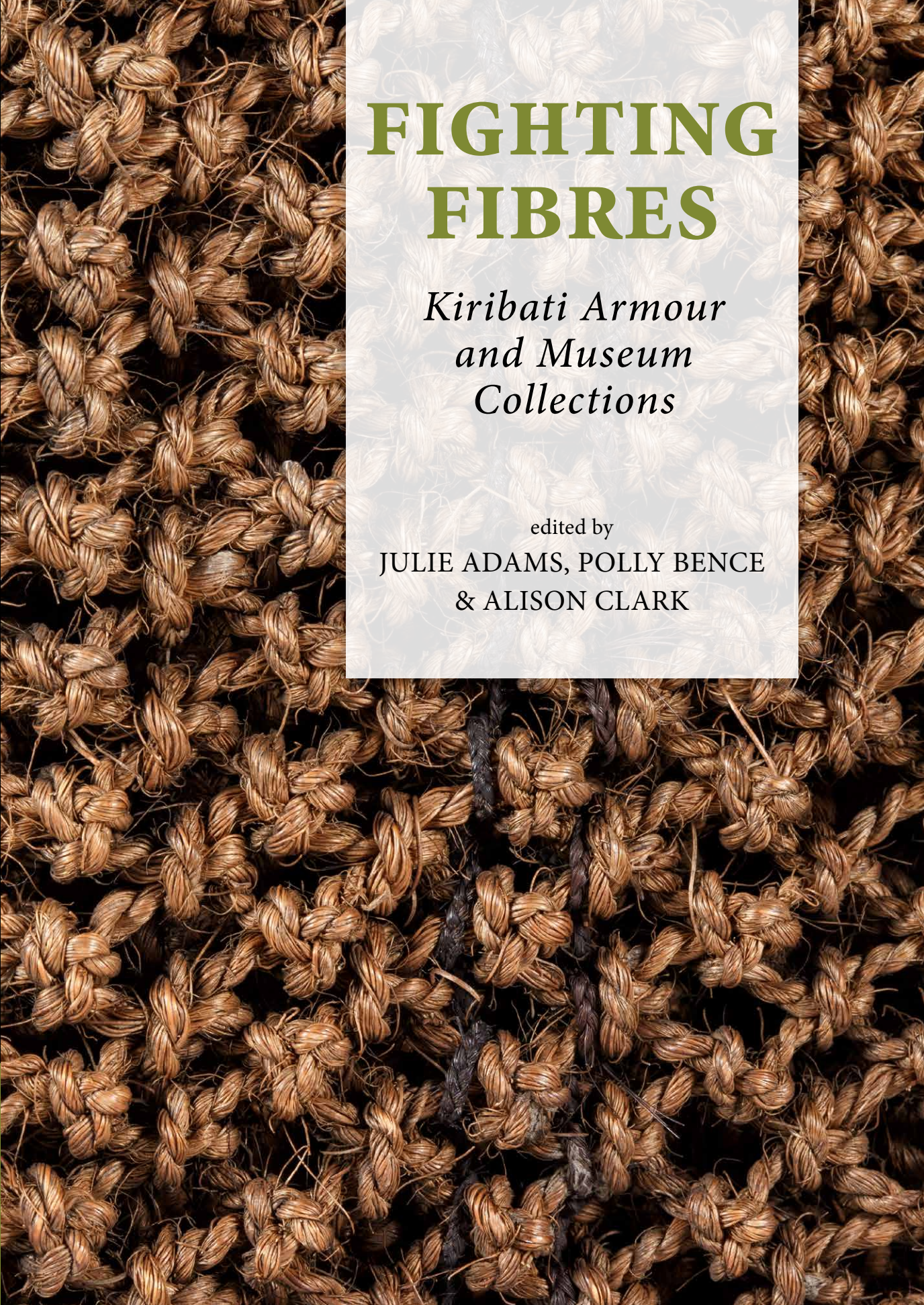

FIGHTING FIBRES

Kiribati Armour and Museum Collections

edited by
JULIE ADAMS, POLLY BENCE
& ALISON CLARK

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Sidestone Press

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BIOGRAPHIES

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Polly Bence has worked in the curatorial team in the Oceanic section of the Department of Africa, Oceania and the Americas at the British Museum since 2011. Over the last five years as the Project Curator, Oceanic collections, she has been preparing the collection for a move into the World Conservation and Exhibition Centre. During this time she has also collaborated on the European Research Council (ERC) funded *Pacific Presences* project. She has also worked at National Museums Scotland (2010-11) on the Royal Museum Project permanent re-display.

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Contributors

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Kate Adams is an independent researcher with interests in history and politics.

Rachel Howie currently works as a Conservator at the British Museum on its Africa, Oceania and Americas collection move. She previously worked at the Museum of Archaeology and Anthropology (MAA) in Cambridge on its active loans and display programme. This included a two-month research and conservation project of Kiribati armour that went on display at MAA in the exhibition *The Island Warrior* in 2017. She trained at Durham University in the MA Conservation of Archaeological and Museum Objects. She has a special interest in organic materials in particular basketry and feathers.

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Rhian Ward completed a Master's degree in the Conservation of Archaeological and Museum Objects at Durham University. Between 2016 and 2017 she worked as a conservation volunteer with the University of Cambridge Museums, during which time she first came across ethnographic objects from Kiribati. She researched and conserved a Kiribati shark tooth trident at the Museum of Archaeology and Anthropology, Cambridge.

PREFACE

From 2013-2018, the European Research Council-funded *Pacific Presences: Oceanic art and European museums* ran an ambitious project that explored the extensive collections of art and artefacts from the Pacific region which are cared for in ethnography and world cultures museums across Europe, from Spain to Russia. The team reconsidered famous works of Oceanic art, but put more energy into research of little-known, sometimes vast collections in storage. In particular, they made connections across collections, reconstructing the histories of particular art forms and their contexts, and investigating collections made by particular travellers and fieldworkers, which have in many cases been dispersed across institutions.

The project was empowered, above all, by dialogue with Pacific Islanders. We have had extraordinarily rewarding engagements with scholars, curators, artists, elders and community members from Pacific nations and diasporas – many of whom have joined the project for periods as affiliated scholars and visitors. They have undertaken study visits with us, they have contributed joint presentations to conferences, they have produced works of art, some acquired by the Museum of Archaeology and Anthropology in Cambridge where the project was based, and they have written or co-written for various project publications. *Pacific Presences* not only enlarges understandings of Oceanic art history and Oceanic collections in important ways, but it also enables new reflections upon museums and ways of undertaking work in and around them. It exemplifies a growing commitment on the part of curators and researchers not merely to consult, but to initiate and undertake research, conservation, acquisition, exhibition, outreach and publication projects collaboratively and responsively.

Fighting Fibres exemplifies the interest of the *Pacific Presences* project in sustained inquiry into particular genres, deeper understanding of their representation across museum collections, the material constitution of the artefacts, the variety of interests in them over time, and in particular the scope for reactivating them in the present. The coconut fibre armour and associated porcupine fish helmets and shark tooth weapons of Kiribati excited the interest of Europeans from the period of early cross-cultural contact onward, and suits were collected extensively for northern hemisphere museums. But the arresting and distinctive forms have not therefore become less important for I-Kiribati, the people of Kiribati; they loom large among symbols of the community and in popular culture in the Islands today. This book addresses long-standing historical questions about the armour; it offers a census of examples in one country; it explores the material make-up of the forms; it engages in dialogue with artists; and documents a remarkable moment of recreation, the making of the first new suit of armour in many decades. *Fighting Fibres* reports research, community engagement and art practice. But the book, published open access, is not intended to mark the end of a project, but to provide a resource for all those interested in extending inquiry and practice – for the future.

Nicholas Thomas

Figure 0.1 A buia at Bikenibeu, Tarawa 2016. Photograph by Alison Clark.

CHAPTER 1

Introduction: Fighting Fibres

JULIE ADAMS

~

Suits of armour made from coconut fibre on the Islands of Kiribati are recognised as some of the most iconic items of Oceanic material culture. Although their use to protect warriors in battle has long ago come to an end, and the knowledge required to create them has diminished, coconut fibre armour has not been consigned to a forgotten past. Two suits survive in the Islands, both of which are housed in Te Umwanibong the Kiribati Culture Centre and Museum on Tarawa. These were created by Tebeioo, the last known maker of traditional armour, on the island of Beru in the 1950s. Today, as part of the annual Museum Day celebrations, Tebeioo's suits are removed from the Museum and worn by a young 'warrior' (Figure 1.1). There is a renewed interest in armour and the skills involved in its production; indeed the image of a warrior wearing

Figure 1.1. Museum Day, Te Umwanibong Kiribati Culture Centre and Museum, Bikenibeu, Tarawa, June 2017. Photo: Doug Ramsay, NIWA Taihoro Nukurangi.

armour has become a national symbol appearing on t-shirts, printed cotton sarongs as well as a plethora of items made for tourists. On Fanning Island, one of the Line Group, Islanders dress up in 'armour-like' costumes and hold shark's teeth weapons to pose for photographs with passengers from the many cruise ships that call in there. The armour's transformation from a relic of a bygone era to a symbol of national and cultural pride marks the latest phase in the history of these extraordinary garments.

Coconut fibre armour is as intriguing as it is visually compelling, with its intricate fibre construction and adornments of human hair, shell and feathers. In addition to the armour, warriors traditionally wore a helmet made of either coconut fibre or the skin of a porcupine fish. This combination gives the whole ensemble an even more extraordinary and dramatic appearance (Figure 1.2). In 2013, when work began on *Pacific Presences: Oceanic Art and European Museums*, a major research project based at the Museum of Archaeology and Anthropology in Cambridge (MAA), the team were struck by the frequent inclusion of suits of coconut fibre armour in exhibitions about the Pacific in UK museums. Indeed, of the 23 institutions that our research identified as having coconut fibre armour in their collections, eleven currently have examples on permanent display.

Encountering these suits today, in museum stores or on display in an exhibition, raises some fundamental questions: how were they made? How were they worn? Were some Islanders making suits of armour for sale to European collectors, as has often been asserted? If not, how can we account for the large numbers of suits now found in the UK and in institutions across Europe? What were the specific histories and encounters that brought about this mass migration of coconut fibre armour from Oceania to Europe?

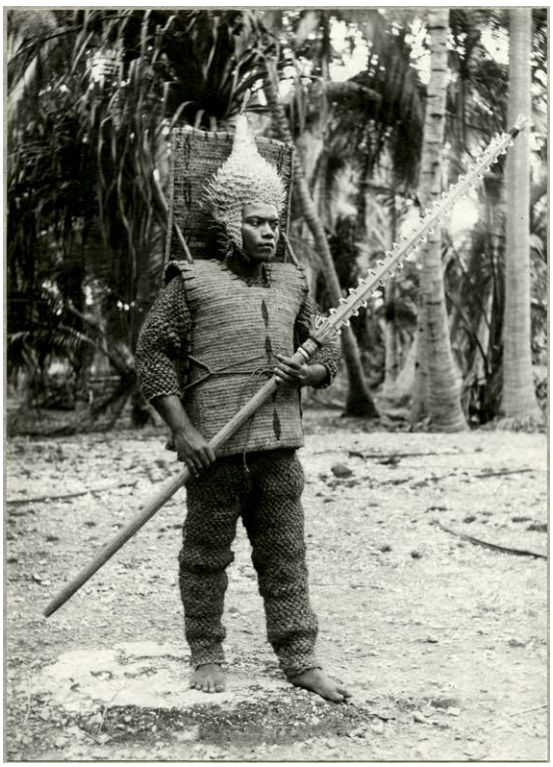


Figure 1.2. Portrait of a warrior wearing armour taken by Rev. George Herbert Eastman O.B.E. c.1920s. P.4912.ach1. © Museum of Archaeology and Anthropology, University of Cambridge.

Against this background, it was decided to make Kiribati armour a key area of research for the *Pacific Presences* project. Researchers in Cambridge contacted colleagues at the British Museum (BM), the institution that holds the largest collection of armour in the UK, and a shared passion was forged for these finely constructed garments, and the Islands from which they originate. Through fieldwork carried out by Alison Clark in Kiribati in 2016 and 2017, the research expanded to include the voices of people from the Pacific. While in the Islands, Clark discussed armour, sharing images of pieces held in UK museums, with local people. Upon her return, these discussions continued via email and Facebook. The opportunity to host visiting researchers from Kiribati, as well as members of the UK's Kiribati Tungaru Association, in Cambridge and at the BM, also proved crucial. In particular, Clark's work with I-Kiribati and New Zealand artists Kaetaeta Watson, Chris Charteris and Lizzy Leckie took the project in exciting and unforeseen directions, leading eventually to the creation of a new suit of Kiribati armour, the first to be made in over 50 years (see Chapter 8). The display of this armour, alongside a historic suit from the Cambridge collections, in the exhibition *The Island Warrior*, curated by Clark at the MAA, was a significant outcome of our research (Figure 1.3).

To coincide with the exhibition's opening, a workshop was organised that brought together museum curators, researchers and conservators, as well as artists Watson, Charteris and Leckie, for a day devoted to coconut fibre armour. We were convinced of the benefits of adopting a multi-disciplinary, polyvocal approach. Specifically, we were keen to continue the dialogue that Clark had established in her exhibition between historic pieces of armour (now held almost exclusively in museum collections) and

Figure 1.3. The Island Warrior display at the Museum of Archaeology and Anthropology, April to September 2017. Photo: Josh Murfitt, 2017 © Museum of Archaeology and Anthropology, University of Cambridge.

people interested in researching, reimagining and creating armour in the present. We hoped that by paying close attention to the armour from the past we might animate these contemporary discussions. The workshop incorporated talks and presentations from curators and conservators, an interview with Watson, Charteris and Leckie about their practice and their research, followed by an afternoon session where everyone experienced the handling of coconut fibre and attempted to master some of the basic techniques that went into making the armour. The workshop's experiential and inclusive approach epitomises the spirit of the wider *Pacific Presences* project, which has foregrounded the bringing together of people and objects to share knowledge, ideas and stories. Within the pages of this book, we have endeavoured to replicate the collaborative and multidisciplinary approach we adopted at the workshop. Thus, alongside the research team's contributions, there are essays from conservators (see Chapters 6 and 7), who have experience of working with armour, and an interview with the artists focusing on their experiments with coconut fibre.

Almost four years after the aims of this project were established, these multidisciplinary conversations continue. This book is the latest embodiment of our research but we do not imagine it to be comprehensive or conclusive. Rather, we hope it will serve as a catalyst for further investigations, research and the sharing of knowledge between people in Kiribati, its diasporic communities and museums in the UK (and beyond) that care for suits of coconut fibre armour today.

Kiribati

The Independent Republic of Kiribati (pronounced Kiribas) is an archipelago of atolls dispersed over a vast area of the Pacific Ocean (Figure 1.4). It is thought the Islands were settled sometime between 3000 BC and AD 1300 (Sabatier 1977). The Republic encompasses the Gilbert Islands, the Line Islands, the Phoenix Islands and Banaba

Figure 1.4. Tarawa from a plane in 2016. Photo: Alison Clark.

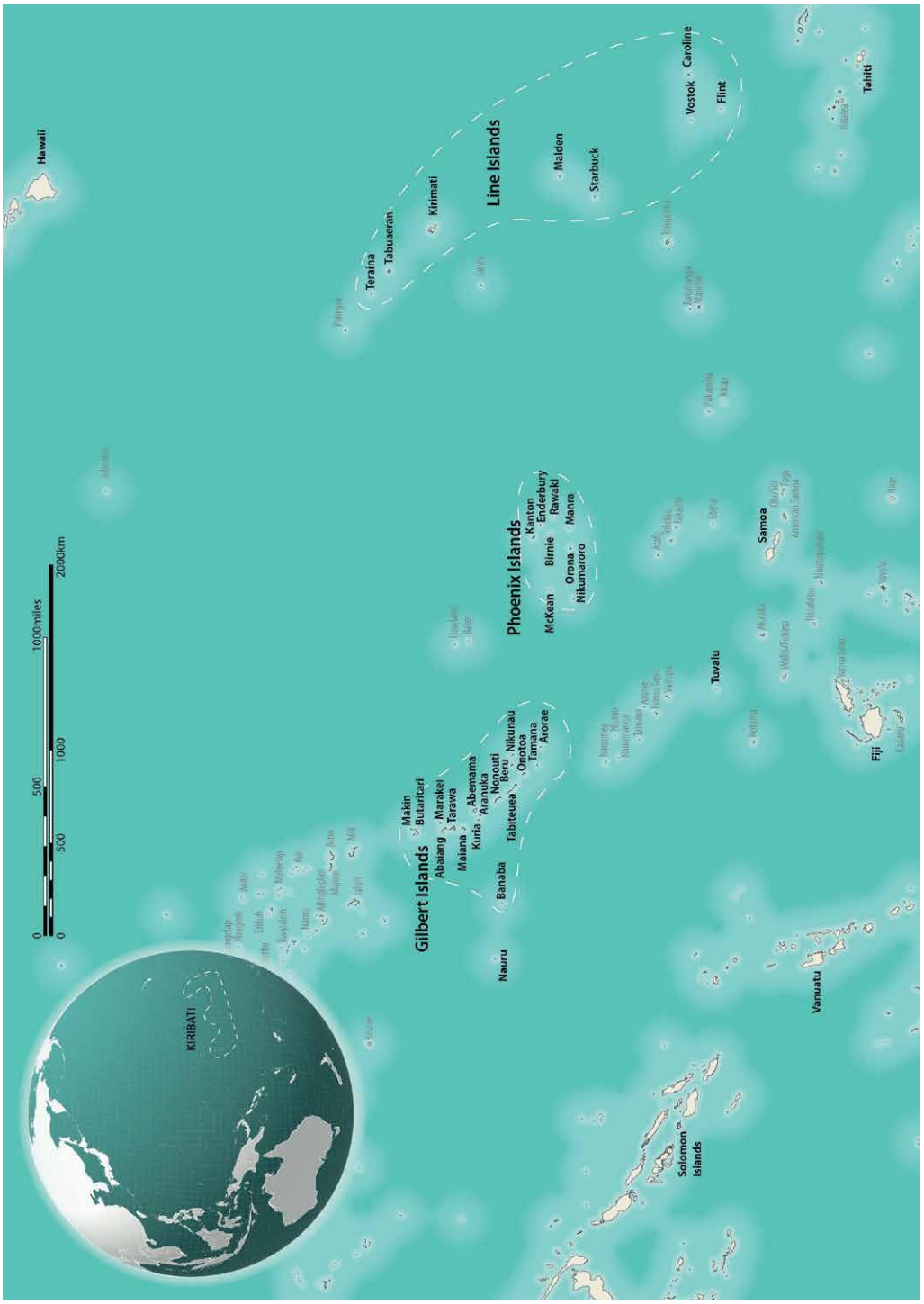


Figure 1.5. Map of the Pacific highlighting the islands of Kiribati. © Mark Gunning, courtesy of Museum of Archaeology and Anthropology, Cambridge.

Figure 1.6. Iacinta husking a coconut, Abemama, 2016. Photo: Alison Clark.

(Ocean Island), and these 33 islands are spread across an area of more than 3,000 miles of sea (Figure 1.5). The majority are low-lying coral atolls, with Banaba – a raised coral island – being the exception. The atolls are narrow strips of land, fringed by white sandy beaches and turquoise lagoons. Because of the soil's highly-salinated and calcareous nature, only the most hardy vegetation can survive. Inland from the beaches, forests of coconut palms, pandanus and breadfruit trees thrive. Islanders traditionally relied on these resources, along with fishing, catching birds and the cultivating of a tuber called babai. I-Kiribati people are skilled at making the most of the restricted resources available to them. Indeed, resourcefulness is considered a part of the national character, with nothing being allowed to go to waste. Despite the challenges of surviving in this harsh environment, the Islands are among the most populated areas of Oceania. The capital, Tarawa, has become particularly densely inhabited, with almost half of the total population of 112,000 living there (Camus 2014). I-Kiribati people are renowned for being "incredibly welcoming, full of humour and laughter, positive and joyful about life" (Burns *et al.* 2017).

Kiribati culture is evidence of Islanders' evolved and sophisticated adaptation to their environment. Their maneaba, or communal buildings, are among the largest structures built anywhere in Oceania, while their ocean-going outrigger sailing canoes are renowned for their speed. Women weave beautiful sleeping mats, made using strips of fine pandanus, and both men and women participate in dancing, which is a national pastime, and a way of sharing stories across generations. In a situation of

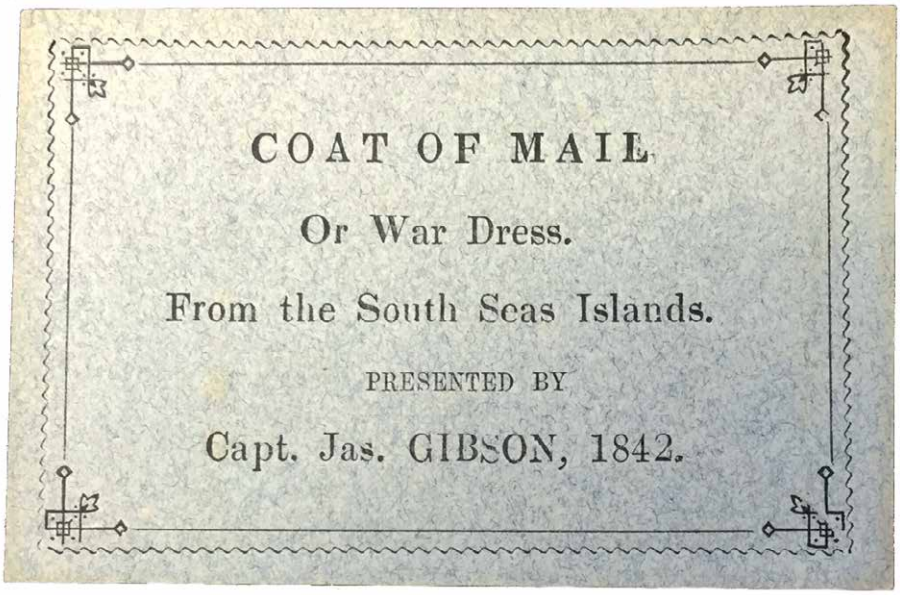


Figure 1.7. Old exhibition label from Montrose Museum. Photo: Polly Bence, 2017. Courtesy of ANGUSalive Museums.

scarcity, maximum use is made of every material. Coconut trees, for example, provide food and oil, timber for canoes and houses, leaves for making mats, baskets and other containers and, crucially, coconut fibre was used to create string, which was essential in many aspects of everyday life (Figure 1.6). Coconut fibre string (known as te kora) also formed the key component in the making of armour. Today, the knowledge of how to make this string, once such an integral part of Kiribati life, is dwindling.

Although the suits of armour made on Kiribati do not originate anywhere else in the Pacific, there are some parallels to be found in other Oceanic contexts. On Atiu, in the Cook Islands, helmets made from coconut fibre were worn by warriors to protect them from the use of sling stones in battle (Buck 1944). Indeed, their similarity to the helmets made in Kiribati has frequently led to Atiu helmets being erroneously catalogued, and even displayed as being from Kiribati, in museums. A coconut fibre cap or helmet is also found in headdresses from other Islands in the Cooks, and in the Australs. In addition, items that have an affinity with Kiribati armour have been documented in Samoa, Fiji, Tuvalu and Nauru, but it is possible that these pieces were actually made by people from Kiribati who were living in those Islands at the time.

The provenancing of coconut fibre armour is problematic because the group of Islands known today as the Republic of Kiribati have undergone a seemingly relentless process of naming and re-naming since contact with Europeans began. The name Kiribati has been used since gaining independence from Britain in 1979. Prior to this, the formal connection with Tuvalu (the Ellice Islands), which had been administered jointly by the British as the Gilbert and Ellice Islands since 1892, came to an end. Following independence, both Kiribati and Tuvalu remained members of the

Commonwealth of Nations. Before 1979, the term the Gilberts was used to describe the archipelago of 16 islands (excluding the Line, Phoenix and Banaba Islands) and, earlier still, the term Kingsmill Islands or Kingsmill Group was also used. Today, Islanders use the name Tungaru to distinguish the former Gilbert Islands from the newly incorporated Line, Phoenix and Banaba Islands. This constant layering and over-layering of names is one of the main challenges to working with museum collections from this region (see Bence, Chapter 2). Objects are generally catalogued using the location from which they originate, as it is defined at the time of registration in a museum. Many of the oldest collections identify objects only as 'South Sea Islands', while others retain their Gilbert Islands or Kingsmill Islands identity (Figure 1.7). Many 'Kiribati' collections also contain objects from Tuvalu (and vice versa), as a result of their long and intertwined relationship. Faced with this complex history, in this book we have tried to disentangle the specific biographies of particular pieces by working with museum documentation, using it to connect armour to an historic period. However, when referring to the Islands more generally, we use the contemporary term: Kiribati.

A 'war-like' people?

From the earliest accounts of European voyages, descriptions of the people of Kiribati have focused on their 'war-like' nature. The German anthropologist, Gerd Koch, was still perpetuating this stereotype in his study of their material culture published in 1986. Based on fieldwork undertaken in the 1960s, Koch writes that the "war-like I-Kiribati are very ready to enter upon a feud for a trifling reason" (1986: 245). This statement seems at odds with the fact that extensive missionising from both Europe and North America, as well as the long-standing colonial presence in the Islands, had led to the cessation of warfare almost 100 years earlier. Another frequently perpetuated narrative is that the armour could not have been developed independently of outside influences, but instead must have been introduced by Europeans or, alternatively, by the Japanese whose samurai warriors had their own distinctive armour. These two ubiquitous narratives – of a 'war-like' people who could not have developed the sophisticated armour they wore in battle – serve to promote an idea of Islanders as 'savage' as well as to demean their creative capabilities. Instead, it could be argued that if I-Kiribati were a people whose 'principal employment' was war – as a member of the United States Exploring Expedition claimed in the 1840s – it is surely plausible that they could have developed a highly-sophisticated range of items of material culture reflecting this (Wilkes 1845: 50).

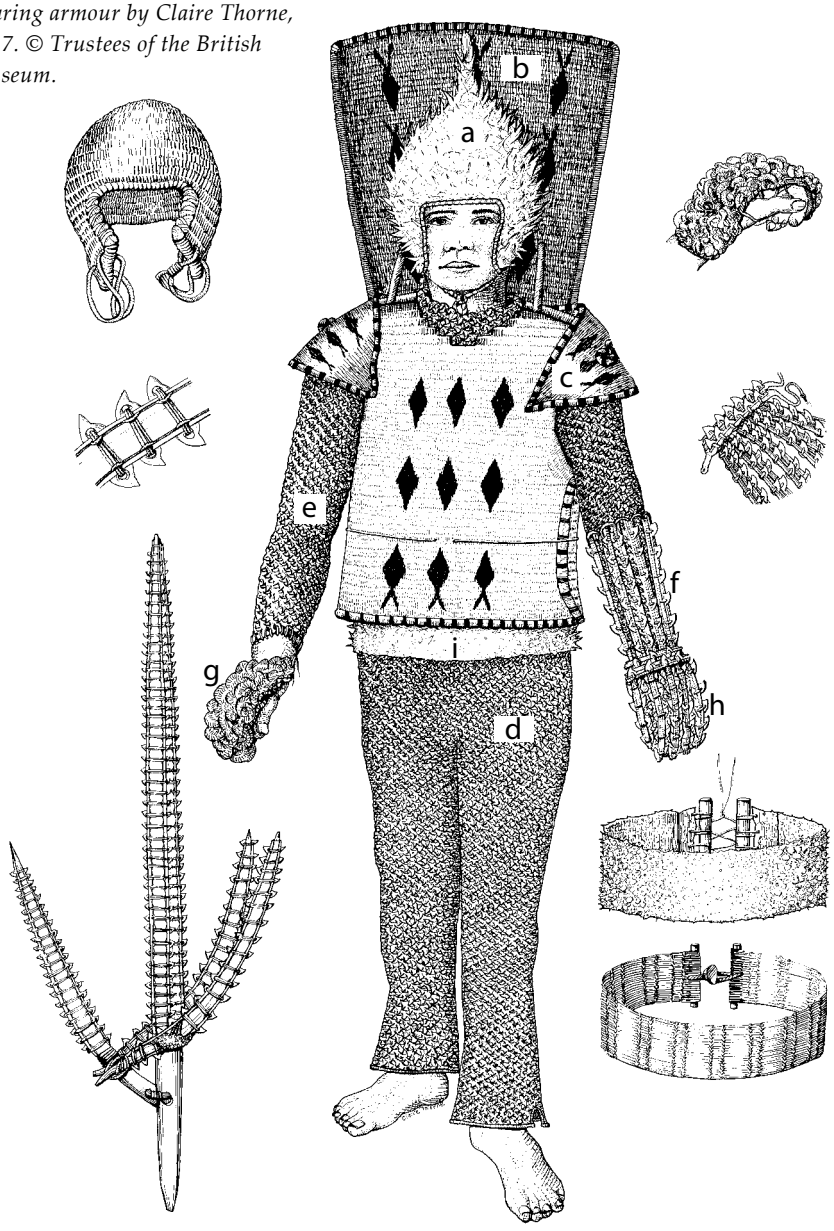
It is clear from historical accounts that pressure on land and resources frequently resulted in disputes, some of which were addressed through combat (Koch, 1986). Combat could take the form of one-on-one, highly-ritualised encounters, conducted according to strict rules, where those involved took it in turns to inflict wounds on each other, using shark tooth weapons. Alternatively, it could involve large-scale battles between clans and even entire islands, where only the leaders would have worn the full range of armour. In either situation, the aim of the fighting was not to kill one's opponent but rather to inflict wounds. Anthropologist Katharine Luomala, who worked in the islands in the 1940s, noted that "the intent was to wound and not to slay; a slayer was regarded as a murderer and had to pay compensation in land" (1954: 22),

Figure 1.8. Postcard printed with a photograph of a mannequin dressed in armour in the Museum Fünf Kontinente, Munich, Oc,B31.22. © Trustees of the British Museum.

thus reinforcing the connection between land as a precious resource and the sphere of combat, punishment and retribution that surrounded disputes about it. On the island of Tabiteuea, Luomala described the various rites of passage undertaken by boys (roronga) in order to become men. This important period of their lives resulted in their achieving the designation of rorobuaka, or warrior, and receiving their first weapon (1978: 221). The roles of masculinity and warrior are fused in the notion of rorobuaka, as if to emphasise their essential inseparability. As a result, it seems likely that most, if not all, men would have owned armour as all were expected to be prepared to participate in the rituals of conflict. During one-on-one conflicts, a warrior was likely to have been assisted by an attendant, who could help him to his feet if he fell, or quickly re-arm him if his weapon was knocked from his grasp. Evidence that such an assistant would have been required is provided by a complete suit of armour in the collections of Munich's Museum Fünf Kontinente where, in addition to the standard set of accoutrements, there is a piece which rises up to cover the warrior's entire head and face, leaving only a small gap to allow him to see out (Figure 1.8). With this limited visibility, the assistant would have been a second pair of eyes in combat.

The suits of coconut fibre armour found in museum collections around the UK form the focus of this book. They represent a complex assemblage of garments aimed at offering protection from the blows of an opponent's shark tooth weapon to every part of a warrior's body. Both men and women contributed to the creation of armour, with women producing te kora, the coconut fibre string, which is the basis of the major components. The integral parts of the armour, illustrated here (Figure 1.9), consist of: a suit of overall-

Figure 1.9. Illustration of a warrior wearing armour by Claire Thorne, 2017. © Trustees of the British Museum.



Key for illustration of armour (te otanga)

The figure wears:
a. A porcupine fish helmet (te barantauti)
b. A cuirass with headguard (te tanga)
c. Shoulder armour
d. Overalls (te otanga)
e. Upper body armour (te tuta)
f. Forearm guard
g. Coconut fibre gauntlet (te bana)
h. Gauntlet with shark's teeth
i. A porcupine ray skin waistband (te katibana)

Other items of armour, clockwise from the top:
Detail of coconut fibre gauntlet (te bana)
Detail of shark's teeth gauntlet
Porcupine ray skin waistband (te katibana)
Coconut fibre waistband (te katibana)
Trident shark's teeth weapon
Detail of weapon
Coconut fibre helmet (te baratekora)

style trousers, which come up over the chest and fix over the shoulders with two straps; body armour, which covers the upper torso and arms, made using the same technique and worn on top of the overalls; and a cuirass, or sturdy piece of body armour. In a European context a cuirass is a breastplate and backplate that fix together to provide protection to the torso. In Kiribati, the cuirass generally also has a high headguard that protects the warrior from blows or projectiles being thrown from behind, by his own supporters towards the enemy. Additional shoulder protection is provided in the form of sections of closely-twined coconut fibre, made in the same way as the cuirass, and strapped over each shoulder. Forearm guards, consisting of shark's teeth fixed to wooden struts, served as protection and could themselves be used offensively in close combat. In addition, coconut fibre gauntlets covered the vulnerable area of the top of the hands. A waist band of either coconut fibre, or made from the skin of a ray, could be worn as an extra layer of protection around the middle. The final element is a helmet made either from coconut fibre or from the skin of a porcupine fish.

Although museum displays often depict a warrior mannequin dressed in the full ensemble (such as the Munich example), historical accounts and descriptions from early European encounters suggest that not every warrior wore all of these components at once (Wilkes, 1845).

Encounters with Europeans: voyaging to independence

Although it took until the first part of the nineteenth century for all of the Gilbert Islands to be visited by Europeans, the earliest sightings by Spanish and Portuguese sailors date back to the sixteenth century. The first encounter occurred between Europeans and Islanders when John Byron, commodore of HMS *Dolphin*, anchored off Nikunau in 1765. This encounter, like many early meetings between Europeans and Pacific Islanders, was marked by cultural confusion and misunderstanding. The ship's crew were frustrated that Islanders were unwilling to provide the supplies they sought. Islanders, meanwhile, were only interested in gaining access to the coconuts on board the ship (see Hawkesworth 1773). Following the establishment of Botany Bay as a penal colony, convict ships began traversing the region. One of the first convict ships was commanded by Thomas Gilbert, and it is because of this that the archipelago was named the Gilbert Islands. Over time, European traders and merchant ships began calling in at the Islands for labour and copra and, with the spread of the whaling industry, this traffic steadily increased. Barrie Macdonald reports that, at its peak in the 1840s, several of the Gilbert Islands were being visited weekly by whaling vessels (1982:16). Accounts from this period often make mention of the distinctive armour and weapons in circulation and express visitors' awe and fascination with their manufacture and fearsome appearance. By this time, trade between Islanders and Europeans had become well-established, often taking place off-shore, with Islanders paddling their canoes out to the ships in order to acquire goods such as iron, sharp-edged tools, and tobacco, in return for supplies, sexual favours and 'curios' such as shark's teeth weapons and coconut fibre armour (Macdonald 1982: 17-19). Unlike in other parts of the Pacific, where sailors were struck by the tattooed bodies of Islanders, here it was their scars, inflicted by their weapons, that left a vivid impression in the minds of visitors (Camus 2014: 56).

Figure 1.10. 9 Portrait (photo) of Rev. George Herbert Eastman O.B.E. wearing armour in 1923, CWM/LMS/ Home/Missionary Portraits/Box 2. Photo: Josh Murfitt, 2017. Council for World Mission archive, SOAS Library.

Protestant missionaries began arriving in 1857, followed by the Catholics in 1888. Hiram Bingham of the American Board of Commissioners for Foreign Missions was the first, followed later by the London Missionary Society (LMS), who made rapid progress in the Islands in the south of the group. Bingham and his wife, accompanied by a native Hawaiian assistant, Kanoa and his wife Kahola, established a mission on Abaiang. Aged just 26 when he arrived in the islands, Bingham offered a damning assessment of local life, which included his particular distaste at "the sight of naked men, boys, girls and more than half naked women" as well as his concern about the tradition of "bloody warfare" (cited in Macdonald 1982: 33). Bingham's mission struggled to make a significant impact in its early years, with Islanders willingly accepting aspects of Christianity that seemed advantageous to their lives, while rejecting those for which they could see no value. In the Gilberts, as in many of the Pacific Islands, missionaries of all denominations focused on bringing about a cessation of violence. Ironically, the competing endeavours of missionaries from various denominations to convert Islanders often resulted in bitter rivalries that reinforced long-standing feuds and divisions, and occasionally resulted in outbreaks of violence and war. Following a series of bitter disputes and massacres in the 1880s, the Islands were placed under the protectorate of the British Empire by Captain Edward Davis in 1892. Missionary activity continued with many aspects of traditional life being discouraged on the basis that they were considered antithetical to Christianity. Dancing and singing were particular targets, as was coconut fibre armour, due to its association with combat. Many pieces of armour, along with other items of ritual and spiritual significance, were either destroyed or removed by missionaries. Despite their disapproval of armour, and all that it represented, some missionaries were simultaneously impressed by its construction and appearance. Our research has revealed that several LMS missionaries, while encouraging the armour's destruction, were actively retaining specimens of armour and selling or donating them to museums back in Britain. One extraordinary illustration of this tension between culling and collecting is a photographic portrait of Rev. George Herbert Eastman O.B.E. dressed in a complete suit of armour, an image which is today held in the Mission's archives at the School of Oriental and African Studies in London (Figure 1.10).

Figure 1.11. London Missionary Society exhibition on the Wirral, Merseyside in 1957. Courtesy of Aidan Eastman.

Following annexation of the Islands by Captain Davis in 1892, the Gilberts were gradually "drawn into the folds of Empire" (Macdonald 1982: v). Colonial officials and commissioners exerted a growing influence over the Islands' affairs even though many of them governed from afar, basing themselves elsewhere, such as Fiji. At the turn of the twentieth century, rich phosphate deposits were discovered on Banaba (Ocean Island), the subsequent mining of which caused immense environmental destruction and resulted in the British authorities relocating most of the population to Rabi island, in Fiji. The significance of phosphate (which is a key component in fertilizers) cannot be overestimated: "there can be no civilization without population, no population without food, no food without phosphate" (Albert Ellis, 1942, cited in Teaiwa 2015). Several of the key colonial figures and collectors of coconut fibre armour, such as Arthur Gordon and Arthur Grimble, were also key figures in the phosphate industry.

During World War II, the Japanese occupied Butaritari, Tarawa and Abemama and the Islands were the scene of several major battles including, in November 1943, the Battle of Tarawa, which saw the destruction of "almost everything above ground level on the islet of Betio" (Macdonald 1982: 143). After the War, with the establishment of the United Nations and its commitment to the process of decolonization, combined with the dwindling British colonial influence, Islanders began to play a greater role in political affairs. In 1974, a referendum was held to determine whether the Ellice and Gilbert Islands should each have their own administration and the process of separation began the following year. On 12 July 1979, the Gilbert Islands gained independence from Britain and were re-named the Republic of Kiribati.

Surveying Kiribati armour

During the 1980s, museum curators such as Lissant Bolton, Jim Specht, Adrienne Kaeppler, Peter Gathercole and Len Pole undertook inventories of Pacific collections held in various museums (see for example Gathercole and Clarke 1979). However, this important and time consuming work was overtaken by computerised catalogues, which rendered the need to publish collection data in survey form redundant and allowed museums to make their collections available on the internet. Despite online catalogues apparently democratising knowledge and potentially making data universally available, the process of trying to establish the whereabouts of coconut fibre armour in UK museums, for example, remains a far from straightforward task. First, as a result of the frequent changes in the Islands' names, knowing what term to enter into a search engine is a challenge and many smaller museums still use the term Gilbert Islands, or even the Kingsmill Islands. Second, a researcher needs to have explored all the possible search terms relating to how the armour has been described. These range from 'coat of mail' (see Figure 1.7), to 'corselet' or 'trousers plaited from New Zealand flax'. It is, thus, very easy to overlook items by not entering the appropriate terminology. Finally, for anyone wishing to document collections of material culture held in the UK, an understanding of the museum landscape and how networks of individual collectors and institutions have interacted over time is a necessary prerequisite for knowing where to look and how to make sense of what you find. As the late curator and Professor of Anthropology, Roger Neich, reflected in an essay about compiling museum inventories: "collections are very ephemeral; they come and go, are assembled and deconstructed all the time" (2005: 174).

In our early discussions about researching armour, the team were keen to get an overview of the scale of UK collections: how many pieces were there and where were they held? It quickly became clear, however, that our hope of a quick answer was not possible. In response, BM curator Polly Bence took up the challenge and set about devising a questionnaire designed to chart exactly what armour was where, sending it out to every museum in the UK that holds Pacific collections. Four years later, we are finally able to provide an answer to our original question and can report that we discovered 189 pieces of coconut fibre armour from Kiribati, held in 23 institutions around the United Kingdom (see Bence, Chapter 2). This book is structured around the invaluable work carried out by Bence. Each of the 189 pieces of armour has been documented and photographed and appears in the catalogue section at the end of the book. For the first time, interested parties – both in Europe and in the Pacific – can access this comprehensive study. It is possible, however, that additional pieces of armour exist in private collections, including, for example, those belonging to the descendants of missionaries who worked in the Pacific. This enticing possibility was underlined by the grandson of Rev. George Herbert Eastman O.B.E., Aidan Eastman, who shared with us a photograph from his grandfather which depicts the scene of a London Missionary Society exhibition in the Wirral (northwest England) in 1957 (Figure 1.11). In the photograph a suit of armour is pictured alongside a humorously apt sign, which asks: 'Have You Got One of These in Your Home?'. This freighted question has an important resonance for our survey team and we have no doubt that more discoveries will be made in the future.

Our survey was, in part, inspired by recent research carried out by Adrienne Kaeppler, Steven Hooper, Emmanuel Kasarhérou and the work of a number of projects based in Cambridge, led by Nicholas Thomas. Several of their publications (see for example Kaeppler's *Holophusicon: The Leverian Museum* (2011) or Thomas et al. *Artefacts of Encounter* (2016) feature fresh information, new insights and revisionary interpretations of historic collections. Our own experience has confirmed that, far from going over old ground, this kind of fine-grained, immersive, detective-like work can be hugely rewarding. For example, we believe our survey challenges the notion that armour was being made for sale to Europeans, as the overwhelming majority of pieces of body armour examined show signs of wear and/or damage. While cuirasses exhibit less damage, this is probably because of their sturdy nature. Maude and Maude note that Islanders avoided the torso and instead targeted the vulnerable arms, legs, face and throat (1981: 317). In other words, the cuirass acted as a deterrent as much as an effective protection from blows. Other factors also influence our sense that armour was not, generally, being made for sale: specifically, the influential role of missionaries and colonial officials who were focused on pacifying the Islands and who simultaneously suppressed combat and confiscated armour. If we combine those factors with the I-Kiribati tendency to dispose of any item of material culture that has outlived its usefulness, then the mass exodus of these iconic objects over a relatively compressed time period can be explained. The armour's rapid disappearance from the Islands also resulted in an inevitable diminishing of the knowledge associated with making it. Gerd Koch described the secrecy with which Kiribati families tended to guard traditional knowledge, even from each other (1986: xvii), thus, as a consequence, once armour had fallen out of use, the skills relating to its production were lost to future generations.

In addition to the work of surveying, this book includes short summaries of the lives of many of those collectors who played a role in the acquisition and subsequent donation of armour to UK museums (Chapter 9). Acknowledging that these men and women represent only part of the story, we believe that understanding more about them helps shed new light on the biographies of the objects themselves. This provenance work reveals a vast network of collectors, dealers, curators and institutions through whose hands these objects passed before entering the stewardship of UK museums. For our part, the research team hope that this book can contribute to the resurgence of interest in coconut fibre armour and assist Islanders living in Kiribati, as well as those living in the diaspora, to establish new connections with these transplanted objects for which UK museums have a duty of care.

CHAPTER 2

Adventures in Collecting: A Survey of Coconut Fibre Armour in UK Museums

POLLY BENCE

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The survey

One of the main tasks of the collaboration between staff at the British Museum (BM) and Museum of Archaeology and Anthropology, Cambridge (MAA) was to conduct a survey into coconut fibre armour held in UK museum collections. After initial discussions about the remit of what we were hoping to achieve, we established five key research questions:

1. What armour had been collected?
2. Where was the armour held?
3. Who were the collectors and donors?
4. When was armour being collected?
5. What can we learn from such a survey?

Our first step was to create a list of all UK museums and institutions thought to hold ethnographic material from the Pacific. To do this we consulted a number of well-known historical surveys such as those carried out in the 1970s by Peter Gathercole and Alison Clarke and, more recently by Len Pole (Gathercole and Clarke 1979; Kwasnik 1994; Pole 1995, 2000 and 2007; Schumann 1986; Starkey 1998). Our final 'hit list' consisted of 175 institutions and, to make this daunting process more manageable, we split the list into tiers based on the scale of their collections and their geographic location. Beginning with those known to have large Pacific collections, we asked colleagues to complete a short survey and supply us with details such as: registration numbers, acquisition details, provenance, measurements, photographs (where possible) and any other curatorial or archival information.

After three years of data-gathering, we were able to produce a comprehensive collections survey – the findings of which can be seen in Table 2.1. This table shows where armour is located, which types of armour were collected most frequently and which pieces appeared to be rare or unusual. In total 189 pieces of armour have been

No.	Museums	cuirass	tunic-style cuirass	overalls	trousers	upper body armour	helmet (porcupine fish)	helmet (coconut fibre)	hood	helmet made of synthetic materials	gauntlet	forearm guard	waistband	porcupine ray skin waist band	shoulder piece	panel for overalls	samples of fibre	total pieces of armour
1	Bankfield Museum, Halifax							1										1
2	Birmingham Museum and Art Gallery	1																1
3	Bolton Museum	1		1														2
4	Brighton Museum and Art Gallery	1																1
5	Bristol Museum and Art Gallery	1		1														2
6	British Museum	8	2	7		4	5	5	2		5	2	5	1	1			47
7	Dr Grierson's Museum, Thornhill	1																1
8	Great North Museum: Hancock, Newcastle*		1	2		2							1					6
9	Horniman Museum, London*	3		2		2	1			1				1		1		11
10	The Huntarian Museum, Glasgow*	1			1													2
11	Ipswich Museum	1																1
12	Kelvingrove Art Gallery and Museum, Glasgow*	1		1		1	1											4
13	Manchester Museum*	3		3		2	2							1		1		12
14	Montrose Museum, Angus	1																1
15	Museum of Archaeology and Anthropology, Cambridge*	7		5	1	5	2	1			1		1			4	2	29
16	National Museums Scotland, Edinburgh*	3		1		1												5
17	Nottingham City Museum	1																1
18	Pitt Rivers Museum, Oxford*	5	1	8		9	4	2					2	1				32
19	Royal Albert Memorial Museum, Exeter*	3						1										4
20	Royal Cornwall Museum, Truro			1				1										2
21	Saffron Walden Museum			2		1												3
22	Whitby Museum*			1														1
23	World Museum, Liverpool*	7		6		5	1					1						20
		49	4	41	2	32	16	11	2	1	6	3	9	4	1	6	2	189
	* Armour on permanent display																	

Table 2.1. Armour found in UK museum collections. Compiled by Polly Bence, 2017.

identified in 23 museum collections across the UK. The largest collection is held in the BM and consists of 47 pieces; followed by the Pitt Rivers Museum (PRM), with 32 pieces and the Museum of Archaeology and Anthropology, Cambridge, with 29 pieces. Although it is not surprising that these museums have the largest numbers, given the well-documented strengths of their Pacific collections, the survey also revealed some unexpected findings, with armour being located in Bolton, Ipswich, Montrose and Nottingham.

What has been collected?

The most frequently collected pieces of armour were cuirasses (53), followed by overalls/trousers (43), other armour worn on the upper body (32) and porcupine fish helmets (16). The prevalence of the cuirass and the porcupine fish helmet is probably a result of their striking and distinctive appearance, which no doubt appealed to collectors. As for the body armour, I believe their portability would have played a part in their collection,

Figure 2.1. Cuirass, 48/1943/1, 63.5cm (h). Tapitowaya (Tabiteuea). Collected by Dr J.G. McNaughton c.1910s. Courtesy of the Royal Albert Memorial Museum and Art Gallery, Exeter City Council.

Figure 2.2. Cuirass, A.1916.4, 69cm (h). Funafuti, Ellice Islands (Tuvalu). Collected by Dr J.G. McNaughton c.1910s. © National Museums Scotland.

because they are easily rolled, stored and transported. Together with the cuirass and helmet, they provide a complete picture of what a warrior would have looked like.

Several rare pieces of armour were identified in the UK survey. Among the most unusual are two hood-type helmets (see Figures 4.9 and 4.10) held at the BM; a shoulder guard and a pair of shark's teeth gauntlets, also held at the BM, and three forearm guards edged with shark's teeth, two of which are at the BM and one is in Liverpool, at the World Museum. Two rare examples of cuirass were discovered at the Royal Albert Memorial Museum in Exeter (RAMM) (Figure 2.1) and National Museums Scotland (NMS) in Edinburgh (Figure 2.2). These two pieces have the appearance of a cuirass, in that they are worn on the torso, have a headguard, are made of similar material, in a similar way and have evidence of lozenge decoration – however they are very different in style from the majority. Both were collected and donated by Dr J.G. McNaughton. This style is discussed further in Chapter 3.

Where is the armour?

We found armour in museum collections across England and Scotland but, interestingly, no examples were located in Northern Ireland or Wales. Ports and towns with strong maritime connections were revealed as hubs, with significant collections being located in Brighton, Bristol, Edinburgh, Exeter, Ipswich, Liverpool, Montrose, Newcastle-upon-Tyne, Truro and Whitby. Scotland was also established as a hub, with museums in

Edinburgh, Glasgow and Montrose holding important, early pieces of armour. Scotland generally has significant ethnographic collections, due to its Enlightenment history placing it at the heart of scientific, philosophical and anthropological exploration in the eighteenth and nineteenth centuries. With hundreds of scientific minds, great thinkers and ambitious explorers travelling abroad and making contact with new cultures and 'exotic' objects, there was a continuous flow of material back to Scotland.

Where are they now?

Two pieces of armour identified in the survey are currently missing and can no longer be located. The first is a helmet, once in the collections of the Bankfield Museum, Halifax, while the second is a cuirass that was known to be in the collection of Dr Grierson's Museum, in Thornhill near Dumfries, sometime in the 1960s. This cuirass is just visible in an archival photograph of the museum's galleries where it is seen hanging from the rafters (see Chapter 10). Looking at this photo there is no doubt it is a cuirass, although an entry in the Museum's 1886 register, in Dr Grierson's hand, reads: '1240. Mating [sic] strongly wove used as armour from York Islands N.E. of Australia. Presented by Mrs Samuel Dick … Duke of York Islands, one of the Union Islands [Tokelau], in Polynesia October 1886'. After 1965, most of the ethnographic collections from Dr Grierson's Museum were transferred to Dumfries Museum and the cuirass disappeared.

Who were the collectors and donors of armour?

Although we have been able to establish a secure provenance for many of the pieces of armour identified in the survey, others can only be traced back to dealers and traffickers in 'curios'. This is not unusual and the same could be said for the biographies of many of the ethnographic objects held in museum collections around the world. Perhaps because of the armour's striking appearance, however, we see a greater percentage of collector-dealers than might otherwise have been expected. Where we have been able to establish a secure provenance, the collectors involved tend to be colonial administrators, missionaries, members of the Royal Family, naval officers or seamen and museum curators. Admiral Edward Henry Meggs Davis, Rev. George Herbert Eastman O.B.E., Rev. William Goward, Sir Arthur Grimble, Sir Arthur Gordon (later Lord Stanmore), the Hon. Charles Swayne and Sir Everard Ferdinand im Thurn were all major players in the collection and dispersal of armour into UK museum collections. All of these men were embedded in the networks of colonial and missionary activities that were established in the Gilbert Islands in the late nineteenth and early twentieth centuries. More details about the specific biographies and connections between these collectors can be found in Chapter 9. In some cases we were unable to discover anything about the history of a piece of armour. As those who work in museums are aware, documentation practices in the past were often less than rigorous, meaning that sometimes not even a name was recorded in a register or catalogue, making it impossible to establish how a piece of armour came from the Pacific to the UK.

Figure 2.3. Overalls, Ln; 2107.1, 128cm (l). Marquesas Islands. Collected by William Garnham Luard and donated in 1837. Transferred from Chelmsford Museum in 1963, formerly in the Chelmsford Philosophical Society collections. Photo: Josh Murfitt, 2017. Courtesy of Saffron Walden Museum.

When was armour being collected?

Although it is often difficult to pinpoint the exact date of collection, we have been able to establish that the earliest piece of armour with a known provenance, in a UK collection, dates back to 1837 (Figure 2.3). This piece is a pair of overalls that are now held in the collections of Saffron Walden Museum in Essex and are associated with a naval man, William Garnham Luard. Other early pieces of armour can be found in the BM, NMS, Edinburgh, the Hunterian Museum and Kelvingrove Art Gallery and Museum, Glasgow, the Montrose Museum and Whitby Museum. All of these can be securely provenanced to before the 1880s.

The 1837 piece in Saffron Walden was originally donated to the Chelmsford Philosophical Society and was recorded in their register as: 'suit of cocoa nut fibre, net armour from the Marquesas. Donor Mr W.W. Luard, R.N. Witham of HMS Actaeon'. The armour was transferred to the Chelmsford Museum and then on to Saffron Walden Museum in 1963. There, the accession register states: 'suit of coconut fibre (sennit) armour from the Gilbert Is. (bears an old label which reads "Warriors dress from the Marquesan Islands presented by Mr W.G. Luard, R.N. of H.M.S. Actaon, 1837")'. Unfortunately, this label has since become separated from the armour and can no longer be located. Both register entries are intriguing as they refer to two different W. Luards, father and son and they also both provenance the armour to the Marquesas Islands. While this attribution is most likely a case of mistaken record-keeping, we do know that William Garnham Luard was a naval man who spent time in the Pacific. Luard entered the Royal Naval College at Portsmouth aged just 13, meaning that if the armour *was* collected by him, then he donated it to the Chelmsford Philosophical Society aged just 17 in 1837 (see his biography in Chapter 9).

Another early piece of armour was donated a year later, in 1838, to Whitby Museum by a Mrs Scott of Cliff Lane (Figure 2.4). It was described in the Whitby Literary and Philosophical Society notes in 1838 as a: 'Pair of New Zealand Trowsers, made of the native Flax, plaited'. The only Mrs Scott registered at Cliff lane in 1838 is an Ann Scott, and parish records show that she was married to Richard Scott who is listed on their marriage certificate as a 'gent'. He died in May 1833, aged 40, and further research undertaken by colleagues in Whitby has established that Scott had a medical condition that meant he was not likely to travel. However, his father and grandfather were both

Figure 2.4. Overalls, WHITM:ETH419, 133cm (l). New Zealand. Donated by Mrs Scott in 1838. Photo: Josh Murfitt, 2017. Courtesy of Whitby Museum.

Figure 2.5. Cuirass, A.1899.251, 108cm approx (h). Solomon Islands. Bought from Distington Museum, Whitehaven in 1899, from the collection of Joseph Ritson Wallace. © National Museums Scotland.

mariners in the Baltic region, and this armour along with other objects donated by Mrs Scott could have been collected by them or perhaps by his cousin Thomas Parkinson, also a mariner, who died in 1838.

Potentially the earliest cuirass held in a UK museum is in the collections of NMS in Edinburgh (Figure 2.5). The register entry from 30 August 1899 describes it as 'Body armour with high back to protect the head and neck, made of plaited coir string with lozenges of human hair introduced. Kingsmill Islands, Distington Museum, near Whitehaven'. Distington Museum was a collection amassed by Joseph Ritson Wallace who, in February 1832, joined his wife's half-brother aboard the *Zeno* for a voyage that lasted 16 months, sailing around Cape Horn to the west coast of South America. Wallace met many travellers and collectors on the voyage and purchased a variety of objects including "an extensive

Figure 2.6. Cuirass, M1980.4987, 71cm (h). South Sea Islands. Presented by Alexander Cruickshank Esq in 1842. Photo: John Johnston, 2017. Courtesy of ANGUSalive Museums.

collection of weapons from the South Sea Islands from a Mr Lambarrie" (Fancy 2009: 7). It is not known whether he acquired this cuirass while on-board the *Zeno*, or perhaps during the many years of collecting that followed his return to England. Wallace originally ran a museum on the Isle of Man, which he later moved to Whitehaven, opening in 1850. This large and varied collection was sold at auction after Wallace's death in 1895. Wallace's great-great grandson, Andrew Legg, kindly assisted with my research and, on further inspection of the original 1899 sale catalogue, we discovered an entry for lot 4845 on the eighteenth day of the sale (Thursday 24 August 1899) for 'Body Armour of Coir Cord and Human Hair from Solomon Islands'. As Solomon Islands collections do not usually contain armour, and as the dates also match the entry in the NMS register, I believe that this is a description of the cuirass, which is now on display in the *Facing the Sea* gallery. It is possible that this cuirass was acquired from a Gilbert Islander living in Solomon Islands.

The earliest cuirass with a secure provenance is held at Montrose Museum on the east coast of Scotland (Figure 2.6). The Museum was set up specifically to house the collections of the Montrose Natural History and Antiquarian Society formed in 1836 by a group of local interested parties. This date makes it the second oldest Antiquarian Society in Scotland and because of this the Montrose collection contains very early Pacific material. This cuirass was presented in 1842, at a time when the Society received numerous donations, and the proceedings state that it came from: "Alex. Cruickshank, Esq. of Stracathro" who donated "A collection of Arms from the South Sea Islands … Dresses and coat of mail". Although it is not possible to identify the other items from Cruickshank, it is likely that this impressive cuirass went straight on display when the Museum opened its doors a year later.

The survey results reveal that the collecting of armour started to decrease from the late 1800s onwards. By the early 1900s, European travellers to the Gilbert Islands would no doubt have heard about the extraordinary armour, but found it harder to acquire examples. Writing about a voyage he undertook in the late nineteenth century, Frank Burnett noted: "Armour and shark-teeth spears were formerly manufactured here, and both were really works of art; but as necessity for them ceased to exist, they are no longer made" (Burnett 1910: 105).

The introduction of Christianity by Protestant missionaries in the mid-nineteenth century had a significant impact on the Islands and their people. In particular, missionaries focused on putting an end to the conflicts and disputes over land and resources that Islanders had dealt with through staged combats involving warriors wearing armour, and over time many traditional practices disappeared.

The decline in the collecting of armour was due, in part, to the reduction in its production caused by this clash of cultures. When writing about his visit to Nikunau in 1872, Rev. William Wyatt Gill described Islanders coming "to see the white strangers and to dispose of helmets of porcupine fish, complete with suits of armour of cocoa-nut fibre, and swords of hard wood with formidable rows of sharks' teeth running the entire length" (Gill 1885: 147).

A small cuirass of very distinctive manufacture and decoration entered the collections of the Hunterian Museum in Glasgow (Figure 2.7) and is associated with the early missionary period. Rev. George Turner was ordained in 1840 and was sent by the London Missionary Society (LMS) with his wife Mary to the New Hebrides (now Vanuatu), and later set up a mission station in Samoa. The Hunterian's register states that this cuirass was probably presented by Turner in 1860 during a visit home. On his return to Samoa in 1863 he was joined by two more missionaries, Rev. Joseph King and Rev. Samuel Whitmee, and their wives. While stationed in Samoa, Turner's daughter Martha Mills was widowed in May 1864 and Whitmee's wife Mary also died two months later. A letter written by Rev. Whitmee to the LMS Foreign Secretary Dr Arthur Tidman explained, "I need not detail to you all my reasons for the step; since you will not be likely to complain, but may at once say that I have asked Mrs Mills to become my companion; that she as well as Dr and Mrs Turner approve" (26 July 1865, SOAS Archives). Turner and Whitmee were now tied together by marriage as well as by God, and Turner entrusted his fellow missionary, turned son-in-law, to take the gospel to the Gilbert Islands.

Figure 2.7. Cuirass, GLAHM:E.462. Gilbert Islands. Collected and donated by Rev George Turner c.1840-1860. © The Hunterian, University of Glasgow 2017.

In 1870 Rev. Whitmee undertook what he called a 'Missionary Cruise', visiting the Islands of Tokelau, the Ellice Islands (Tuvalu) and some of the Gilbert Islands, in the ship the *John Williams*. On 15 October 1870 the *John Williams* left the Ellice Group for the Gilbert Islands, stopping first in Arorae, followed by Tamana, Onotoa and Beru. He then visited Nikunau in 1871. Although Whitmee does not mention collecting objects while on his travels, four pieces of armour in the PRM collection bear his name. A letter found among the Rolleston papers at the Ashmolean Museum explains how

Whitmee's armour came to the PRM: "I am accordingly now sending, under the care of Rev. J. King, of the Samoan Mission, the articles specified in the accompanying list. Mr King will probably reach England about May or June next" (From Rev. Whitmee to Prof. Rolleston, Ashmolean, 6 November 1872, SOAS Archives). Five pieces of armour from a 'Mr King' were also donated to the BM on 15 September 1873 and it is probable that this is Rev. Joseph King who also donated Whitmee's armour to the Ashmolean Museum in the same year.

During the mid to late nineteenth century many islands in the Pacific experienced the rapid expansion of Western trade and were exposed to blackbirders, who removed Islanders to work as labourers on plantations in Australia, Tahiti and Peru. Gilbert Islanders were among those targeted by Benjamin Boyd and William 'Bully' Hayes, two notorious blackbirders active in the mid-nineteenth century. Whitmee described how, during his missionary cruise of 1870, Tamana Islanders were nervous and resisted coming forward to greet his vessel for fear it was the "men stealing ship" from Tahiti. He wrote: "Had I not been accompanied by Christian natives of Tamana who told the people why I had gone to visit them, I might have paid with my life for the cruelty of these modern slavers" (Whitmee 1871: 31). The increased presence of colonial administrators, following the creation of the Gilbert Islands Protectorate by the British in 1892, contributed to the decline in the production of armour. In his 1912-1914 Colonial Report from the Protectorate, Edward Carlyon Eliot noted of the Gilbert Islanders: "They have adopted and adapted themselves to British rule with extraordinary facility … Although the reasonable influences of civilisation upon the native are on the whole excellent, they may have the effect of slowly discouraging old native customs" (Eliot 1915: 14). The increase in the numbers of Europeans arriving in the Islands also brought a period of population decline due to introduced diseases such as measles. It has been estimated that the population of the Gilbert Islands was reduced from 20,000 to under 3,000 in the late nineteenth century, recovering to approximately 30,000 by 1929 (Grimble 1930). As a result of these various factors, the production of armour gradually declined and then ceased. Islanders no longer took part in the traditional battles aimed at resolving conflicts over land and, with armour no longer being worn, those suits in existence were traded, sold and exchanged away from the Islands in a relatively short period of time.

However, our survey revealed two pieces of armour – a porcupine fish helmet and a cuirass – were made and presented to HRH Prince Philip in 1959 on the Island of Tarawa. These pieces were almost certainly made specifically for the Royal Tour and may have been created by the last known maker of armour, a man named Tebeioo, who also made the armour now on display in Te Umwanibong Kiribati Culture Centre and Museum (see Clark, Chapter 3). The pieces presented to Prince Philip now form part of the Royal Collection, cared for by the BM (Figures 2.8 and 2.9). Before their production, it is likely that no armour had been made for over 50 years. Recently, however, several new pieces of armour have been created, and we have included these in our survey. The most recent item is a contemporary helmet, inspired by the historic porcupine fish helmets, and made by the artist Chris Charteris (see Figure 4.11). This helmet was commissioned in 2016 by the Horniman Museum, London, for display in

Figure 2.8. Porcupine fish helmet, Oc1975,Loan01.84, 37cm (h). Gilbert Islands. Presented to HRH Prince Philip in 1959, Royal Collection Trust (no. 74039). Royal Collection Trust / © Her Majesty Queen Elizabeth II 2017.

Figure 2.9. Cuirass, Oc1975, Loan01.98, 82cm (h). Gilbert Islands. Presented to HRH Prince Philip in 1959, Royal Collection Trust (no. 74052). Royal Collection Trust / © Her Majesty Queen Elizabeth II 2017.

its galleries. A new, complete, suit of armour was created by Kaetaeta Watson, Chris Charteris and Lizzy Leckie for exhibition at MAA in 2017.

What can we learn from the survey?

When we first embarked on the survey, we were hoping to trace notable changes in style over time, or distinct varieties between islands or villages. Unfortunately, a lack of detailed provenance information has meant this aim has proved elusive. However, close analysis of the objects does yield some important differences in aspects of their production. Looking at the overalls – the second-most collected type of armour – three main styles can be identified: finely-worked armour with one or more panels affixed to the front and reverse to protect the wearer's vulnerable areas, many of which are edged with human hair cord; trousers without straps; and, lastly, coarse knotted overalls with straps but no additional panels. After studying the collector and acquisition dates for these pieces, it can be suggested that those with the extra panels represent an early style. Relevant examples with this feature are held in Bristol (dated before 1870), the BM (c.1860s), Saffron Walden (1837) and Whitby (1838), see Figures 2.3 and 2.4. However, a well-known illustration from the United States Exploring Expedition of 1841, depicting a warrior wearing overalls without any extra panels, complicates this hypothesis (see Figure 6.9). So, while it may be that the addition of panels could be a signifier of an early piece, it is clear that armour without additional panels was also in use during that period.

Figure 2.10. Feather detail on overalls A.1966.12.b, Micronesia. Transferred from the Tower Armouries in 1966. Purchased from William Downing Webster before 1895. Photo: Polly Bence, 2017. Reproduced Courtesy of Glasgow Museums.

Figure 2.11. Cuirass with shells, BOLMG:1890.14b.11(b), 52cm (h) torso. Kingsmill Islands. Bought from auctioneers Capes, Dunn & Pilcher in 1890 from the collection of George C. Yates. Photo: Josh Murfitt, 2017. © Bolton Library and Museum Services.

Several pieces of armour identified in the survey appear to be rare, or perhaps even unique. For example, in Glasgow's Kelvingrove Museum, there is a piece of armour which includes a waist panel decorated with long black feathers from the frigate bird (Figure 2.10). Two rare cuirasses were located that have cowrie shells attached to the back of the headguard: one in the Pitt Rivers Museum and one in Bolton Museum. Rev. Samuel Whitmee probably collected the example now in Oxford (Figure 3.8), whereas the Bolton example came to the museum in 1890 via an auction and was formerly in the collection of George C. Yates, a local antiquarian (Figure 2.11). Kiribati oral histories suggest that, as with the incorporation of human hair, the addition of feathers and shells was a deliberate strategy aimed at harnessing spiritual powers associated with the realms of the sky and sea. As such, these cuirasses are likely to have belonged to a warrior or a chief. An early depiction of a warrior wearing a cuirass with shell decoration was made by John Webster, a Scot living in New Zealand. Scot's *The Warrior of Nukunau* [Nikunau], from 1851 (Figure 2.12), is an intriguing image and its title might suggest that cuirasses with shells were particularly associated with the Island of Nikunau. Two others with shells are known to exist, one in Melbourne and the other in a museum in Toulouse, France. Further research is required to establish how rare cuirasses with shell and/or feather elements are, and to try to identify with which Islands they might be associated.

Figure 2.12. Watercolour on Paper, Warrior of Nukunau by John Webster 1851, PD-1966-16. Courtesy of Auckland Museum Tamaki Paenga Hira.

One of the challenges in connecting particular pieces of armour with specific islands is the multiple name changes the group has undergone in the period of contact with Europeans. In 1820, the Islands were named the îles Gilbert (Gilbert Islands) by Adam Johann von Krusenstern, a Baltic German admiral of the Czar, after the British captain Thomas Gilbert. The term 'Kingsmill Islands' was also being used to refer to those islands that lie south of the equator: Arorae, Beru, Nikunau, Nonouti, Onotoa, Tabiteuea and Tamana. In early museum documentation, however, the term Kingsmill Islands or Kingsmill Group was often interpreted to mean all of the Gilbert Group, until the Gilbert Islands became the favoured term in the late nineteenth century. In our survey findings, only 18 pieces of armour (out of 189) can be provenanced to a specific island in Kiribati, although many more mention the Kingsmill Islands generally. It seems probable that pieces of armour described as being from the Kingsmill Islands are the earlier pieces in collections (early nineteenth century), and this accounts for roughly a quarter of the pieces identified in the survey. The PRM records in particular state that 17 of its 32 pieces of armour are from the 'Kingsmill Islands', suggesting that they are from the southern group of Islands listed above. It must be emphasized, however, that in many cases, geographic provenance was either not recorded or documented at the time of collection and the attribution of Kingsmill Islands, Gilbert Islands or Kiribati may have been added after the accession date – adding to the confusion.

Each of the Islands has an individual and complex history and set of cultural characteristics. Tabiteuea translates as 'land of no chiefs' in Gilbertese, and there is a general consensus that Islanders from Tabiteuea were the most fearsome and that this is where ritualized combat and, consequently, the armour may have originated. Historically, on Tabiteuea, a man who had been selected by his family at birth embarked on a rite of passage which lasted years, to change his status from a youth (roronga) to a warrior (rorobuaka). Anthropologist Katharine Luomala notes that "Tabiteueans fought among themselves to prevent any village or clan leader from becoming paramount over the island and to resist outside invasions" (1978: 226). The findings from the survey support this interpretation, with no armour being attributed to the Islands above the equator. After looking at evidence in the literature and studying the survey data, we can hypothesise that armour was more concentrated in the Kingsmill Islands and, indeed, may have originated there, on Tabiteuea.

Several of the pieces of armour identified in the survey are attributed to Island groups other than Kiribati. In particular, many of the earlier pieces have provenances that include Fiji, the Marquesas Islands, New Zealand, Samoa, Solomon Islands, Tokelau and Tonga and how to interpret these (mis)attributions has been a further challenge for our work. Although the armour is visually distinctive and should, in theory, be readily identifiable, errors made by the collectors themselves (many of whom acquired armour at auctions and never travelled to the Pacific) or by previous generations of museum staff, often get repeated in documentation and catalogues. It is tempting, therefore, to assume that such attributions are simply human error. However, there are cases when we know that a particular collector was in the field acquiring objects themselves, and in these cases it seems more problematic to assume that a mistake has been made. One example is in the collections of the Great North Museum: Hancock, and involves body armour donated by Juliana Boyd in 1891

(Figures 2.13 and 2.14). As we know that Boyd travelled to the Pacific and was acquiring objects, it may be that she bought the armour – which is recorded in the register as being from Fiji – from a Gilbert Islander who was living and working there. Similarly, a cuirass in the collection of Birmingham Museum and Art Gallery (Figure 2.15), collected by brothers Herbert and Walter Chamberlain, was bequeathed to the Museum in 1918. As the two men were based on the island of Naitauba, in Fiji's northern Lau group in 1877, it is possible that they came into contact with Gilbert Islanders there and hence acquired this cuirass in Fiji. The most obvious challenge when undertaking a museum survey is that documentation often fails to account for the complicated and multi-sited lives objects lead. Identifying an object as being from a particular place should not lead one to assume that it was collected from that same place: objects, like people, are always on the move.

Samoa was another hub for the collecting of armour. The Gilbert Islands became part of the Samoan Mission in 1870, when Samuel Whitmee undertook his cruise and the Islands became the northwest outstations of the Samoan Mission. The *John Williams* made twice yearly visits to the outstations and there were said to be 30 missionaries working on the Gilbert Islands at any one time (King 1899). Writing about the LMS in Samoa in 1897, Foreign Secretary Ralph Wardlaw Thompson wrote: "For more than fifty years it has been the training place from whence have gone out all the pastors of the Samoan Churches, and also a great company of missionaries to the Tokelau, Ellice and Gilbert groups, and to New Guinea" (Thompson 1900: 192). The flow of objects, ideas and people between the Gilbert Islands and Islands elsewhere in the Pacific, in particular those in Western Polynesia, must be understood in order to interpret the various locations recorded as sites for the collection of armour.

The research conducted while carrying out the survey of armour in UK museums has demonstrated that curators are aware of the importance of the coconut fibre armour in their collections. Of the 23 museums that hold armour, eleven currently have pieces on display in their permanent galleries. Over the past three years, I have seen all of the armour located in the UK and have had the privilege of studying these amazing artefacts very closely. I have had my own adventures in collecting and the result is this comprehensive survey of coconut fibre armour. In tandem with extensive research into the collectors and donors of armour, my hope is that this survey will be of value to future researchers. It must be stressed, however, that this is a survey of the armour found in the United Kingdom. There are many other fantastic collections of Kiribati armour and therefore great potential for this project to extend outwards, to Europe and beyond.

Figure 2.13. Upper body armour, NEWHM C574, 158cm (w). Fiji. Collected by Juliana Boyd in 1891. © Photo: Andrew Agate, 2017. Great North Museum.

Figure 2.14. Overalls, NEWHM C574, 163.4cm (l). Fiji. Collected by Juliana Boyd in 1891. © Photo: Andrew Agate, 2017. Great North Museum.

Figure 2.15. Cuirass, 1918A17.10, 80cm (h). Gilbert Islands. Collected by the Chamberlain brothers c.1877-1899 and donated by Captain Norman Chamberlain in 1918. Photo: Josh Murfitt, 2017. Courtesy of Birmingham Museum and Art Gallery.

CHAPTER 3

Te tanga: Contextualising the Kiribati Cuirass

ALISON CLARK

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The coconut fibre cuirass is the most imposing and recognisable element of Kiribati armour (Figure 3.1). Numerous examples are found in museums across the world, many of which are well-preserved and in remarkably good condition. Fifty-three examples were located by our survey, held in 19 institutions around the UK. Their collection spans a 130-year period of history. Known across the Republic of Kiribati as te tanga, only two of these iconic objects remain in the Islands, both held at Te Umwanibong, the Cultural Centre and Museum in Bikenibeu, Tarawa (Figure 3.2).

The popularity of the cuirass with European collectors is probably attributable to its 'unique appearance', as described in a 1903 letter from Captain Davis to Charles Hercules Read at the British Museum (Davis, British Museum Correspondence, 23 September 1903). Throughout the nineteenth and early twentieth centuries, Kiribati armour was highly prized by collectors and, as it became ever more available following Islanders' conversion to Christianity, its prevalence on the European 'curios' market and in auction houses and sale rooms increased. Although no other Pacific culture created armour on this scale, there is evidence that production spread to the neighbouring Islands of Nauru and Tuvalu.

Contextualising the cuirass

Cuirasses were designed for combat but were also linked to ritual. In large battles, only the main warrior would have worn the cuirass, which was placed over his suit of armour. In one-on-one fights, the warrior would have had a specific 'score' to settle. They would have been supported by others wearing only the under-parts of the armour. Although little is known about the rituals involved in the making of cuirasses, it is generally agreed that the process of instilling power into the garment began before the process of making (Charteris, pers comm. 2017). While preparing coconut fibre string (te kora), by rolling it upon their thighs to create cords, women would use thoughts and prayers to imbue the cuirass with great spiritual power. In readiness for battle, the entire clan would also have gone through a series of rituals to try and ensure they emerged as victors.

Figure 3.1. Coconut fibre cuirass with struts and decorated with human hair, Z 7034.1, 102cm (h). Gilbert Islands. Collected by Sir Arthur Gordon, mid-19th century. Photo: Josh Murfitt, 2017 © Museum of Archaeology and Anthropology, University of Cambridge.

Figure 3.2. Te tanga on display at Te Umwanibong Kiribati Culture Centre and Museum, Bikenibeu, Tarawa. © Alison Clark, 2017.

Making the cuirass

To make a cuirass would have required a communal effort, many weeks of labour and several thousand coconuts. The production of vast quantities of coconut fibre string and human hair cord reflects the I-Kiribati tradition of maximising available resources. Potent materials, such as human hair, were used for decoration and to provide layers of spiritual significance and meaning. It is believed that only women's hair was used for this purpose and it was invariably that of a relative of the warrior involved (Watson, pers comm. 2017).

The cuirass is fashioned around a sturdy internal structure of coconut fibre. Plied coconut fibre cords are woven under and over this core with the aid of a bone needle. The technique involves weaving from the back, up and over the front of the cuirass, with extra strings being added for the headguard, which was itself strengthened with wooden struts running up each side. These struts were designed to provide stability and to prevent the headguard from collapsing. In most cases, the decorative human hair was an integral part of the construction process, not added once the object was complete.

The production of armour declined in the early 1900s following the arrival of missionaries and representatives of the British colonial administration, who sought to pacify the atolls. Their arrival brought to an end the large-scale wars that had occurred in the 1800s. Traditionally, I-Kiribati people did not value anything that they did not actively need or use, so it seems likely that objects used in warfare would have increasingly been considered disposable. Today the peaceful nature of the people is conveyed in the Islands' motto: 'Te Mauri, Te Raoi, Te Tabomoa' (Health, Peace and Prosperity).

Classifying the cuirass

In order to identify and understand the different features of the cuirass, it is useful to divide them into groups based on similarities or differences. The following classifications should not be considered exhaustive, however, as they focus solely on examples found in museum collections in the United Kingdom. As only seven out of 53 cuirass can be geographically provenanced to a specific island, it is difficult to establish whether individual atolls produced specific types, or whether styles and designs changed and developed over time. Despite common forms, almost every cuirass was made for an individual warrior and was indicative of their status, family and identity. This makes each one distinctive and reflects the variety of human expression, creativity and choice.

The majority of the cuirasses identified in our survey can be divided into three types. First, those which take the common tabard form with a headguard. The second type does not have a headguard and is a tunic style cuirass. The third variation does have a headguard but does not conform to the common tabard design and is, instead, worn like a jacket, with a vertical opening down the middle of the chest.

Type one

There is a lot of variation in this type around the tightness of the weave, the size and shape of the headguard and the decoration used (Figure 3.3). The majority are made with a relatively tight weave that gives the impression of tiny holes radiating out across the body of the cuirass. The effect is probably caused by the action of the bone needle

Figure 3.3. Coconut fibre cuirass with struts and human hair decoration, no number. Acquisition details unknown. © Colchester and Ipswich Museum Service.

Figure 3.4. Coconut fibre cuirass, Oc1894,-.218, 77cm (h). Arorae, Gilbert Islands. Collected by Captain Davis in 1892. © Trustees of the British Museum.

being inserted to pull the fibres over and then under the core cord. The larger the hole, the looser and more flexible the cuirass. However, in a few examples, the weave is so tight that these needle holes are not visible, making the cuirass appear thicker, with a wider, almost square, shape (see for example British Museum Oc1975,Loan01.98; World Museum Liverpool 57.66.24-27). These tighter woven cuirasses were all collected post-1920, and may reflect the introduction of a smaller metal needle making a fine weave more readily achievable. These particular examples can all be attributed to the atoll of Beru, the home of the last known maker of armour in Kiribati, whose name was Tebeioo. Thus, they can be described as being in the Beru-style.

The headguards in this first type of cuirass tend to be either short and square (Figure 3.4), short and triangular (Figure 3.5), or large and widening out at the top, often with a curve (Figure 3.1). The size of the headguard often corresponds with the rigidity of the main body of the cuirass. Thus, those with a larger headguard tend to have a thicker weave that makes the main body more rigid – probably in order to support the additional weight. Generally, headguards were strengthened with coconut wood struts and the larger examples were given further support with two additional struts that run from the body of the cuirass to the headguard.

Figure 3.5. Coconut fibre cuirass with minimal decoration, 2011.93.1, 71cm (h). Tabiteuea, Kingsmill Islands. Donated by Evert Jan Brill before 1871. Photo: Josh Murfitt, 2017 © Museum of Archaeology and Anthropology, University of Cambridge.

Figure 3.6. Coconut fibre tunic, NEWHM C732, 62cm (h). Tongatoboo (Tongatapu, Tonga). Collected by Lancelot Iredale and donated in 1841. © Great North Museum.

Type two

Four examples of this tunic-style cuirass (Figure 3.6) were identified in the survey of UK museum collections. One example is that donated by Lancelot Iredale during a visit home to Newcastle-upon-Tyne in 1841, and bears the dubious provenance of 'Tongataboo' [Tongatapu]. Iredale was transported to New South Wales as a convict in 1816. There, he made a life for himself and established an ironmongery and hardware business in 1822. By 1834, he had been awarded a contract to supply tools to the Colonial Secretary's Office (*Sydney Herald* 1834). It is unclear whether he travelled in the Pacific; however, his association with the Colonial Service and his regular attendance at St James Church, King Street, Sydney – which was frequented by missionaries who worked in the Pacific Islands – suggest possible sources for his acquisition of this particular cuirass. Despite its attribution to Tonga, the materials used, its form and decoration all suggest a Kiribati provenance. While the shape generally reflects that of a type one, this example is much more flexible. Also it is not made in one piece and is

instead a series of panels sewn together. There is no obvious way of tying the two side panels together, so it may well be that this type of cuirass was worn with a belt. The decoration is typically Kiribati, with the back edge of the cuirass featuring a line of small triangles created from human hair. The triangular design represents the teeth of the shark and features strongly across a range of Kiribati material culture. Referencing the shark is another way of imbuing the armour with power. As this is a unique design, it is difficult to say whether it can be identified as a 'type' or simply a unique variant. However, it seems clear that it did originate in Kiribati.

Type three

Only two examples of the third type of cuirass were identified in UK museum collections. They were both collected by Dr J.G. McNaughton, and are held at Royal Albert Memorial Museum (Figure 2.1) and National Museums Scotland (Figure 2.2). Despite the fact that one bears the provenance 'Tapitowaya' [Tabiteuea] and the other 'Tuvalu', it seems likely that these two cuirass originated in Kiribati, given that McNaughton worked at the London Missionary Society hospital on Tarawa atoll in 1919 (Allen 1919: 77). However, he also worked at the missionary hospital on Funafuti atoll between 1916 and 1917, so it is also possible that one or both of the cuirass could have been collected in Tuvalu. Kiribati and Tuvalu are separated by only 216 miles of sea – from Arorae in the south of Kiribati, to Nanumea in the north of Tuvalu – and the Islands share many aspects of tangible and intangible culture. Many of the martial arts practised in Kiribati originated in Tuvalu (Koch 1965), so there is a strong possibility of cross-fertilisation of material culture. This likelihood is reinforced by the fact that both island groups share similar environments and natural resources. Koch also notes that "war-like expeditions … sailed [from Kiribati] to the islands of Tuvalu, where … fighting took place" (Koch 1986: 245), so Islanders on Tuvalu might have acquired items of Kiribati armour as a result of these expeditions.

Figure 3.7. Close up of the tassel on a coconut fibre cuirass with minimal decoration. 2011.93.1. Photo: Josh Murfitt, 2017 © Museum of Archaeology and Anthropology, University of Cambridge.

While the two cuirasses in question differ in the way that the panels have been assembled to form the overall jacket shape, they both use the same weaving technique to produce these panels. Each has a small square headguard, and one features a lozenge shape that has been sewn into the back of the guard . The two side panels are drawn together with a loop and tie system, which would have undoubtedly left the wearer vulnerable to attack at the front. This type of cuirass also lacks the rigidity of

the first type and, while it might have been easier to wear, the small headguard would have provided minimal protection.

Several elements are common to the various types of cuirass discussed here, the first of which is the headguard. These would have offered protection to the warrior from the misdirected throws of his own party (both men and women) who assembled behind him in battle to launch stones at the enemy (Koch 1986: 246; Kaeppler 2008: 133). The other element found across types of cuirass is the presence of a tassel or loop on the back, at the base of the headguard (Figure 3.7). These may have served a practical purpose, allowing the cuirass to be stored on a hook inside the meeting house (mwaneaba). Alternatively, the tassel may have been used to attach a talisman or charm.

Decorating the cuirass

Cuirasses are often decorated with cords made of human hair. Other materials such as shells and feathers were used less commonly. The choice of which materials to use, as well as the form the decoration took, appears to have been at the discretion of the wearer, although it may be that certain elements would have indicated a warrior's clan identity. Human hair cords were employed to create lozenge shapes. These were arranged in a variety of patterns – with single or multiple vertical rows of lozenges – on both the main body and headguard. The rows varied between one, three and five in number. Occasionally, there is a single lozenge in the centre of the headguard. Further variations include horizontal lines of human hair placed between the lozenges on the headguard and the main body. These horizontal lines tend to occur on cuirasses which have multiple vertical rows of lozenges on the main body and the headguard, with the exception of one example which has thick vertical lines running underneath a single lozenge on the main body (Royal Albert Memorial Museum 367/2005, see p185). The precise shape is also open to adaptation, with some lozenges featuring 'tails', providing evidence supporting the suggestion that they represent 'stylised dolphins' or fish (Koch 1986:246). Other lozenges take a 'v shape' (Figure 3.8), or an open lozenge (Pitt Rivers Museum 1884.31.36). There are also cuirass that are devoid of decoration. In some cases, human hair is used to edge a cuirass, creating either a striped motif, or featuring half triangles that reference shark's teeth. The exact meaning of these designs remains

Figure 3.8. Coconut fibre cuirass decorated with human hair, NCM 1987-1490, 100cm (h). Gilbert Islands. Donated by Mr Wellington Thompson in 1952. © Nottingham City Museum.

Figure 3.9. Coconut fibre cuirass decorated with shells, 1884.31.36, 70cm (h). Gilbert Islands. Collected by Rev. Samuel Whitmee c.1870. Photo: Josh Murfitt, 2017 © Pitt Rivers Museum.

Figure 3.10. Coconut fibre cuirass with ray skin frontage, Oc1904,0621.29, 70cm (h). Gilbert Islands. Collected by Captain Davis in 1892. © Trustees of the British Museum.

unknown, though it is likely that they are related to designs used in tattooing, as depicted by Augustin Kramer (Kramer 1906: figures 26 and 27), which feature the 'v shape', the fish/dolphin motif and the use of horizontal lines to break up patterns. This connection between tattoo designs and designs found on other items of material culture, such as carved wooden clubs or barkcloth, occurs throughout the Pacific Islands.

Two cuirasses found in the survey are ornamented with cowrie shells (Figure 3.9), and cowries are also used in necklaces and Kiribati women's dance belts and are often associated with fertility and birth. These shells were, and still are, collected by women from the reef. Their inclusion on the armour might be intended to reference the transformation, or rebirth, of a man when he becomes a warrior. The example from the Pitt Rivers Museum (Figure 3.9) has the added element of rows of chama shell and palm wood discs strung onto coconut fibre cord and sewn onto the cuirass. This emulates the decorative lines often created using human hair cords. These lengths of shell and wood discs are usually used as dance belts or necklaces and it is very unusual to see them attached to a cuirass. They may be recycled objects, originally owned by the female relatives of the wearer of the cuirass, and their inclusion may again be intended to convey power to the warrior.

A unique cuirass, held in the British Museum (Figure 3.10), has an intriguing additional element that is both practical and spiritually significant. In his 1903 letter to Charles Hercules Read, at the British Museum, Captain Davis describes the cuirass,

then in his possession, as 'the only armour so protected I saw in the whole group'. It is a thickly woven piece with a curved body and triangular headguard and has a large oval-shaped piece of porcupine ray skin sewn on to the front. When dried, ray skin becomes solid and would have provided an extra layer of protection for the vital organs. Tebeioo, the last known maker of armour, was from Beru. In an interview given in 2016, Tebeioo's granddaughter, Taakebu, claimed that Tebeioo had made the cuirass collected by Davis in 1892, so perhaps the use of ray skin was unique to Beru. The similarity in shape, human hair decoration and weave of this distinctive cuirass to the one seen in Figure 3.4 and to another held in Cambridge (1902.425, see p.169) may suggest that these were also made in Beru.

Conclusion

Despite being fascinated with coconut fibre armour, frustratingly few European collectors bothered to document the process of making. Those that did produce written accounts frequently dismissed it as 'clumsy' and 'cumbrous' and questioned its effectiveness for combat (Kramer 1906: 272; Koch 1986: 246; Wilkes 1845: 296). By contrast, the research undertaken for this book has highlighted the creativity and dexterity of Kiribati Islanders and the sophisticated manufacturing process required to produce these complex garments. One of the benefits of surveying and studying all of the examples held in UK museums has been the opportunity, for the first time, to compare and contrast the materials, forms, techniques and styles that make up this historically important group of artefacts.

The creation of a new cuirass in 2016, for display at the Museum of Archaeology and Anthropology in Cambridge, offered the opportunity for some experimentation and a number of people were able to try it on prior to it being exhibited. Three people of different shapes and sizes wore this new cuirass and, although it had not been made with traditional materials, were able to demonstrate that a warrior would have had a good range of movement (Figures 3.11 and 3.12). Lizzy Leckie, one of the makers of the new cuirass, reported that it "… didn't feel that cumbersome, it felt balanced. It felt like you could get quite a lot of movement from it because you could get the front and the back to expand." (see Chapter 8).

On a recent visit to the Pitt Rivers Museum, I spent time in the arms and armour displays where one of their suits of coconut fibre armour is exhibited alongside other armour from the Pacific, Asia, Europe, Africa and the Americas. What was immediately striking was not the differences, but the similarities. In the display case is a 'shirt of string work' from the Toothill people, Paraguay, made before 1908. It is a tabard form, woven from caraguata fibres and decorated with darker lines and triangle shapes. It could easily be mistaken for a Kiribati cuirass, but it is not one. The idea of an Oceanic society developing a suit of armour has often puzzled visitors to Kiribati and those who have written about the objects. For many, the assumption was that their development must be attributed to contact with Europeans (Wilkes 1845: 93, Koch 1986: 246). The Pitt Rivers collection of armour from around the world suggests otherwise, demonstrating that when faced with producing something that can protect the body, humans can and do produce similar forms that occur independently

Figure 3.11. Isabella Levet wearing the new te otanga (Museum of Archaeology and Anthropology, University of Cambridge 2017.14.1-3, and 2017.15). Photo: Lizzy Leckie, 2016.

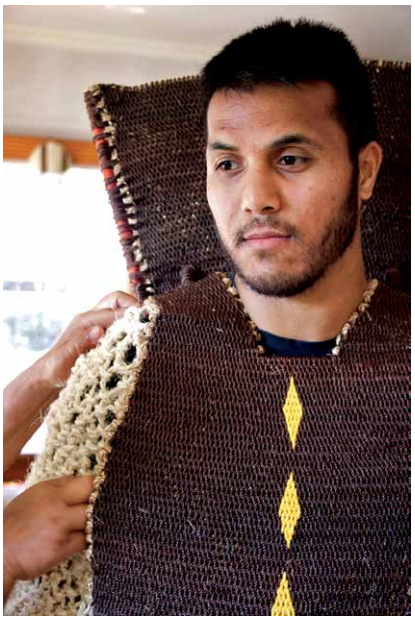

Figure 3.12 Bauro Kairaoi wearing the new te otanga (Museum of Archaeology and Anthropology, University of Cambridge 2017.14.1-3). Photo: Lizzy Leckie, 2016.

of each other. In the case of Kiribati coconut fibre armour, it may never be possible to accurately provenance each individual cuirass. However, this survey suggests that close study of this inventive form of protection will yield further important insights into the world of the Kiribati warrior.

CHAPTER 4

Protection, Status or Intimidation? A Typology of Kiribati Helmets in UK Collections

POLLY BENCE

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In the eighteenth and nineteenth centuries, when Gilbert Islanders were manufacturing coconut fibre armour, the addition of a coconut fibre helmet (Te baratekora) provided essential protection, guarding the warrior from serious harm or even death. Helmets made from porcupine fish (Te barantauti) were also worn and are remarkable objects both in terms of the skills involved in their manufacture and their striking appearance. When worn together with body armour, including a cuirass and a waist belt made of porcupine ray skin, a warrior would surely have been a formidable sight.

Following the arrival of missionaries and colonial officials, wars and combat decreased from the mid-nineteenth century onwards. In the subsequent period, helmets made of porcupine fish were collected in high numbers as curios and, as such, are prevalent in museums across the world. Our survey of the armour held in UK collections has uncovered 30 helmets (including 16 fish helmets) across ten museums: the British Museum (12 helmets), the Museum of Archaeology and Anthropology, Cambridge, (three), Pitt Rivers Museum, Oxford (six), the Horniman Museum, London (two), Manchester Museum (two), World Museum, Liverpool (one), Royal Albert Memorial Museum, Exeter (one), the Royal Cornwall Museum, Truro (one), and Kelvingrove Museum, Glasgow (one). A coconut fibre helmet, originally in the collection of Whitby Museum and transferred to Bankfield Museum, in Halifax, in 1930 can unfortunately no longer be located.

In order to better understand this category of armour and to draw attention to some interesting examples, this chapter presents a number of the helmets identified during the UK survey. Through these specific case studies, it is possible to establish a typology, as well as learn more about the materials and techniques used in their manufacture.

The historical helmets cover three main types:

1. Coconut fibre helmet
2. Porcupine fish helmet
3. Hood-type helmet

1. Coconut fibre helmets

1.a

This type of helmet, created from coconut fibre, is of a sturdy design and is made using the same coiling technique found on the Kiribati cuirass, with the coils being secured in place by a two-ply twisted coconut fibre cord. Eleven examples of this type, with varying features, were found in the survey. This helmet (Figure 4.1), from the collections of the Museum of Archaeology and Anthropology in Cambridge (MAA), has elongated side pieces to protect the cheeks and a plaited cord for fastening under the chin. It is described in the accession register as being from the Kingsmill Islands and was donated to the Museum in February 1903, along with two cuirasses, by Arthur Rutter, a local auctioneer and estate agent.

1.b

Another example of a coconut fibre helmet can be seen at the Royal Cornwall Museum in Truro (Figure 4.2). It is also made using the same technique as a cuirass; however, in this example the two-ply twisted fibre cords terminate in a top knot on the crown. A separate piece of coconut fibre cord, decorated with banding made of human hair, has been used to edge the rim of the helmet and would frame the face. Unfortunately no accession or

Figure 4.1. Coconut fibre helmet, E 1902.427 75cm (cir). Kingsmill Islands. Donated by Arthur Rutter in 1903. Photo: Josh Murfitt, 2017 © Museum of Archaeology and Anthropology, University of Cambridge.

Figure 4.2. Coconut fibre helmet with top knot, TRURI:1500.450.1, 17cm (h). Acquisition details unknown. Reproduced with the kind permission of the Royal Institution of Cornwall. Photo: Mike Searle, June 2017.

collector information exists, but it is likely to be an early example due to its sophisticated manufacture and also because Truro was a busy port that thrived during the eighteenth century. From the 1780s onwards, convicts as well as miners and labourers employed in the local tin mines were sailing to Australia, and many called at the Gilbert Islands. A similar helmet can be seen in Frankfurt Museum (registration number N.S.13373) and was donated by the collector William Oldman in 1911.

1.c

This very fine example of a coconut fibre helmet is in the Royal Albert Memorial Museum in Exeter (Figure 4.3). It has the same coconut fibre structure as the helmet shown in Figure 4.1, but has the addition of a thick tuft of black human hair on the crown and tufts of hair secured around the rim, framing the face. Human hair was an extremely precious commodity and was regularly woven into armour and weaponry. Anthropologist Katherine Luomala noted that "The head hair of both sexes is prominent in custom, belief, and myth, and has a value representing an intertwining of such factors as the aesthetic, magical, and practical" (Luomala 1978: 239). Donated to the Museum in 1945 by colonial official Richard Waterfield, it is not known exactly where or how he acquired the helmet. This is the only example of its kind found in the UK survey; however, a very similar helmet, with additions of human hair, can be found in the collections of the Museum Fünf Kontinente in Munich (registration number 91 876).

1.d

The BM's collection contains 12 helmets, more than any other institution in the UK. A donor referred to in the registers as a 'Mr King', now thought to be Joseph King of the London Missionary Society, donated a coconut fibre helmet (Figure 4.4) in 1873, together with five other pieces of armour. This helmet is made using the same coiling technique as other coconut fibre helmets and cuirasses. However, this

Figure 4.3. Coconut fibre helmet with human hair, 9/1945/37, 28.4cm (h). Collected and donated by Richard Waterfield in 1945. Photo: Peter Stephens. Courtesy of the Royal Albert Memorial Museum & Art Gallery, Exeter City Council.

Figure 4.4. Coconut fibre helmet with tropic bird feathers, Oc.8045, 54cm (h approx). Gilbert Islands. Purchased from Mr King (Rev Joseph King) in 1873. © Trustees of the British Museum.

example has plumes of white and red tropic bird tail feathers secured through a hole in the crown. This extremely rare helmet is the only example of its kind discovered in the survey. The feathers are fragile and, as such, are a surprising addition to an object apparently designed for combat. It is possible that this helmet had a spiritual, ceremonial, significance and would not have been worn in battle. As with many Pacific Island cultures, in the Gilbert Islands the realms of the living and the dead are closely intertwined. It is believed that the Anti (spirits) visit the living, often taking animal forms. French anthropologist Guigone Camus explains that on the island of Tabiteuea "the primordial goddess Nei Tituabine appears in the aspect of a giant marine ray, but she can also send her messenger, a red-tailed tropic bird" (Camus 2014: 79). This insight into local cosmologies could explain the addition of the tropic bird feathers on this helmet.

2. Porcupine fish helmets

The porcupine fish (Diodontidae) is a solitary, nocturnal, fish common in all tropical oceans around the world, preferring the seabed, lagoons and coral reefs as its natural habitat. They are usually light brown in colour, overlain with dark spots on the body and fins. Their internal organs contain a natural neurotoxin that is 1,200 times more powerful than cyanide and they use this as a deadly weapon against predators. The species Diodon hystrix or Diodon holocanthus were used to make fish helmets, most likely the former, judging by the patterning found on fish skins in museum collections. The process of manufacture involves distressing the fish in water, forcing it to naturally defend itself. The white belly swells up with water and expands to several times its normal size and it is then captured in this inflated state. The fish were buried in sand to allow insects to clean out the interior and then left for a week in the sun to dry out. Indeed, sand particles are still evident on many fish helmets in collections today. Pandanus leaf linings were occasionally added for comfort, as well as coconut fibre cordage for fastening under the chin. German biologist Eugene Gudger wrote in some detail about porcupine fish helmets in the early twentieth century:

> That such a helmet of stiff dried skin with its supporting and strengthening horny spines is capable of warding off or at any rate deadening blows, such as those inflicted by the weapons … can not be doubted. … In short, it must be admitted that the dried Diodon skin makes a fairly effective helmet for the Gilbert Islander (Gudger 1930: 442)

The earliest written record of these helmets can be found in the accounts of the United States Exploring Expedition, when several of the crew landed on Tabiteuea in April 1841. Captain Charles Wilkes wrote:

> However singular the body-dress is, that of the head is still more so: it consists of the skin of the porcupine-fish, cut open at the head, and stretched sufficiently large to admit the head of a man. It is perfectly round, with the tail

> sticking upwards, and the two fins acting as a covering and guard for the ears: its colour is perfectly white, and by its toughness and spines affords protection against the native weapons (Wilkes 1845: 50-51)

2.a

Sixteen porcupine fish helmets were found in the UK survey. This example (Figure 4.5), in the BM, has all of the fins, cheek and neck pieces intact. A pandanus leaf lining has been added either for decorative or comfort purposes and a two-ply twisted coconut fibre tie remains for fastening. It was donated in 1887 by Harry Veitch of James Veitch & Sons, a well-known nursery business. This fantastic helmet was most likely collected by Harry's brother John Gould Veitch, who was a horticulturalist on board the HMS *Curaçoa* in 1865. The *Curaçoa* visited many Pacific Islands (including Fiji and Samoa) under the command of Commodore Sir William Wiseman. As the ship did not actually visit the Gilbert Islands, it may be that the helmet was acquired from an Islander living elsewhere at the time. This is one of the finest and most complete examples of porcupine fish helmets found in the survey.

2.b

Another example of a porcupine fish helmet was found in Manchester Museum (Figure 4.6). This helmet had been transferred from the Wellcome Collection in 1951 and has no associated collector information. Again, a pandanus leaf lining has been added to the interior of this helmet. When asked about these linings, the I-Kiribati weaver and artist Katetaeta Watson suggested that they were made to measure as "pandanus leaf is very pliable when freshly prepared". She observed that the lining in the Manchester helmet was of a high quality and had been made with enough horizontal and vertical strands to allow for an extra section to fold up along the edge, in order to create a "decorative element to the helmet" (Watson pers. comm. 2017).

2.c

In the collections of the Horniman Museum in South London is a unique example of a porcupine fish helmet (Figures 4.7a-b). The head, sides and belly of the fish have been removed, which results in a level rim and therefore no cheek and neck protectors. The rim has then been stitched with what appears to be two-ply twisted coconut fibre cord. Most surprisingly, a plume of red, black and grey hair emerges from where the tail fin should be and this has been fixed in place using a European plied cotton cord and plaster of Paris. This helmet was previously in the Wellcome Collection and was transferred to the Horniman Museum in 1950. During research for this book, conservator Julia Gresson carried out tests on the hair and concluded that it is a mixture of human and animal. Further inspection under a microscope revealed that the red hair is very likely to be dyed human hair and the grey is goat hair, similar to that used on Naga objects from North East India. There is a long and complicated history of fakes and forgeries in the museum world and this is a particular issue with items from the Wellcome Collection. The term 'object-fabrication' can be used to describe the phenomenon where a new object has been created by making amendments or additions to existing

Figure 4.5. Porcupine fish helmet, Oc1887,0201.54, 37.5cm (h). Gilbert Islands. Collected by John Gould Veitch or Peter Veitch and donated by Harry Veitch in 1887. © Trustees of the British Museum.

Figure 4.6. Porcupine fish helmet with pandanus leaf lining, 0.8102, 42cm (h). Gilbert Islands. Gift of the Wellcome Historical Medical Museum in 1951. Image courtesy of Manchester Museum. © The University of Manchester.

Figure 4.7a-b. Porcupine fish helmet with hair plume and close-up. 30.12.50/8, 36cm (h). Gilbert Islands. Donation from the Wellcome Historical Medical Museum in 1951. Photo: Dani Tagen, 2017. © Horniman Museum and Gardens.

pieces. The aim of such historical practices was to intrigue the museum-going public but, with the passage of time, they now also serve to confuse and confound curators. These objects tell their own stories; they are tangible evidence of a museum visitor's desire for wonder, as well as the desire of museum staff in the past to supply that wonder. As Sir Mark Jones wrote, after curating a British Museum exhibition in 1990:

> it can be argued that fakes, scorned or passed over in embarrassed silence by scholar, dealer and collector alike, are unjustly neglected; that they provide unrivalled evidence of the values and perceptions of those who made them, and of those for whom they were made (Jones 1990: 11).

3. Hood-type helmet

In his publication of the 1890s, James Edge-Partington included an illustration of a Kingsmill Group warrior whose name was 'Bob' (see Figure 4.8 and Chapter 5). Surrounding the central drawing of 'Bob' are four illustrations of helmets found in the British Museum's collection (including Figure 4.4). A more flexible hood-type helmet, made of knotted coconut fibre, is depicted in the top left of the drawing. The hood appears to be attached to the headguard of a cuirass by a piece of cord. On further inspection, it seems that this drawing depicts one of two 'hood-type' helmets in the

BM that were found unregistered in the collection in 1980 and assigned a 'Q' number to denote their unknown provenance. After noticing the similarity between Edge-Partington's drawing and these two 'hoods', as part of the research for this book, it seems certain that they entered the Museum before 1900 and should be considered as a third type of helmet (Figures 4.9 and 4.10). German Anthropologist Gerd Koch, who wrote extensively on the material culture of Kiribati, mentions this third type of helmet: "On Tabiteuea (as on Nauru), a head protection of this kind was occasionally funnel-shaped, with a small opening at the front" (Koch 1986: 246). These two examples are the only ones found in the UK survey.

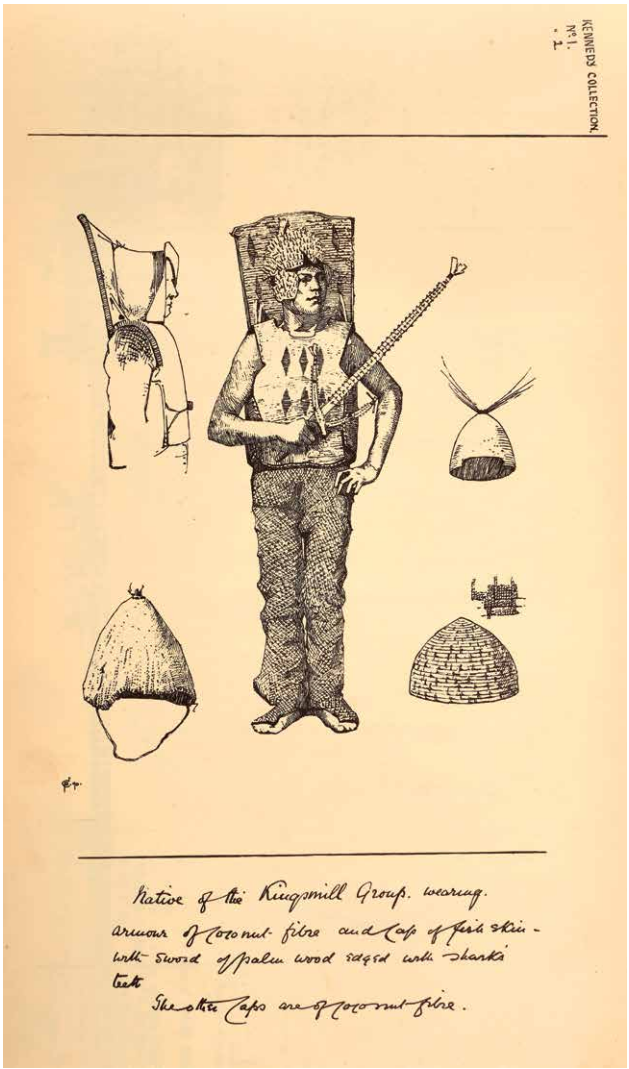

Figure 4.8. Illustration of a Kingsmill warrior, 'Bob' and surrounding helmets in James Edge-Partington's 'An album of the weapons, tools, ornaments, articles of dress of the natives of the Pacific Islands' 1890. © Trustees of the British Museum.

Figure 4.9. Hood made of knotted coconut fibre, Oc1980,Q.954, 41cm (h). Kingsmill Islands. Acquisition details unknown, but in the Museum before 1900. © Trustees of the British Museum.

Figure 4.10. Hood made of knotted coconut fibre, Oc1980,Q.955, 57cm (h). Kingsmill Islands. Acquisition details unknown, but in the Museum before 1900 ©. Trustees of the British Museum.

Conclusions: the significance of sea and sky

An exciting fourth type of helmet is the most recent addition to the UK survey and was specially commissioned by the Horniman Museum (Figure 4.11). Named *Te Tia Kawakin – the guardian/protector*, this piece was made in 2017 by artist Chris Charteris from a recycled motorcycle helmet, turret shells (Maoricolpus roseus) and liquid nails. It has a lining made from South East Asian reeds. After researching collections of Kiribati armour worldwide, Charteris created this helmet as a contemporary interpretation of the traditional porcupine fish helmets saying that he considers them "protective headwear derived from the ocean". This helmet will go on display in a new World Cultures gallery, due to open at the Horniman Museum in 2018.

Like other island cultures in Micronesia, where land is scarce, the ocean has a special significance to the I-Kiribati. It brings life, sustenance, and connects Islanders with each other. It is also the home of the Anti (spirits). I-Kiribati histories tell of sea spirits that dwell in the shallow waters surrounding the Islands and myths describe them communing with the living at night. Before entering into battle, ibonga (healers) would use their powers to try to avoid conflict and instead seek peaceful negotiations. If this failed they could summon the Anti. "Warfare and the religious cosmos were inextricably linked … Everything emanated from the Anti – valour, wisdom and strength … A war chief never

Figure 4.11. "Te Tia Kawakin (the guardian/protector)" Kiribati Eco-Warrior helmet made by Chris Charteris in 2017 of recycled motorcycle helmet, turret shells (Maoricolpus roseus), liquid nails and reed lining. P972. Photo by Lizzy Leckie, 2017. © Chris Charteris.

embarked on a war without consulting his seer" (Rennie 1989: 127). By using creatures that inhabit the surrounding waters in their armour (in the form of poisonous fish, shark teeth and ray skin), Islanders were referencing their relationship with the ocean and its ancestors. If the porcupine fish was venerated as an ancestor and represented the spirit world, then perhaps fish helmets were reserved only for uea (chiefs) and were worn in order to imbue the wearer with the ocean's power.

Katharine Luomala's research carried out on Tabiteuea, in 1948, suggests that particular birds were also considered to have spiritual powers and played an important role in I-Kiribati culture. It is therefore not surprising that we have found evidence of feathers being incorporated in both coconut fibre armour and helmets. Luomala

describes the period of intense uncertainty and change in the Islands following the arrival of the American missionary Hiram Bingham in 1867. She notes that Islanders who converted to Christianity chose to identify themselves using frigate bird feathers and, as a result, became known as the 'Feather People' (Luomala 1954). As Tabiteuea and the Kingsmill Islands have been suggested as the original source for coconut fibre armour (see Chapter 2), it is perhaps significant that these so-called 'Feather People' were also concentrated there. In the Berlin Ethnologisches Museum there is a coconut fibre helmet decorated with feathers (registration number VI 14621). This striking helmet, which is also adorned with shells and human hair, is provenanced to Nauru, an Island that lies only 500 miles from Tabiteuea. Although tenuous, it is tempting to speculate that there might, indeed, be a link between the 'Feather People', coconut fibre armour and its dissemination outwards from Tabiteuea to the other Islands in the archipelago and beyond. Further research and fieldwork might provide more concrete evidence for such a hypothesis.

In the literature, there are several references to a type of helmet that is completely absent from the UK survey: a porcupine fish helmet with feathers protruding from the tail fin. John Coulter, a nineteenth century visitor to the Islands, recorded its existence, writing: "The head is surmounted by … a helmet, in a conical shape, and made of dried fishes skin, with two or three feathers of various colours stuck in the top for a plume" (Coulter 1847: 191). Further mention is made by the writer John George Wood who proposed that these particular helmets may have been reserved for the chiefs of the village.

> That they may look more imposing in battle, the chiefs wear a cap made of the skin of a diodon, or porcupine fish, which, when inflated, is covered with sharp spikes projecting in every direction, and upon this cap is fixed a bunch of feathers (Wood 1870: 381)

Given the striking appearance of these helmets and the multiple references to them, their absence from UK collections is intriguing. Indeed the existence of a 'missing' type of helmet raises interesting questions for researchers involved in producing a survey-style analysis of a collection. How can absences be represented in the findings? Although it seems possible (on the basis of probability) that porcupine fish helmets, with feathers protruding from the top, did make their way to the UK, for whatever reason none have survived. Of course, it may be that helmets included in our survey did, in the past, have such feather decorations and that these have been lost due to pests or other damage. Until such time as further evidence can be found, however, they remain absent from UK collections.

Having spent the past three years researching Kiribati armour in UK collections, it is the porcupine fish helmet that fascinates me the most. Although it has long been argued that this fierce looking helmet protected a warrior in battle, my research leads me to conclude that they are unlikely to have been robust enough to protect against a severe blow. One writer has suggested that they may, indeed, have been "more about drama than defense" (Langlois 2015). Too fragile to withstand any forceful impact, we can conclude that this type of helmet was designed primarily to intimidate the opposition. The porcupine fish helmets that survive in UK collections today are extremely fragile, the

spines are razor sharp and are particularly prone to breaking. By their very nature they are incredibly delicate objects, and they have only become more so with age.

There is still so much to learn about the various types of helmet worn as part of the suits of coconut fibre armour on the Islands of Kiribati. What is certain is that Islanders employed great skill and ingenuity in creating them, making full use of the resources available to them. The evidence for this can be seen in the variety of helmets found in UK collections today.

CHAPTER 5

'Bob, a native of Tarawa, Kingsmill Group, Aged 18'

ALISON CLARK

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From the 1760s, Pacific Islanders began volunteering as crew on European and American ships. These adventurous individuals acted as translators and mediators between worlds: forging relationships, brokering exchanges and negotiating conflicts. Some of these kanaka seamen (as they were referred to by Westerners) "travelled as enobled [sic] tourists – as guides for explorers and pampered specimens for naturalists" (Chappell 1997: xiv). Omai, the Tahitian, who came to London courtesy of Captain Cook's second voyage, is one such famous example; Prince Lee Boo of Palau is another. These visitors gained a kind of celebrity status and thus remain visible in the historical archives today. Many others, however, are confined to the shadows; indeed, often we do not even know their names. While traces can sometimes be found, scattered in the documents of libraries, archives, museums and occasionally in the graveyards of European towns and cities, ultimately their stories are difficult to piece together or have vanished entirely. One such visitor is Bob (Figure 5.1).

Featured in a series of nine photographs, not including copies, in the collections of the British Museum (BM), is a man described as 'Bob', who is attributed to both Tarawa (Kingsmill Islands) and Rotuma in the inscriptions on the images. In one of these photographs, which we believe was taken at the Museum in 1872, he is seen dressed in a suit of coconut fibre armour, wearing a porcupine fish helmet, and holding a shark tooth weapon (Figure 5.2). It is a striking image and its appearance in the Museum collections raises a number of questions about how Bob came to be in London, why he visited the Museum and what purpose the image was meant to serve.

In the course of our research we have now identified each of the pieces of armour Bob is wearing in the collections of the BM; the cuirass is Oc.1973 (Figure 5.3) and came to the Museum from the Royal Botanic Gardens at Kew, in 1866; the overalls are Oc.1108; and the helmet is Oc.7979 (see Chapter 10) and was purchased from a German dealer named Eckhart in 1872. The weapon is also strikingly similar to an example also found the collections (Oc.1961). In one corner of the photograph a blurred bundle is just visible that looks like a pile of clothing, perhaps suggesting that the decision to get Bob posing in the armour was fortuitous. However, some of the other images

Figure 5.1. Carte de visite of Bob. Photo: Adamo Pedroletti. 1871-72. Oc,A3.63. © Trustees of the British Museum.

Figure 5.2. Bob wearing Kiribati armour. Unknown photographer. OcB31.26. © Trustees of the British Museum.

in the Museum collection might suggest otherwise. In one, a carte de visite, Bob is seen wearing a three piece suit and tie, while a number of the other photographs are anthropometric studies that show him unclothed and posed in a variety of stances.

In recent years, those who have examined these photographs have debated whether they can be interpreted as showing Bob exerting a level of agency over his depiction (McKinney and Romanek 2012), or rather that they reflect Bob's position of "powerlessness" (Brunt 2012). In the context of our own research, we have established a further layer of interpretation about Bob's visit to the BM and his engagement with the pieces that now form part of its collection. This research provides an unexpected foreshadowing of the contemporary museum practice of engaging with Pacific Islanders around collections in order to improve documentation.

We know that Bob arrived in London in late 1871 and was back in the Pacific in 1872. These dates are corroborated by the BM registers, which show that the helmet that Bob is wearing in the photograph was accessioned in 1872, and by the diaries of Charles Frederick Wood, the man who brought Bob to London. Bob came to London with Wood, a traveller, author and collector who sailed around the Pacific Islands in the 1860s and 1870s. Wood published an account of his last voyage in the 1875 volume *A Yachting Cruise in the South Seas*. The records show that Wood established a sheep station in Queensland that was worked by labourers whom he had 'recruited' during

Figure 5.3. Cuirass, Oc.1973, 77cm (h). Kingsmill Islands. Transferred from the Royal Botanic Gardens, Kew in 1866. © Trustees of the British Museum.

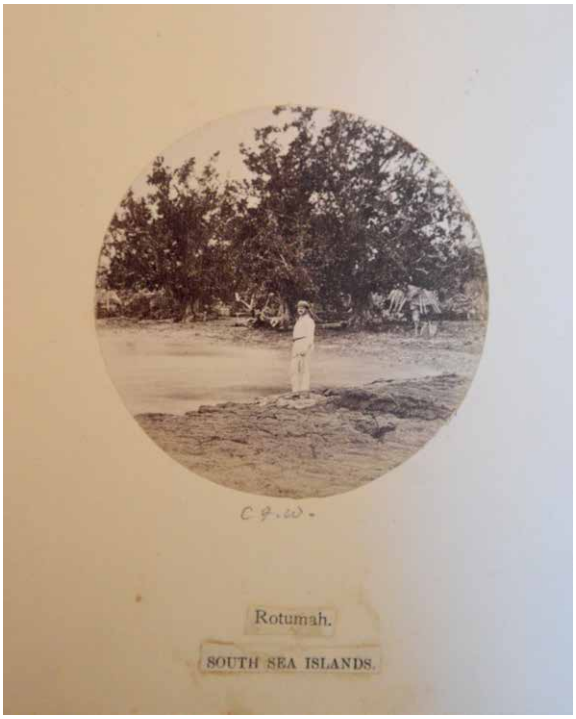

Figure 5.4. Portrait of Charles Wood in Rotuma. Unknown photographer. 1869-72. Courtesy and copyright Georgina Connaughton.

a voyage to the Islands known today as Fiji, Rotuma, Tuvalu and Kiribati. During his second voyage, he travelled to Solomon Islands and the New Hebrides (now Vanuatu), eventually settling in Rotuma (Figure 5.4) where he exported barrels of coconut oil. He arrived back in England in December 1871. The following year he left England again, on what would be his last voyage to the Pacific. On these voyages, Wood was also bartering with Islanders for local artefacts and was particularly interested in those crafted before the introduction of European materials (Wood 1875: 18). He later donated approximately 60 objects to the BM between 1872 and 1875, and a further 37 to the Pitt Rivers Museum.

In *A Yachting Cruise in the South Seas*, Wood writes with evident familiarity about picking up Islanders and ferrying them about the region, as well as about hiring them to crew his boat:

> I found any number of people anxious to go away with me, and I found out afterwards as I went from island to island, that the natives would like to turn one into an omnibus, to pick up and set down passengers all over the Pacific. As it is, I have a curious collection: first the ambassador for Niuafu; then a native of Wallis Island who has nearly lost his eyesight, and is anxious to

> return home; then a lame little boy suffering from a painful disease in his feet, whom I have undertaken to cure and bring back again; and finally two sons of chiefs, boys of about fourteen, who are being sent by their fathers under my charge, to see the world (Wood 1875: 17).

Wood's journals suggest that the Islanders he met expressed a clear desire to travel and join his crew. However, we know that this was not always the case with voyagers and traders in the Pacific. Wood's activities also suggest another dimension to these interactions and he writes of rewarding those Islanders who were able to learn how to be a "white man's boy". Despite encouraging such adaptations, Wood – somewhat ironically – professes concern that contact with Europeans will cause the demise of indigenous Pacific cultures. So great was his concern to document the 'authentic' Pacific that he commissioned photographers to accompany him on his voyages. Wood wrote that "the opportunity of taking portraits of these people in their primitive condition will soon be lost so rapid is the advance of so-called civilization" (Wood 1875: i – ii).

It was during his second voyage, while living on Rotuma, that Wood met Bob and decided to bring him back to England. From Wood's diary, we learn of how he encountered Bob and his perception of him as just another acquisition:

> This morning my boy Kawtom did not put in an appearance I having paid his wages yesterday. So I shut up my house and waited till the natives found me another servant. At night I engaged Bob a native of Apian [Abaiang]. I had wanted him from the first, hearing that natives will not work in their own island. He had some knowledge of a white man's boy having been on a boat to Sydney from which he had disembarked on his arrival here as the Captain paid him nothing and given him hardly any food (Wood 1871: 9 June).

Bob is most likely to have received his English name on this Australian ship. In his accounts, Wood wrote about this phenomenon stating that

> The first object of every lad is to run away to sea, often intending never to return. He cares not for his name received in Christian baptism … In his heart he looks upon the name the sailors give him as his real one, whether Tom, Dick, or Harry, and this will cling to him through life (Wood 1875: 27).

The fact that Bob and Wood met in Rotuma may also explain the confused dual attribution of Rotuman and Kingsmill Islander on the back of the carte de visites.

Wood left Rotuma with Bob on 16 August 1871, writing in his diary that the two were headed for Fiji and then New Zealand (Wood 1871: 16 August). En route, Wood writes that Bob became ill and then improved. By the time Wood reached San Francisco, however, Bob has disappeared from his diary. It is a mention of him in object registration slips at the BM, and the presence of the photographs in the Museum's collections, that establish that Bob arrived safely in England. Whether his visit to the BM was by invitation or was unsolicited we do not know, but our research has presented an intriguing possibility: that the staff at the Museum used the opportunity

of Bob's visit to try to establish a better understanding of objects in the collection. Annotated object registration slips which refer to him as 'Mr Wood's native', contain observations offered by Bob about objects thought to be from the Kingsmill Islands. For example, the registration slip for object Oc.7280 notes "Mr [C.F?] Wood's native thought this not from the Kingsmills". Whatever the motives of Museum staff at the time, Bob's story has become interwoven with the history of the objects he encountered that day, including the coconut fibre armour he wore for the photograph.

It is likely, given the note on the registration slips, that Bob attended the BM with Wood. It seems certain that he spent time with Wood's family, as in a later letter to his sister Mary, Wood references having employed a new "Rotumah boy (successor to Bob)" (Letter from Charles Wood to Mary Wood, 1 April 1874). This suggests that Mary was familiar with the 'old Bob' and is further indication of Wood's proprietorial attitude to Pacific Islanders. There is, however, another intriguing possibility, that Bob was introduced to BM staff by a member of the Anthropological Society of London, and that could indicate a more contentious background to the visit.

There are two carte de visites of Bob in the BM collection (Figure 5.1) both of which were taken by Adamo Pedroletti on behalf of the Anthropological Society. Pedroletti (1829-1881) was an Italian sailor turned photographer, who made images of indigenous visitors to London (Charnock 1869: clxx). On 4 May 1869, it was reported that Pedroletti held an exhibition of such photographs in his house and that he was later appointed as photographer to the Anthropological Society of London (minutes of council 18 May 1869). The carte de visites of Bob may have been used as calling cards, accompanying Bob as he (was) toured around London. More likely, however, given their production by the Anthropological Society, is that they were made to evidence Bob's 'exotic' status. The remaining photographs of Bob in the BM collection (Figure

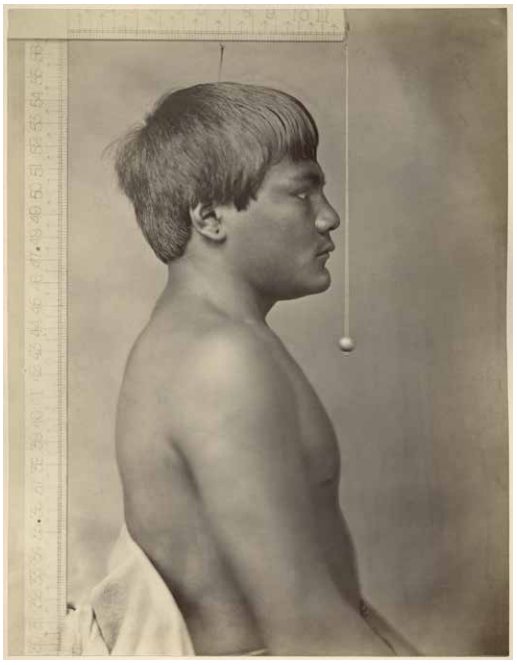

Figure 5.5. Profile of Bob. Unknown photographer. Oc.B96.28.
© Trustees of the British Museum.

5.5) are clearly intended as anthropometric studies. In them, Bob is shown naked and is depicted standing in four different full-body poses, alongside a measuring rod, and seated in two portrait style images, one from the front and one from the side showing the profile. Anthropometry was a tool used in the early days of the discipline of physical anthropology to measure and categorise people into racial groups. The introduction of photography into this methodology occurred in the late 1860s, as anthropology sought to professionalise itself. Photography, it was believed, could provide an objective, scientific truth (Edwards 1998: 27). In 1869, Thomas Huxley, an eminent biologist and president of the Ethnological Society of London, set about devising a photographic project that would use anthropometry to create, for the first time, a uniform vision of the British colonial enterprise. On 26 July 1869 at 9.30am, Huxley met with Pedroletti and arranged for him to take a series of 50 sample photographs of indigenous people then residing in London (Bank 2006: 106). These photographs were then sent to the Colonial Secretary, Lord Granville, with a set of instructions on how to photograph "natives" (Huxley 12 August 1869). Huxley had been influenced by a series of photographs commissioned by John Lamprey (Lamprey 1869), in which the subjects were photographed against a grid. Huxley sought something even more precise, however, and created a series of instructions to which each participant in the project should adhere. In doing so, he sought to eliminate any glimmer of subjectivity and neutralise the interpretive agency of the photographer. Essentially, Huxley was seeking evidence that could be studied before it was too late, just as Wood had attempted to document the 'primitive native' before their demise. Although the anthropometric photographs of Bob were not part of the Huxley project, the handwritten inscriptions on their reverse, which read "Bob, a native of Tarawa, Kingsmill Group, Aged 18", are the same as the inscriptions on the back of the Pedroletti carte de visites. This suggests that both sets of images were taken at the same time and by the same photographer during Bob's visit to England. How the Museum acquired these images is unknown, but it raises the possibility that Pedroletti or another member of the Anthropological Society accompanied Bob on his visit and handed over the images to the Museum staff.

There is evidence that the anthropometric images for which Bob posed were still being used almost 50 years later, when they appeared in the 1906 edition of *The Living Races of Mankind* (Hutchinson 1906: 31) with the measuring instruments cropped out. The inclusion of the photographs of Bob, who is listed in the book as being a "native of Tarawa", are further evidence of the perpetuation of such images in ethnological research of the period. In this publication, Bob's portraits are used to illustrate a 'typical' Kingsmill Islander: a person who was described as being distinct from the Eastern Polynesians by their "shorter stature, the greater development of hair on the face, and the more elongated contour of the head, the latter feature indicating an approximation to their Melanesian neighbours of the islands to the south-west" (Hutchinson 1906: 31). Wood seems to have tried to emulate this 'scientific' approach to racial taxonomy through his own photographic collections, and owned albums featuring photographs of indigenous people from all over the world, seated or standing, naked or semi-clothed, against a measuring rod. The people are not named but their geographic locality is given. However, in one album (Figure 5.6) Wood has juxtaposed images of various Pacific Islanders, some named, some labelled generically

Figure 5.6. Portraits of Pacific Islanders in a page from one of Charles Wood's photographic albums. Unknown photographer. Courtesy and copyright Georgina Connaughton.

as 'Rotuman' or 'Fiji girl'. For reasons about which we can only speculate, Wood has juxtaposed these anonymised subjects with one of the carte de visites of Bob. Likewise we can only hypothesise as to what Wood's intentions had been in bringing Bob to London, although it seems clear from this trail of evidence – direct and circumstantial – that Bob became embroiled in contemporary debates about the nature of humanity and what it meant to be 'other'.

Whether Bob was a willing or reluctant party in the portrayal of these various guises is a moot point. As previously stated, it has provoked a debate about where the agency lay in these photographic sessions. In particular, is the image of Bob in a suit of coconut fibre armour from the Kingsmill Islands meant to depict a European version of the fearsome Kingsmill Island warrior or, alternatively, was it a case of Bob taking the opportunity to display the potency of his culture in material form? The truth is we will never know. However, there are aspects of Bob's story that suggest he had an independence of spirit that might favour the latter interpretation. This conclusion is reinforced by a letter from Wood to his sister Gertrude, when he reported that he had dismissed Bob from his employ: "at Levuka I discharged Bob whose conceit and impudence I could no longer put up with" (Letter from Charles Wood to Gertrude Wood 13 December 1873). Bob's dismissal seems to have been the end of his association with Wood, and by April 1874, Wood had employed a new "Rotumah Boy" (Letter from Charles Wood to Mary Wood, 1 April 1874).

What happened to Bob after 1873 is a mystery; however, one possible final reference can be found in the book *Pacific Tales* by Louis Becke, published in 1897. The dedication on the front is to "those olden days", which implies Becke's time in the Pacific dated to some years before the book's 1897 publication. In the text, a "Tarawa Bob" is mentioned along with a "Rotumah Tom". This Bob and Tom are described as being brothers-in-law and mates aboard the *Montiara*, a trading schooner that cruised among the islands of Micronesia. Freed from his association with Wood, it is tempting to imagine that Tarawa Bob was, indeed, the man who travelled across the oceans to London and whose image – dressed in the unique armour of his heritage – now resides in the photographic collections of the British Museum, providing a valuable research resource for future generations.

CHAPTER 6

Conserving Kiribati Armour

RACHEL HOWIE

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Museum objects can be regarded as historical documents from which important information relating to their specific biographies can be extracted (Caple 2000: 29). As a conservator, you are trained to look closely at objects in order to try and understand how they have been made and what they have been made from. Such information is essential in order to formulate a plan for undertaking any conservation treatments or repairs. For many museum conservators, however, finding the time to research other aspects of an object's history, such as its contextual significance and original usage, is a challenge. In 2016, I was fortunate enough to be offered a research conservation project, based at the Museum of Archaeology and Anthropology (MAA) in Cambridge, which allowed me to focus intensively on a suit of Kiribati armour from the Museum's collections (Figure 6.1). This particular suit had been selected for inclusion in the exhibition *The Island Warrior* (2017) and required conservation assessment as well as a suitable mount for display. Time spent researching the original context of the armour, as well as the opportunity to compare it with other examples in UK institutions, guided my approach to its conservation. In particular, it helped me decide when to intervene, which treatments to use and, just as significantly, when to take no action at all.

The materials and construction of the armour

It is well documented that the plant fibre used to make Kiribati armour is coconut, and that the black material used for the decorative elements is human hair (Kaeppler 2008: 133; Newell 2011: 114). In Cambridge, we were able to confirm this with staff at the McDonald Institute for Archaeology. A scanning electron microscope (SEM) and light microscope were used to examine samples of the plant fibre that, due to its brittle nature, had become dislodged from the armour's cuirass. The longitudinal striations were deemed consistent with those found on coconut fibres (Figures 6.2 and 6.3). Coconut fibre string (te kora) was the main material used to make the cuirass, overalls and upper body armour and was chosen because of its ready availability, as well as for its strength, flexibility and its resistance to abrasion. Still used in the Islands today, coconut fibre string is created using the fibres from the middle layer of the fruit wall of the coconut (Norton 1990: 127). These fibres are dense and resistant to rot

Figure 6.1. Armour on mannequin (Z7034.1) and (Z7034.2-3), upper body armour, 156cm (w) and overalls, 165cm (l). Porcupine fish helmet (2011.93.3), 24cm (h), Tabiteuea, Kingsmill Islands. Donated by Evert Jan Brill before 1871. Photo: Josh Murfitt, 2017.

and seawater. To extract the fibres, the husk is soaked in sea or fresh water, beaten to loosen and remove the fleshy tissue, and then dried in the sun (Koch 1986: 187). The processed fibres are then turned into cords by women, who roll two threads on the back of the thigh, moving the palm of the hand in a forwards and backwards motion. New fibres are added to those being rolled to make the cord longer. These cords are then plaited or twisted to make thick lengths of string (Koch 1986: 169).

Human hair, which is used to decorate the armour, is composed of keratin, a tough, fibrous protein material. It is stable in changes of relative humidity (RH), but is vulnerable to insect attack, light damage and poor handling (Kite 2015: 3). Using a SEM it was confirmed that the black fibre used on the cuirass was, indeed, hair of some sort (Figure 6.4) and with light microscopy it was confirmed as human (Figure 6.5). Hair fibre has three distinct parts: the cuticle, the cortex and the medulla (Kite 2015: 2). When it is analysed, the cuticle and medulla are the most important aids for identification of species (Allen 2015: 109). Under the light microscope, the medulla appeared to be amorphous in appearance, and its width was generally less than one-third of the overall diameter of the hair shaft, indicating human origin. This is distinct from the medulla in animal hairs, which is normally continuous, structured and generally occupies an area of greater than one-third of the overall diameter of the hair shaft (Deedrick and Koch 2004).

There are two main sections to the cuirass, the main body and the raised headguard. To prevent the headguard from falling forward, this example has two supporting struts attached to the front of the headguard and the shoulders of the main body. As the coconut fibre cord is tightly wrapped around the struts, it is not clear whether they are formed of wood or tightly packed fibres. In addition, two wooden poles wrapped in two-ply twisted coconut fibre and human hair cord are attached to the reverse of the

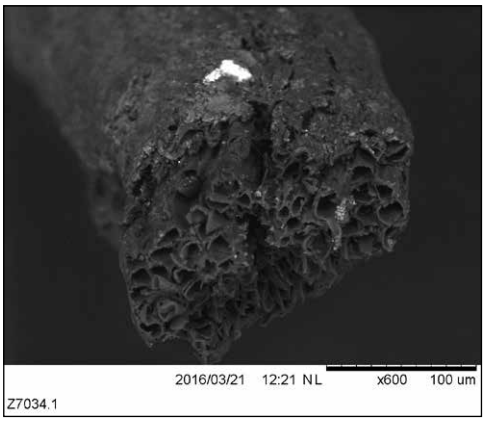

Figure 6.2. SEM image of coconut fibre on the cuirass Z 7034.1. Photo: Catherine Kneale and Dr Trish Biers. © Museum of Archaeology and Anthropology, University of Cambridge.

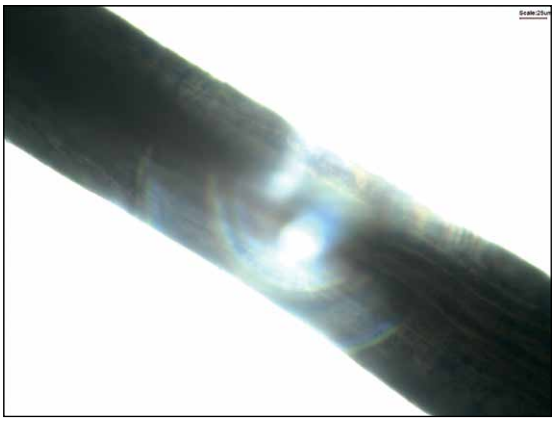

Figure 6.3. Microscopy image of coconut fibre on the cuirass Z 7034.1. Photo: Dr Jennifer Bates. © McDonald Institute for Archaeological Research, University of Cambridge.

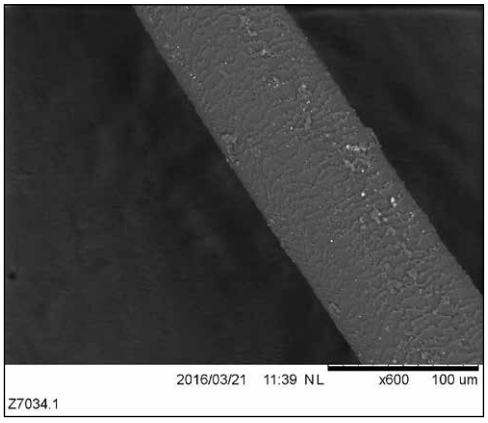

Figure 6.4. SEM of human hair on the cuirass Z 7034.1. Photo: Catherine Kneale and Dr Trish Biers. © McDonald Institute for Archaeological Research, University of Cambridge.

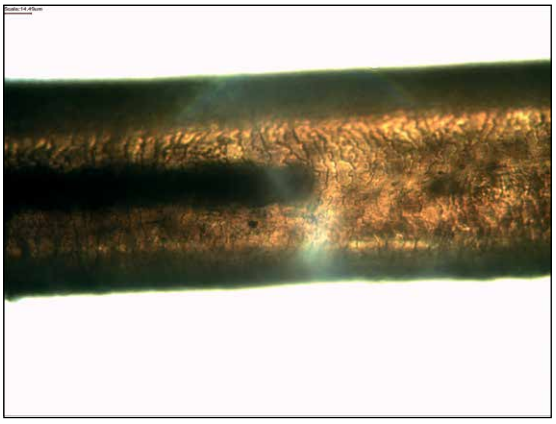

Figure 6.5. Microscopy of human hair on the cuirass Z 7034.1. Photo: Dr Jennifer Bates. © McDonald Institute for Archaeological Research, University of Cambridge.

headguard on each side. There are numerous examples of cuirasses that do not have these poles and consequently the headguard slumps forward. When worn, the cuirass encases the torso, overlapping at the front with cords to secure it in place.

The cuirass is created using long coconut fibre coils, which are bound together by two-ply twisted fibre cord, interweaving between the coils. On the MAA cuirass, these coils were laid horizontally and parallel to each other. The three-ply braided fibre coils can be seen at the edges, where they turn and go back on themselves. This method of construction means that the armour is both very heavy and very rigid, offering effective protection to the warrior inside. The cuirass is decorated with twisted human

hair cords, arranged in lozenge motifs. The edge of the cuirass is also decorated with twisted coconut fibre and human hair.

There are many variations in the style and construction of Kiribati armour; however, there is a general similarity between individual pieces. The overalls conserved for the exhibition at MAA are of the distinctive style found in many museum collections. Two plaited straps come up from the front of the chest and would have been worn over the shoulders, being tied in a loop at the back. The MAA overalls, along with several other examples found elsewhere, have a large hole in the crotch region. This might have been deliberately placed so as to allow the wearer to relieve himself easily. Alternatively, it might be as a result of damage from general wear and tear or from blows in battle. The overalls and upper body armour were commonly made using a knotting technique, with differences occurring in the size of the weave. Compared to the upper body armour, the MAA overalls have large gaps between the knots (Figures 6.6 and 6.7). In other examples, a finer cord is used, enabling a tighter weave. On occasion, the size changes even within one piece or is altered deliberately to create a pattern (Figure 6.8).

An impressive and intimidating feature of Kiribati armour is the helmet made from a hollowed out and dried porcupine fish. There are several types of porcupine fish recorded as having been used for helmets, but the majority found in the British Museum, for example, are listed as belonging to the family Diodontidae, with only one identified as the Cyclichthys orbicularis species. A helmet from the Museum of New Zealand Te Papa Tongarewa (Te Papa), is listed as probably being the Diodon hystrix species, also of the Diodontidae family. After discussion with Oliver Crimmen, from the Natural History Museum, and researcher Kat Szabo, the MAA helmet was identified as also being from the Diodontidae family; most likely, the Diodon hystrix. However, the particular species could not be confirmed absolutely (Crimmen 2016; Szabo 2016). Some helmets, like the MAA example, are just the dried skin of the fish, while others are reinforced with an additional internal structure.

Conserving the armour: to clean or not to clean

The armour was generally in a good, stable condition, but was covered in a layer of museum dust. Each piece was dry cleaned using a brush and museum vacuum, with netting over the top to catch any small pieces, and Groomstick (a natural rubber) to remove the more ingrained surface particulates. Groomstick was used as it could be moulded to a desired shape, and the tackiness could be reduced, by rolling it on the back of the hand or by placing it in a fridge for a few hours. Smoke sponge was considered but it was ruled out as it was too abrasive.

The overalls contained a number of holes along the sides and one on the chest. What caused these holes is not clear, but they may be the result of physical damage to the artefact while being worn in combat. Many of the holes are located along the sides of the torso and legs, which could indicate contact with a sharp weapon. Interestingly however, there does not appear to be any sign of blood. A hole located on the right side of the chest might suggest that the warrior did not wear a cuirass. A drawing, made by Alfred Agate during the United States Exploring Expedition, shows just such a warrior in action (Figure 6.9). Repairing this hole might have been necessary to prevent further damage; however, as the stability of the artefact was not compromised it was decided

Figure 6.6. Weave on overalls, Z 7034.3. Photo: Rachel Howie. © Museum of Archaeology and Anthropology, University of Cambridge.

Figure 6.7. Weave on upper body armour, Z 7034.2. Photo: Josh Murfitt, 2017. © Museum of Archaeology and Anthropology, University of Cambridge.

Figure 6.8. Weave changes on overalls, Oc.8043. © Trustees of the British Museum.

to leave it in an unchanged state, as visible evidence of the object's biography. The knotting technique, used to create the overalls and upper body armour, was cleverly designed to ensure that any holes that occurred during combat were halted at the next knot, thus preventing them from unravelling and expanding. On the MAA armour, the broken ends of the coconut fibre could have caught, as a consequence of handling. I therefore took the decision to secure monofilament nylon netting over these ends, to prevent this from occurring but without obscuring the historical damage (Figure 6.10). To make them less noticeable the net was dyed using Lanaset™ dyes, which are designed to be used on protein fibres but can also be used on nylon. These dyes were chosen because of their proven fastness. As two of the holes along the legs would be visible when the armour was on display, a dyed patch of habatai silk was also stitched to the inside of the coconut fibre using 100% polyester ultra-fine thread. The repairs were subtle, but could be easily identified upon closer inspection of the object.

Both the upper body armour and overalls had deep creases running along their edges as a consequence of flat storage. These were relaxed using local humidification with damp blotting paper and Sympatex, a waterproof, water-vapour-permeable membrane. Sympatex brings the applied moisture as a vapour to the surface of the object without the object actually coming into direct contact with the liquid.

On the cuirass a small number of the human hair bindings had come loose and were beginning to unravel (Figure 6.11). These were secured using small pieces of tinted Japanese tissue (tosa tengujo) with a 50:50 mixture of wheat starch paste and 4% methylcellulose in deionised water (Figure 6.12). The tissue was tinted with acrylics, as, when dry, the pigment

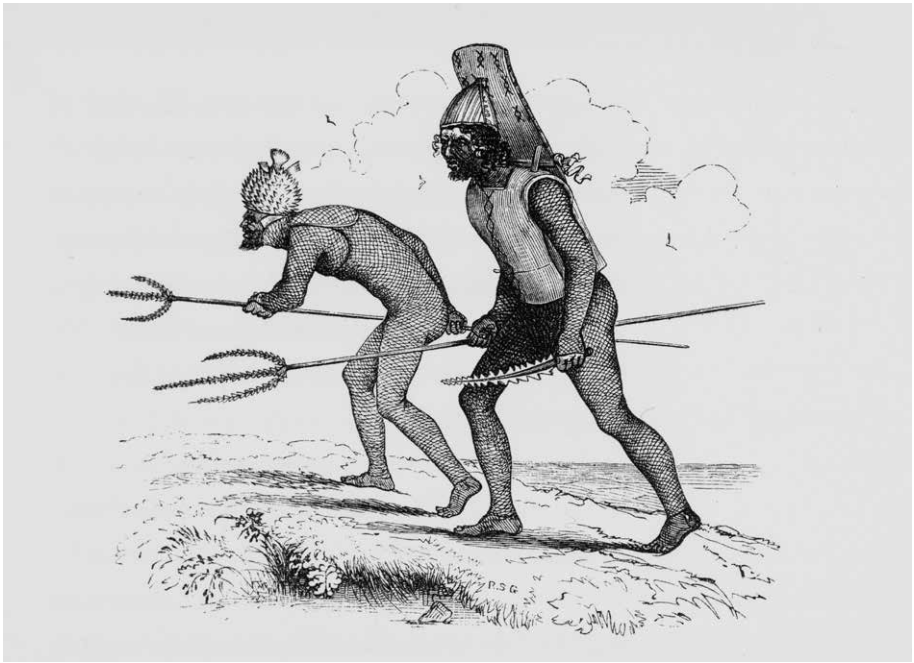

Figure 6.9. Illustration of two warriors on Tabiteuea, from the United States Exploring Expedition by Alfred Agate in 1841. © Smithsonian Institution.

Figure 6.10. Overalls Z 7034.3 being conserved. Photo: Rachel Howie. © Museum of Archaeology and Anthropology, University of Cambridge.

Figure 6.11. Binding hair on Z 7034.1 before conservation. Photo: Rachel Howie. © Museum of Archaeology and Anthropology, University of Cambridge.

Figure 6.12. Binding hair on Z 7034.1 after conservation. Photo: Rachel Howie. © Museum of Archaeology and Anthropology, University of Cambridge.

does not dissolve in water. If it is necessary to remove these repairs in the future, a small amount of deionised water would not cause the pigment to run.

The cuirass had an unusual white discolouration on the coconut fibre (Figure 6.13) which was also seen on several cuirasses in other collections. Initially, I was concerned that it might be mould, as this commonly occurs on organic materials if stored in an environment with RH 65% or higher. After liaising with other institutions that had undertaken analysis on these deposits, it was identified as salt. In addition, under the light microscope, the white bloom had a definite crystalline appearance, rather than the characteristic fuzzy appearance of mould. Salt efflorescence occurs when soluble salts dissolve upon exposure to moisture in the air. They then migrate through the porous material and crystallise on the surface. Changes in the RH will trigger the movement of soluble salts in and out of porous materials. During the manufacturing process, the coconut fibres are soaked in sea or fresh water, so it may be that the salt is present as a result of this. This would certainly explain its appearance on cuirasses in other institutions. However, as the reason for the salt deposit on the MAA cuirass was unclear, I decided not to remove it.

Figure 6.13. Back of cuirass with discolouration Z 7034.1. Photo: Josh Murfitt, 2017. © Museum of Archaeology and Anthropology, University of Cambridge.

When the porcupine fish helmet came into the lab to be assessed, the surface was covered in what appeared to be sand (Figure 6.14). As Bence discusses in Chapter 4 we know that helmets were often buried in sand, and it is possible that this material clinging to the side of the helmet came from this process. Again, because the sand particles are a material manifestation of the helmet's history, I took the decision to leave them in situ. The same could not be said for the accumulated museum dust and dirt, however, and that had to be removed. This was achieved by careful use of a soft brush and conservation vacuum. The 'retention' of the sand was also a concern in another treatment. The helmet's ear guards were misshapen and bent inwards into the cavity of the helmet (Figure 6.15). Due to the rigidity of the skin they were fixed in shape but, for the helmet to be displayed these areas had to be reshaped. There are a number of methods used to achieve this, which range from localised humidification, to humidifying the whole object in a humidity chamber (Doyal and Kite 2006). As it was only the flaps that required reshaping, localised humidification was undertaken and the vapour was applied using a combination of Sympatex sandwiches and a preservation pencil connected to an ultrasonic humidifier. The helmet was humidified from the inside, so that the sand on the outer surface was not dislodged. The treatment was successful as the surface did not darken and the sand remained securely attached (Figure 6.16).

From a conservation perspective, the absence of something can be as important as its presence, and I was curious as to why the MAA helmet had no internal lining. Considering the abrasive qualities of the porcupine fish skin, it might be expected that some form of padding would be beneficial to the wearer. Upon close examination of the helmet, two cords were seen that knotted on the outside of the skin, before threading through and hanging down inside the helmet. Perhaps these may originally have been used to attach an internal lining that did not survive when the helmet was collected or has subsequently become detached.

Further consideration of absences and presences came to the fore when we prepared to mount the MAA armour for display. A number of museums in the UK were consulted in order to gain a better understanding of mounts that had been used elsewhere. Many institutions reported that they had been forced to create their own

Figure 6.14. Sand on porcupine fish helmet 2011.93.3, 24cm (h). Tabiteuea, Kingsmill Islands. Donated by Evert Jan Brill before 1871. Photo: Rachel Howie. © Museum of Archaeology and Anthropology, University of Cambridge.

Figure 6.15. Porcupine fish helmet, 2011.93.3, after conservation. Photo: Rachel Howie. © Museum of Archaeology and Anthropology, University of Cambridge.

Figure 6.16. Porcupine fish helmet, 2011.93.3, after conservation. Photo: Josh Murfitt, 2017. © Museum of Archaeology and Anthropology, University of Cambridge.

forms on which to mount the armour, because of the unusually narrow proportions of the overalls. Although numerous suits of armour exist in museum collections for researchers to examine, none of them can be experienced actually being worn on a human body. Sean Mallon, Senior Curator at the Museum of New Zealand Te Papa

Tongarewa has suggested that the proportions of the armour may be due to the relatively small stature of I-Kiribati people at that time the armour was made or that it was worn predominantly by teenagers and young men (Te Papa Tongarewa 2011). The MAA overalls, for example, are very narrow and long. After discussions with Proportion London, a company that produces conservation-grade mannequins, we concluded that we needed to order a mannequin made for a six-year old boy. We then had to customize it by significantly increasing its length to accommodate the armour. The mannequin was then padded and shaped to obtain the desired dimensions. The size of the mannequin posed some interesting questions about who, in fact, would have worn this armour and how the coconut fibre might have become stretched with usage. Further research into this fascinating issue is required.

According to the American Institute for Conservation of Historic and Artistic Works (AIC), "the primary goal of conservation professionals is the preservation of cultural property" for future generations (AIC 2017). When conservators join the Institute of Conservation (ICON) they are governed by a code of conduct and professional standards, and are expected to understand "the ethical basis of the profession and the responsibilities of the conservation professional to cultural heritage and to wider society" (ICON 2014). Ethical considerations play a huge part in deciding what treatments to use, even those as simple as cleaning. Every stage, from creation through to their present state in museum stores, is part of an object's life history. Taking this idea to the extreme, even the removal of museum dust, could be "considered an act of vandalism" (Caple 2000: 91). However a build-up of dirt and dust can also be harmful to objects and creates an attractive environment for pests. In addition, dust can be abrasive, absorb moisture creating a humid environment, and can cause staining. Conservators carefully weigh up the benefits of removing soiling products, which can increase the stability of the object, versus the potential loss of information that these products may contain. Although ethical concerns and the stability of the object are always the priority, the opportunity to research the armour prior to commencing treatment allowed me to make informed decisions about how to proceed. It was thus, as a direct result of my research, that I removed the layer of particulate deposits from long-term storage, but left in place the sand on the helmet and the white deposits on the cuirass.

CHAPTER 7

Kiribati Weaponry

ALISON CLARK AND RHIAN WARD

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Many of the collectors of coconut fibre armour featured in this book also acquired items of weaponry from Kiribati. Indeed, the famous swords and daggers that are edged with shark's teeth are the most frequently represented object-type from Kiribati found in museums worldwide (Figure 7.1). Although less well known, palm wood clubs and spears with stingray barbs were also used by warriors (Figure 7.2). This chapter provides an overview of the materials and the method of production for these weapons which have a strong association with the armour and a ubiquitous presence in Pacific collections.

The most comprehensive written accounts of Kiribati weaponry are those provided by G.M. Murdoch in his 1923 article 'Gilbert Islands Weapons and Armour', and Gerd Koch's *Material Culture of Kiribati* (1986). Both authors provide typologies that divide swords and other weapons into various categories, shapes and sizes. There is general agreement across sources, and from oral histories, that these weapons were used for inflicting physical harm but were not intended for killing an opponent (Finsch 1893; Koch 1986; Maude and Maude 1981; McClure 1924; Montague 1921; Murdoch 1923; Ratzel 1896).

Kiribati daggers and swords are made from palm wood with shark's teeth lashed onto the wood using coconut fibre string (te kora). The daggers are the smallest of the weapons – some having a single row of teeth on one side, while others have teeth on both sides. They were held in the palm of the hand and used to inflict wounds on the hands of an opponent (McClure 1924: 236). Daggers are the only type of weapon currently being made in the Islands and are popular tourist items (Figure 7.3).

The wood used in the making of these weapons would have come from felled coconut palms, which were split into sections before being whittled and sanded to achieve the desired shape (O'Riordan 2013). Marks found on shark's teeth swords are consistent with this method of working the wood. The teeth were removed from a dead shark and small holes drilled into each individual tooth using a stone or, later, a metal drill (Drew et al 2013). Unsurprisingly, shark's teeth make very effective weapons and are multifaceted. In other words they can pierce, crush and slice, whereas metal weapons tend to perform only one of these actions (Moyer and Bemis 2016: 9).

Figure 7.1. Shark tooth dagger, E 1904.48 (Z 7052), 36cm (l). Purchased from Gerrard and Sons from the collection of Captain Davis. Photo: Gwil Owen. © Museum of Archaeology and Anthropology, University of Cambridge.

Figure 7.2. Palm wood club, 2008.26, 82cm (l). Donated by Irene Beasley. Harry Beasley purchased it from Gerrard and Sons, from the collection of Captain Davis. Photo: Gwil Owen. © Museum of Archaeology and Anthropology, University of Cambridge.

Figure 7.3. Shark tooth dagger, 2016.170, 34cm (l). Purchased by Alison Clark from Kiribati in 2016 as part of a Crowther Benyon grant. Photo: Josh Murfitt. 2017. © Museum of Archaeology and Anthropology, University of Cambridge.

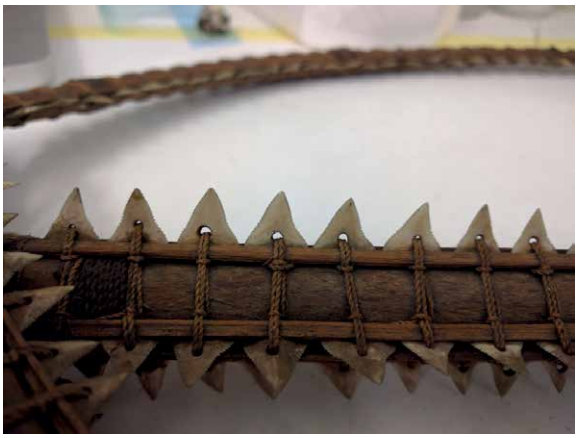
The swords, which usually measure between 60 and 120 centimetres in length, conform to three types: those with a round central body that have four rows of shark's teeth set into each side; and those with a flat central body with two rows of teeth, one row set into each edge. A third type, often referred to as a 'trident', is shorter and wider than the swords and has teeth on each 'branch' or 'arm' of the weapon. Tridents would have been carried by a warrior's henchman or assistant. The armour-clad warrior would have been carrying a long spear, measuring between three and six metres in length (Murdoch 1923: 174; Maude and Maude 1981: 317). These spears were tipped with a stingray barb or with rows of shark's teeth (Gill 1885: 132).

The final item of Kiribati weaponry is the palm wood club. These clubs are almost identical across museum collections. Each is approximately 60 to 80 centimetres long, with a looped handle made from twisted coconut fibre string designed to slip around the wrist. The clubs are smooth and polished, allowing the natural striations of the wood to show through. None of the clubs feature carved designs and it has been

Figure 7.4. Shark tooth branched spear or trident, E 1907.603, 117cm (l) Purchased with a donation from Professor Bevan. Photo: Josh Murfitt. 2017. © Museum of Archaeology and Anthropology, University of Cambridge.

suggested that this absence of designs indicates that these clubs were less valued than swords or daggers (Wilkes 1845: 84). Further accounts describe the clubs being used in battle only when weapons with shark's teeth had been broken (Murdoch 1923).

In 2017, a trident sword (Figure 7.4) was featured in *The Island Warrior* exhibition at the Museum of Archaeology and Anthropology (MAA), Cambridge, alongside a suit of armour (see Chapter 6). As with the armour itself, the weapon needed to undergo conservation work before it could be put on display. First, the trident had to be stabilised in order to prevent further decay, followed by research and testing of the materials used to construct it, in order to decide what treatments might be appropriate. It had always been assumed that the teeth used for such weapons would have been taken from one species of shark. Images of the teeth were sent to Dr Kelly Richards at the Department of Zoology at the University of Cambridge for analysis and identification. In particular, it was hoped to establish whether the teeth used on the weapon were from species found in the waters around Kiribati. The work carried out by Dr Richards confirmed that the teeth belonged to sharks in the genus Carcharhinus, which are found in Kiribati. Interestingly, she was also able to identify that teeth from two different species of shark were present on the object. The teeth shown in Figure 7.5 are probably Carcharhinus albimarginatus (silvertip shark) or Carcharhinus falciformis (silky shark), but may also be Carcharhinus melanopterus (blacktip reef shark), Carcharhinus amblyrhynchos (grey reef shark), or Carcharhinus cautus (nervous shark). The teeth shown in Figure 7.6 are probably Carcharhinus longimanus (oceanic whitetip shark) or Carcharhinus amboinensis (pigeye shark), but may also be Carcharhinus leucas (bull shark). All



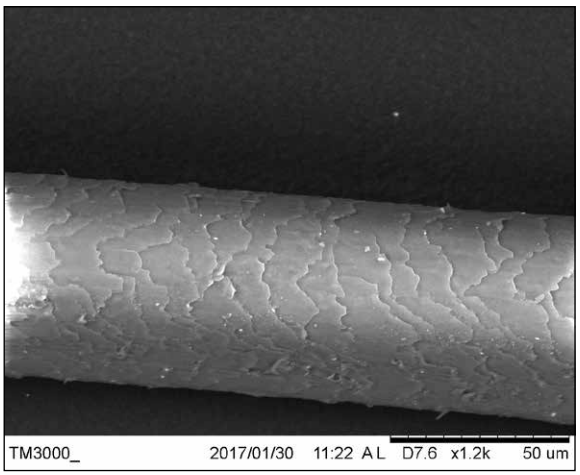


Figure 7.5 (left). Shark's teeth on E 1907.603. Photo: Rhian Ward. © Museum of Archaeology and Anthropology, University of Cambridge.

Figure 7.6 (right, above). Shark's teeth on E 1907.603. Photo: Rhian Ward. © Museum of Archaeology and Anthropology, University of Cambridge.

Figure 7.7 (right, below). SEM of human hair on E 1907.603. Photo: Rhian Ward. © Museum of Archaeology and Anthropology, University of Cambridge.

these can be found in Pacific waters (Richards 2016, pers. comm.; Florida Museum 2017a, b, c).

In addition, it was hoped to establish whether the bindings used on the weapon were made of human hair or, alternatively, were dyed coconut fibre. To this end, samples of the fibre were examined using a scanning electron microscope (SEM). By comparing the resulting images with samples of human hair, it was possible to confirm that human hair was used to decorate this trident and, as a result, it seems likely that this would also be the case in the bindings of other weapons (Figure 7.7).

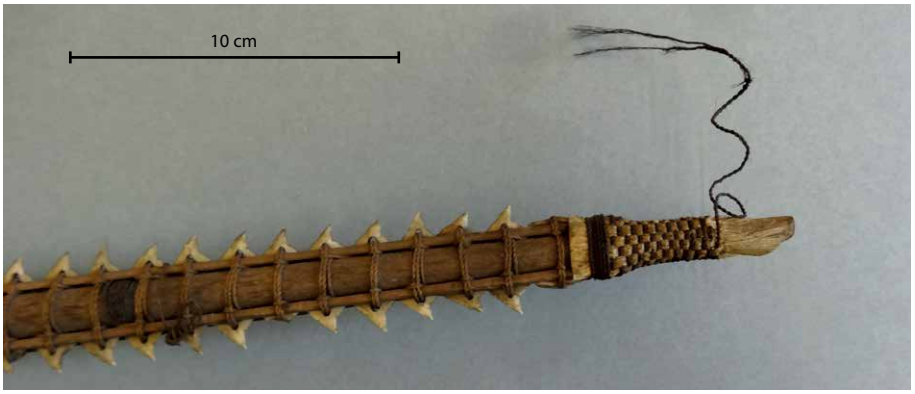


Figure 7.8. Unravelling human hair on E 1907.603. Photo: Rhian Ward. © Museum of Archaeology and Anthropology, University of Cambridge.

Figure 7.9. E 1907.603 after conservation. Photo: Rhian Ward. © Museum of Archaeology and Anthropology, University of Cambridge.

Subsequent to this research, further conservation work was carried out, involving the removal of surface dust and dirt, repairing the human hair cord, and supporting the deteriorating palm leaf sword tips. The presence of museum dust on objects can cause a variety of problems: hard particles can cause abrasion to the object when disturbed, and thick layers of dust can cause discolouration and impair close examination. Furthermore, dust can increase or even initiate decay due to its ability to hold moisture close to the object, causing areas of high humidity (Tétreault 2011: 266). In this case it was deemed beneficial to remove the dust and dirt that had accumulated on the object since its accession into the Museum. This was carried out using Groomstick, a pH neutral form of natural rubber. Unlike other cleaning materials such as sponges, Groomstick lifts dirt off the surface rather than rubbing it off. This approach reduces the risk of scratching the object, which can be caused by abrasive dirt when it is removed.

When the sword arrived in the conservation lab, it was noted that the human hair binding was unravelling (Figure 7.8) and was at risk of being snagged. These loose strands were secured back in place using tinted Japanese tissue paper (tosa tengujo) and 5% methylcellulose adhesive in 75:25 IDA: deionised water (Figure 7.9). The frayed palm leaf tips were treated in a similar way to prevent loss. This conservation work ensured that the weapon could be safely displayed and its appearance was closer to its original condition when it had been used in battle.

Weapons were some of the most frequently collected items during early encounters between Europeans and Pacific Islanders. The legacy of these transactions is the many thousands of examples now held in the collections of European museums. The enduring appeal of Kiribati weaponry means that swords, tridents and daggers are regularly selected for exhibition. However, due to their scale and the relative fragility of their delicate bindings, they require careful monitoring, conservation and storage. The new research outlined here has helped identify some of the specific materials used to create these visually striking weapons. It is hoped these findings will assist the important work of conserving objects that exert such a powerful hold on the public imagination.

CHAPTER 8

The Fibres That Connect Us: An Interview

KAETAETA WATSON, CHRIS CHARTERIS, LIZZY LECKIE AND ALISON CLARK

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Kaetaeta Watson is an I-Kiribati master weaver and artist from Tabiteuea, one of Kiribati's coral atolls. Chris Charteris is a New Zealand based jeweller, sculptor and artist whose work takes inspiration from his I-Kiribati, Fijian and English heritage. Lizzy Leckie is a weaver from Aotearoa New Zealand, who has worked with Maori and Kiribati weavers learning traditional weaving techniques. In 2013, the three started working together as part of *Tungaru: The Kiribati Project*, a New Zealand based initiative that explored Kiribati material culture. In 2016, after meeting Alison Clark at the Festival of Pacific Arts in Guam, they joined the *Pacific Presences* research project, based at the Museum of Archaeology and Anthropology (MAA), Cambridge. Led by a mutual research interest in Kiribati armour, how it was made and used, and whether it could still be made, Clark asked Watson, Charteris and Leckie to produce a new suit of Kiribati armour for the exhibition *The Island Warrior*, displayed at the MAA from 4 April until 25 September 2017 (see Figure 8.5). As part of this project Watson, Charteris and Leckie researched historic armour in museum collections in New Zealand, and came to the UK in 2017, where they and Clark also visited museums in London, Glasgow, Cologne and Berlin, where this interview was conducted on 13 April 2017.

Alison Clark: Creating a new suit of Kiribati armour has been an incredibly time consuming project for you all, what do you feel you have learnt from it, and what do you feel the process has revealed about the armour and how it was made?

Chris Charteris: The first thing is to acknowledge the many weeks or months of labour that would have gone into producing the armour. Even just making the string would have been a huge undertaking. For us, as we were using pre-prepared string, that was a whole process we didn't have to go through. So from the beginning, we recognised that making the armour would have to have been a communal effort. While we learned a lot about the practicalities of making the armour, there are other aspects of the process that are still quite mysterious. For example, the magic

and rituals behind its production and the patterns which adorn it are still largely unknown to us. But we are learning.

AC: Making the armour has involved a lot of research and you have all visited many museum collections (Figure 8.1) and seen a variety of historic suits of armour. Do you think that by looking at armour in collections you can get closer to understanding what the cultural significance of the materials and designs used might have been?

CC: First and foremost I think it comes down to what was originally available in the environment. In Kiribati culture, birds, fish and other sea creatures have a spiritual significance for different family groups – like totems – so I'm sure there would have been a reference to those spiritual connections in the making of the armour. In light of our research, we suspect that there was probably a common set of designs or motifs that people used but that there was also an element of creativity – the freedom to do something different. We now know that there are a lot of different variations in terms of the patterns and designs but there are also differences in form. For example, the cone shaped cuirass we saw at the Ethnologisches Museum in Berlin and at the Museum of New Zealand Te Papa Tongarewa – I think there might only be three like that in the world. The armour held in museum collections is like a library, it is an invaluable resource for researchers like us. The fibres connect the past with the present.

AC: Could you explain how you went about selecting the materials and the methods for constructing the new suit of armour?

Lizzy Leckie: We tried all sorts of fibres. We started by experimenting with various samples but quickly realised that we needed a huge quantity of string, at least 400 metres! So, like people in Kiribati, we wanted to use what was around us and what was easily available. We chose sisal, which is used to make ropes and matting. Although it was plied, rather than the plaited string that would have traditionally been used, it worked quite well. For that reason we used it for the overalls. Also, sisal has a hairy texture, like coconut fibre, so we got a big bale of it and made the overalls and arms. Initially, we tried using multiple strings. We came up with a technique where every knot consisted of two strings joining and then separating again. We were relying on our ability to look at images of historic armour, deconstruct them in our minds and then reassemble them using new materials. It was a process of trial and error but we got there.

Kaetaeta Watson: This project was an example of individual creativity meeting with collaboration. Lizzy did one leg and I did one and we joined them (Figure 8.2). I think that is one of the benefits of working together. We were able to talk and compare as we went along. After a few weeks of making the overalls using multiple lengths of sisal, I began thinking about the nets people use in Kiribati, for fishing. Although I couldn't remember how they were made, I knew that my nephew did.

Figure 8.1. Kaetaeta Watson and Chris Charteris studying the armour at Auckland Memorial Museum. Photo: Lizzy Leckie, 2016.

Figure 8.2. Kaetaeta Watson and Lizzy Leckie making the overalls 2017.14.2. Photo: John Watson, 2016.

So we went and spent a couple of days with him. He showed us the techniques he knew and we progressed to using one single strand of sisal. This was much easier, and that is how we made the upper body armour (Figure 8.3). So the overalls and the upper body armour are made using two different techniques. My nephew did a starting netting knot for me, but it was so neat and tight that my fingers became sore when I tried to do it. I just couldn't do it that way, so I made it looser. I did the top bit first then the upper body armour afterwards which are joined in the middle. I just left a neck hole and then joined the shoulders. It was fiddly but it was fun and exciting and I definitely preferred the second knot, the netting one.

LL: For the cuirass, we used a manila rope for the core fibre before wrapping over it with a nylon netting string. The roll we had was bright orange and we thought: it's too bright we can't have that! So we dyed it brown, to resemble coconut fibre. I started working on the cuirass using a metal needle and I was nearly in tears because it was so difficult that it took me a day to complete just three rows. So I decided not to make it so tight and I asked Chris to make me another needle because the metal needle was really hard to use. He made some whalebone needles and they really helped. Then we were able to manage a few hours a day and the armour slowly grew (Figure 8.4). We started at the back at the bottom, making it wide at first and then going up and joining in the diamond shapes. We looked at examples in museums to work out how the headguard behind the head would have been attached and added in extra cord for that. In total, the cuirass probably took a couple of months to make and various people gave us a hand with it at different times. Several members of the community contributed and that was a really wonderful feature of the project. Once the armour got to a wearable size, people could try it on, just to see how it felt and the balance of it. It was quite an amazing feeling to have it on.

CC: To complete the costume we really wanted a fish skin helmet. The traditional helmets were made from porcupine fish, but we don't have those in our waters in New Zealand, so we put the word out to our fisherman friend and through him we managed to get hold of two pufferfish within the time we had available. Then we made use of the internet to learn how to clean a pufferfish! We worked out that you cut the head off and then you peel the skin away from the internal parts. The spiky bit has quite a thick leathery membrane so you can pull the rest of the flesh away from it, and it comes away quite cleanly. We removed the insides and the head, which created the space where the wearer's face would be. We soaked the skin in bleach and salt to try and remove the smell, and we blew a balloon up inside the skin so it would retain its shape. We then hung it out to dry, and in two days it was sufficiently dry to allow me to drill some holes around the edge. Then it was sent to Kaetaeta who made the lining from harakeke (New Zealand flax), and wove in a shark tooth design along the front rim.

Figure 8.3. Chris Charteris and Kaetaeta Watson demonstrating the netting knot. Photo: Josh Murfitt, 2017. © Museum of Archaeology and Anthropology, University of Cambridge.

Figure 8.4. Lizzy Leckie demonstrating using the bone needle to make a cuirass. Photo: Josh Murfitt, 2017. © Museum of Archaeology and Anthropology, University of Cambridge.

KW: I really wanted to make the lining with pandanus leaves, but the pandanus I had was too old and hard so I chose harakeke, which I have worked with a lot. I also made some thin coconut fibre string (te kora) to bind the edges using the holes that Chris had drilled.

AC: Over the course of this project you have each spoken about the relevance and importance of collaboration and community. Why has it been so important to you to involve the wider community?

LL: For me, working with the community is the most important aspect of this whole journey. That is what is *living* about this project: it's what it has all been about.

CC: The making of the armour required us to engage with other people in the community to get help and to share what we were doing. The good thing that comes out of that is represented in the name that we gave to the new armour, *Kautan Rabakau* (Figure 8.5), which means 'to awaken'. To awaken the connection to the ancestors and to the skills that have come from the past. Such awakenings are the things that keep that part of your soul alive.

KW: As Chris said, it is about stepping back to move forward. Looking at what has been done in order to go on and hopefully making a connection, not just for the three of us, or even for my family, but for the Kiribati community as a whole. As a Kiribati person I know there can be difficulties going into a community. There are certain sensitivities that must guide the approach you need take. Sometimes it can be frustrating but then, all of a sudden, you get a breakthrough and the whole thing works. That is a great reward.

LL: Working with the communities in New Zealand has also been so valuable. The sharing has been important. Meeting Kaetaeta's extended family, that now live in New Zealand, was great. They were excited about the project and keen to get involved. Her family has incredible skills that they are willing to share.

CC: I think our involvement in the previous project, *Tungaru: The Kiribati Project*, has been important too, it showed our commitment. We are at a stage where critical skills are getting lost, and in one generation you can lose a whole skill-set and it is crucial to try and keep some of those skills alive. Not just because you can, but because they are important, and useful.

AC: The image of a warrior wearing coconut fibre armour has become iconic but what do you think it means for I-Kiribati people today?

KW: For me it is just a tourist thing unless there is some kind of understanding behind it. My impression is that for many people it is just a tourist attraction. People are buying t-shirts (Figure 8.6) with the image on, but what are they buying them for? Is it because it's a warrior? I would like to ask them what impression they think it

Figure 8.6 (right). Kiribati warrior t-shirt, 2016.166, designed by Barane Iererita. Photo: Josh Murfitt, 2017. © Museum of Archaeology and Anthropology, University of Cambridge.

Figure 8.5 (left). Suit of armour, Kautan Rabakau (to awaken)*, made of manila rope, nylon netting string (dyed brown). Cuirass 2017.14.1, 86cm (h), overalls 2017.14.2, 59cm (l), upper body armour 2017.14.3, 135cm (w) and porcupine fish helmet 2017.15, 27cm (h). All made by Chris Charteris, Lizzy Leckie and Kaetaeta Watson, 2016-2017. Photo: Josh Murfitt, 2017. © Museum of Archaeology and Anthropology, University of Cambridge.*

gives of Kiribati. Also, its popularity relates to how unique it is. No other islands have armour like this and that must be part of its attraction.

CC: Just like the Kiwi bird has come to represent New Zealand, the armour has come to represent Kiribati, because there aren't many other images you can pick out that are a uniquely Kiribati thing. It may be to do with cultural pride too and it is probably up to this generation to re-define what it means for people within Kiribati. The warrior image could be re-purposed for contemporary debates. For example, if you are talking about climate change, then maybe it could be used as a means to symbolise the fight against that.

KW: We I-Kiribati are a very independent people and we live off the resources that are around us. But if we are warriors fighting against anything, then it is climate change. I think the image of the warrior and the armour should be used for that.

AC: Finally, Kiribati has become synonymous with climate change. You have all mentioned the potential of the image of the warrior to be used in climate change awareness both in Kiribati and internationally, could you briefly discuss how it could be used and how you think climate change is impacting on Kiribati cultural heritage?

KW: Kiribati armour isn't just about warfare, it is about materials too. It is made from coconut trees and if these trees aren't there or are not bearing fruit anymore we can't use coconut fibre string anymore. Our traditional skills are and will be affected by global warming as Kiribati people use the materials provided by the environment they live in. If it's not there they can't do those things anymore. If I-Kiribati have to be transported to another country because of climate change the Kiribati culture could disappear. We need to make an effort now to maintain cultural skills and to carry them with us to where we are, wherever that may be. In transporting the whole of Kiribati into another country it may be safer for the population but at the same time it will mean that a new Kiribati culture will be developed. That is why it is important now to record all the skills and knowledge we have of how we were and how we are now.

LL: As a symbol, one way that the warrior can be used is as a guardian that protects and preserves what is precious: Kiribati culture. Because the armour is made from materials gathered from the land and ocean it automatically speaks of Kiribati resourcefulness and sustainability, which are ways of life that we all we need to adopt in the fight against climate change.

KW: Whilst the image of the warrior is a useful tool, it cannot be just about the warrior alone. The image needs to stand for a strong Kiribati voice that has the energy and the attitude, like the warrior, to fight not just in the sense of warfare but to fight against climate change and to speak out to the world about what Kiribati is facing. That would be great if that could happen.

This interview is an abbreviated version of the full interview, which will be published in Carreau, L. *et al.* 2018. *Pacific Presences: Oceanic Art and European Museums.* Leiden: Sidestone Press.

CHAPTER 9

Provenance

COMPILED BY KATE ADAMS, POLLY BENCE,
ALISON CLARK AND GEOFF RUBENSTEIN
EDITED BY COLIN ADAMS

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One of the major challenges facing museums in the 21st century is the need to examine more critically the provenance of the objects in their collections. There is increasing pressure - not least from originating communities - for museums to make explicit the circumstances of acquisition and thus allow audiences to be drawn into, and comprehend, something of these interactions. Uncovering the diverse and complex histories of collections of Kiribati armour has been a priority for our research team and, as a result, we have assembled short biographies of almost all the collectors of these objects held in UK museums. This research has revealed the vast interconnected network of explorers, colonial officials, missionaries, traders, soldiers, whalers, collectors and dealers that caused these objects to leave their place of origin and be accessioned into European and North American metropolitan museums.

In taking this approach, we have been mindful of curator Mark Elliott's warning that museums must be "wary of over-emphasising the stories of 'dead white men'" (2017: 10). However, we consider that there is positive value to be gained by engaging with these characters and their role in collections. Indeed, we believe that, taken together, these biographies offer particular insights into the complex dynamics and motivations involved in the collecting of armour. If museums still connote 'colonial dustiness' (Thomas, 2010: 6), perhaps a more open-minded approach to provenance can help blow away some of the cobwebs of history.

Edgar Leopold Layard provides an example of how the interplay between object biographies and collector biographies can lead to a better understanding of acquisition histories. On first impressions, Layard could be dismissed as a quintessential 'colonial collector'. His family had a history of working as colonial administrators and Layard himself was sent to Fiji in the 1870s to produce a report for the Colonial Secretary. Yet, he was also a scientist whose career choices were influenced by his desire to travel and his ambition of becoming a naturalist. Indeed, it was his passion for nature and for

collecting flora and fauna that led him to acquire artefacts such as the coconut fibre cuirass now held in Manchester Museum. To view Layard exclusively through the lens of a 'colonial project' would be a distortion. The same may be true of the missionary the Rev. George Turner and his family, who lived for decades in the Pacific Islands and acquired armour now held in the Hunterian Museum, Glasgow. While these objects are, arguably, the material manifestation of long-standing reciprocal relationships, those acquired by John Gould Veitch during a brief voyage through the Pacific Islands in 1865 clearly evidence a more pecuniary dynamic.

If we better understand the nuances of these object histories and personal biographies, then we begin to create more sophisticated narratives about the nature of specific transactions that help account for the agency and motivations of Islanders. However, the combining of fieldwork with Islander knowledge and histories is also vital. Thus, we are pleased to be able to include in this chapter a named I-Kiribati maker, Tebeioo, who likely created a cuirass now held in the collections of the British Museum. This association was uncovered as a result of a meeting between Tebeioo's descendant, Taakebu, and Alison Clark in Kiribati in 2016, and also through the existence of a photograph of this cuirass being worn during the visit of Edward Henry Meggs Davis and HMS *Royalist*, to the Islands in 1892 (see Figure 9.1). The coming together of these threads of research is a tantalising example of what might be possible given the opportunity for sustained interactions between Islanders and European Museums.

The most obvious differentiation in collectors is between those who travelled to the Pacific themselves and those who collected from the UK, with the latter being more likely to be dealers (such as Wellington Thompson, a dealer in arms and armour) or those who had varied collections of 'exotic' objects often purchased from such dealers. Harry Beasley is one who collected a range of artefacts from a variety of sources, eventually amassing a large enough collection to open his own ethnographic museum. Likewise, for Augustus Henry Lane Fox Pitt-Rivers, coconut fibre armour was simply part of a much larger ethnographic collection which went on to form the basis of the Pitt Rivers Museum (PRM).

Those who collected coconut fibre armour while travelling or resident in the Pacific were for the most part either colonial officials, missionaries, mariners or naturalists of some ilk. Despite the disparate nature of the collectors, there are significant connections between them; many of the colonial officials knew each other – Sir Arthur Gordon helped to advance the career of William MacGregor, appointing him to be the Chief Medical Officer of Fiji, for example. Some colonial collectors also impacted on the policies of the British government in the Pacific region; such as Edgar Layard who co-authored the report that led to the annexation of Fiji in 1874 and which saw Arthur Gordon appointed as the first Governor. We can also assume that dealers and auctioneers were aware of each other, particularly those who focused on one genre of artefact, in this case weaponry. And with the London Missionary Society being the main religious organisation operating in the Pacific region at this time, it is inevitable that there was an information exchange between those missionaries who collected coconut fibre armour: this is evidenced by the correspondence between them.

It would be easy to assume that once pieces of coconut fibre armour arrived in the UK this was the end of their journey, however, there are numerous examples of armour subsequently changing hands. Henry Tufnell gathered his collection while travelling alongside William MacGregor and after his death his collection was merged with that of MacGregor's and passed to Henry Anson who in turn bequeathed it to the PRM. Much like the collectors themselves, the armour became embedded in a network of connections of individuals and institutions.

Tebeioo

Maker of coconut fibre and ray skin cuirass in the British Museum

Only one piece of historic armour held in a UK museum can be associated with a named maker: a unique cuirass with a panel of porcupine ray skin, acquired by the British Museum (BM) in 1904, from the collection of Captain Edward Davis. It is believed to have been made by Tebeioo, the last known maker of armour, from the Island of Beru. In an interview given in 2016, Tebeioo's granddaughter, Taakebu, suggested that her ancestor had made the cuirass with the ray skin and may even be the man shown wearing it in a photograph taken by a member of the Davis voyage, in 1892. As particular skills and knowledge were kept within families, it is possible that members of Tebeioo's family had been making armour for generations. Tebeioo himself, or a descendant with the same name, is known to have made a suit of armour that dates to 1957 now held in the

Figure 9.1. An I-Kiribati man wearing armour made by Tebeioo, 1892. Photo from the voyage of HMS Royalist. *Copyright Fiji Museum.*

Kiribati Cultural Centre and Museum. Information in the Cultural Centre states that Tebeioo was from Nukantewaa village, on Beru, and that he made the suit as part of the centenary celebrations of the American Board of Missions held on Abiang that year. Working in the 1950s, this Tebeioo is believed to have been the last maker of traditional armour and it is likely, therefore, that he also made the cuirass presented to Prince Philip, Duke of Edinburgh, two years later when he visited Beru in 1959. This cuirass is now part of the Royal Collection, cared for by the British Museum.

Balfour, Henry (1863-1939)

Donor of a porcupine fish helmet in the Pitt Rivers Museum

Balfour was the only son of Lewis and Sarah Balfour, née Comber. He was educated at Charterhouse School in Surrey and then studied Natural Sciences at Trinity College, Oxford. In 1887 he married Edith Wilkins, the only daughter of Robert Francis Wilkins, a donor to the PRM. During the construction of the Museum one of Balfour's tutors offered him a year's work, "making little drawings, writing and typing out very neat labels, writing catalogue descriptions". Balfour quickly began negotiating for a permanent position and by 1889 he was appointed Sub-Curator. In late 1890 he was made curator, a position he held until his death, aged 75. Over the course of his career Balfour arranged, rearranged and expanded the museum's collections. He wrote many scholarly articles and published a book entitled *The Evolution of Decorative Art*. Beginning in the 1890s he taught anthropology at Oxford, influencing generations of students. Balfour was an avid traveller who worked primarily as a natural scientist. Many of his voyages related to the study of whales and whaling. Balfour was a good networker who was always keen to meet other curators and local colonial officials on his travels. He also had a voracious appetite for collecting ethnographic and archaeological objects and amassed a very large collection, being the second-biggest donor to the Museum after Pitt-Rivers himself. Balfour was President of the Royal Anthropological Society (of which several of our collectors were members), the Museums Association, the Folklore Society and the Royal Geographic Society. He was also a fellow of the Royal Society.

Beasley, Harry Geoffrey (1881-1939)

Donor of a waist band, a coconut fibre helmet in the British Museum, a coconut fibre helmet, cuirass and body armour in the Pitt Rivers Museum and a cuirass in the World Museum, Liverpool

Born in Kent in 1881, Harry Beasley was a privately wealthy collector and curator, who worked as a brewer, having inherited the North Kent Brewery. Beasley's passion for collecting began when he was just thirteen and he acquired two clubs from Solomon Islands. In 1914 he became a fellow of the Royal Anthropological Institute and the same year he was married to Irene Marguerite and together they continued to expand the collection, buying from auction houses, museums, fellow collectors and missionaries. In 1928 the couple moved to Cranmore House in Kent and set up the Cranmore Ethnographic Museum, which eventually housed over 6,000 objects from around the world. The main focus of their collection was artefacts from the Pacific; however, they also collected items from Asia, Africa and North America. Beasley died in 1939 from complications associated with diabetes. During the war, the collection was housed at

the British Museum, which was fortuitous because Cranmore House was bombed in 1941. In 1944 Irene offered part of the collection as a donation to the British Museum and the rest was dispersed to various museums and institutions over the following years by Irene and her daughters.

Boyd, Juliana Fenwick (1846-1892)

Collector of body armour in the Great North Museum: Hancock

Juliana was the daughter of Edward Fenwick Boyd, a notable industrialist, and Ann. Edward played a substantial role in the formation of the North of England Institute of Mining and Mechanical Engineers and became its fourth president in 1869. Boyd's mother died in 1861 and she became her father's companion. She had a wide range of interests, being an avid collector of books, china and furniture. Boyd had a strong interest in the history of the north of England. She was a keen antiquary and genealogist and was a Fellow of the Antiquarian Society of Newcastle-upon-Tyne. Boyd published a work on Thomas Bewick, the famous wood engraver and natural history author, entitled *Bewick Gleanings*, which she dedicated to her father who had first gifted her a copy of Bewick's works. The work contains a biography of Bewick and his pupils and was last reprinted in 1973. Boyd's estate contained a large number of examples of Bewick's work. Following her father's death in 1889, Juliana decided to embark upon a period of travel, which had been recommended for her nerves. In August 1890 she sailed to Melbourne, visiting Victoria and Tasmania before travelling to New Zealand where she explored both the North and South Islands, at least partially on horseback. From New Zealand she ventured on to Fiji and many other islands in the South Pacific. There she amassed an extensive collection of ethnographic objects including Maori carvings, Fijian clubs and the coconut fibre armour which now resides in the Great North Museum. Juliana fell ill before her return to England and died on 10 January 1892 in Auckland, New Zealand.

Brill, Evert Jan (1812-1871)

Donor of a cuirass, body armour and a porcupine fish helmet in the Cambridge Museum of Archaeology and Anthropology

Brill was born and died in the Dutch city of Leiden, which boasts the first ethnographic museum in Europe, established in 1837, and the oldest university in the Netherlands, founded in 1575. From the age of 17, Brill worked alongside his father in the publishing house Luchtmans and specialised in the fields of theology, oriental languages and ethnography. Luchtmans had close links with the university, which was a major centre of studies in these subject areas. In 1848, Brill became the owner of the company and changed its name to E.J. Brill. In order to cover his new financial obligations, Brill liquidated the entire stock he had inherited at a series of auctions that took place between 1848 and 1850. He went on to establish an international reputation for his company as a publisher of academic works across a wide range of fields. It is not known how he acquired the coconut fibre armour now held in Cambridge, however his role as head of E.J Brill would almost certainly have brought him into contact with leading figures at the National Museum of Ethnography (Rijksmuseum Volkenkunde).

Chamberlain, Herbert (d. 1904) and Walter (1847-1920)

Collectors of a cuirass in Birmingham Museum and Art Gallery

Members of the prominent Birmingham family, Herbert and Walter were the younger brothers of Joseph Chamberlain (1836-1914), who was mayor of Birmingham from 1873 to 1876, and Secretary of State for the Colonies from 1895 to 1903. Walter and Herbert were also uncles to both Austen Chamberlain (Foreign Secretary 1924-1929) and Neville Chamberlain (Prime Minister 1937-1940). Although they had some interest in politics, Walter and Herbert both chose careers in business and neither entered public office. Upon their retirement in 1874 they travelled the world and collected together. They voyaged to Canada, where they both met and married Canadian women. From September to December 1877, they spent time travelling in Fiji and upon leaving purchased the island of Naitauba from its first recorded European owner, William Hennings. Herbert and Walter owned Naitauba until 1899 when they sold it back to Hennings at a loss, having failed to make a success of a cotton and coconut plantation on the island. The collection of Herbert and Walter was passed on to Herbert's son, Norman. Norman Chamberlain was an extensive traveller himself and upon his death he bequeathed a variety of material to Birmingham museum. Norman was killed in 1917 during the Battle of Cambrai in the First World War and this event had a profound impact upon his cousin, Neville Chamberlain whose reluctance to enter into another war in 1939 has become an important part of British history. It seems plausible that Henry and Walter acquired the cuirass during their time in the Pacific.

Chris Charteris (1966 -)

Maker of new armour in the Cambridge Museum of Archaeology and Anthropology and a helmet in the Horniman Museum

Chris Charteris was born in Auckland, New Zealand. He is a jeweler, sculptor and artist whose work takes inspiration from his I-Kiribati, Fijian and English heritage. He is passionate about making new innovative works that reflect the present yet are deeply rooted within past traditions. His work can be found in a number of private and public collections including the British Museum, the Museum of New Zealand Te Papa Tongarewa and the Museum of Archaeology and Anthropology, Cambridge. In recent years he has been researching museum collections of Kiribati armour and has created various works that are in dialogue with these historic artefacts. His most recent creation, a 21st century interpretation of a Kiribati helmet, was commissioned by the Horniman Museum, London.

Christy, Henry (1810-1865)

Donor of armour to the British Museum

Quaker, businessman and textile manufacturer, Henry Christy had the funds to amass a vast collection of botanical specimens and, later, ethnographic objects. His interest in other cultures developed as a result of the Quaker's involvement in promoting the abolition of slavery and the protection of Indigenous peoples in British colonies. From the age of 40, he began to travel abroad and undertook expeditions to North America, Cuba, Mexico and across Europe. Christy was elected to the Royal Society in 1865 but died before he could take his place there. The bulk of his large collection was offered to the British Museum by the trustees of his estate, which included Curator Augustus

Figure 9.2. Lizzy Leckie, Alison Clark and Chris Charteris, 2017. Photo by Josh Murfitt. © Museum of Archaeology and Anthropology, University of Cambridge.

Wollaston Franks. Christy also left a sum of money (used to establish the Christy Fund) that allowed for the occasional purchase of important collections or individual objects.

Clark, Alison (1984-)

Collector of gauntlet and facilitator of new armour in the Cambridge Museum of Archaeology and Anthropology

Born in St Albans, England, Alison Clark gained a joint BA (Hons) in History of Art and Architecture and English Literature at the University of Reading in 2006. In 2007, she completed a MA in Arts of Africa, Oceania and America at the Sainsbury Research Unit at the University of East Anglia, followed by an AHRC funded PhD in Australian Studies with the Menzies Centre for Australian Studies at King's College, London and the British Museum. Both her Masters and her PhD (2013) focused on the Indigenous Australian collections at the British Museum. Later in 2013, Clark became Postdoctoral Research Associate at the Museum of Archaeology and Anthropology, University of Cambridge on a European Research Council funded project *Pacific Presences: Oceanic Art and European Museums*. She also curated the MAA exhibitions *Antipodes: Cut Apart* (2016) and *The Island Warrior: Coconut Fibre Armour from Kiribati* (2017). Clark is Editor of the *Journal of Museum Ethnography*. Her current research examines the contemporary resonance of HMS *Royalist* (1890-1893) in the Pacific; and the revival of particular cultural practices in Kiribati, including examples of modern-day making of coconut fibre armour. In 2016 and 2017, Clark travelled to Kiribati, visiting the islands of Tarawa, Beru and Abemama. In 2016, Clark began a collaborative project with artists Chris Charteris, Lizzy Leckie and Kaetaeta Watson to investigate the feasibility of making contemporary examples of Kiribati armour.

Figure 9.3. Admiral Edward Davis. Courtesy of Bexhill Museum.

Davis, Admiral Edward Henry Meggs (1846-1929)

Collector of two cuirasses and two porcupine fish helmets in the British Museum and a porcupine ray skin waist band in the Horniman Museum

Born in Galway, Ireland, Davis commanded the Australia-based third class cruiser HMS *Royalist* between 1889 and 1893. During this period he patrolled the Western Pacific, visiting the New Hebrides (now Vanuatu), New Caledonia, New Guinea, Solomon Islands, Fiji, the Marshall Islands and the Gilbert and Ellice Islands (now Kiribati and Tuvalu). His voyages were divided into three distinct periods, each with particular aims. The first trip centred on the New Hebrides and was operated under the auspices of the Anglo-French Joint Naval Commission. The Islands had been declared a neutral territory by France and Britain, and Davis spent most of his time maintaining law and order, addressing conflicts over land and removing arms sold by traders to Islanders. For his second assignment, Davis was instructed to establish law and order in Solomon Islands and New Guinea after the deaths of several European traders in the region. He spent approximately a year conducting significant punitive expeditions among the Islands. The third voyage visited the Gilbert and Ellice Islands and, briefly, the Marshall Islands. Davis declared the Gilbert Islands a British Protectorate in 1892. During his four-year assignment, Davis collected 1,499 objects, of which 259 were from the Gilbert Islands and included three cuirasses, five helmets, five pieces of body armour, three belts and 31 weapons. These objects are now held in museums across the UK and mainland Europe. In 1894, Davis returned to his wife and children in Bexhill, England, and sold his collection to help fund his retirement in 1905. He continued to play a role in the Royal Navy and was made an admiral in 1908. Davis also helped to run his local museum in Bexhill until he fell to his death from a window at his home on 6 October 1929.

Davis, Dr Joseph Barnard (1801-1881)

Collector of overalls in the British Museum

Remembered primarily as a craniologist and collector of human remains, Davis was born in York. He obtained his medical qualification in 1823, having studied anatomy under Joshua Brookes at his private school. In 1862 he graduated MD at the University

Figure 9.4. Portrait of Joseph Barnard Davis. Lithograph by R.J. Lane. © Wellcome Library, London.

of St Andrews. He began his medical career as a ship's surgeon on a whaling voyage to the Arctic seas and later had a medical practice located in Staffordshire. Davis' transition from medical practitioner to physical anthropologist can be traced through his notebooks. They begin with descriptions of medical conditions he found interesting and are quickly transformed into rigorous notes on the appearances of those he dealt with and definitions of their racial categories. He started to collect remains, mostly skulls. One of his earliest acquisitions was the skull of a polar bear that had been killed in Greenland in 1820. Davis bought skulls and other remains from fellow collectors – often medical men like himself – and supplemented this by collecting remains during his travels. By 1867 his collection numbered 1,474 items. Davis was a polygenist and his overarching goal for his collection was that it should prove the theory that different races had separate origins. His collection also contained ethnographic and archaeological objects, portraits and paintings of Indigenous people and a large anthropological library. Davis had as particular interest in Indigenous Australians and Pacific Islanders. In 1867 he published a catalogue called 'Thesaurus Craniorum'. No information exists to explain how he came to acquire the armour.

Dawson, Thomas (1811-1895) and Higgins, Charles Longuet (1806-1855)

Possible collectors of a piece of shoulder armour in the British Museum

Turvey Abbey in Bedfordshire is a priory but was once a country house which dates from the early seventeenth century. It was formerly the private residence of John and Theresa Higgins who passed it down to their son, Charles Longuet Higgins (1806-1885), a philanthropist and gentleman who financed the building of a school, church and cottages in the village of Turvey. Charles amassed a collection of ethnographic objects largely from one Christie's sale held in 1851. Nearly 40 years after that auction had taken place, two members of staff from the British Museum, Charles Hercules Read and James Edge-Partington, visited Turvey Abbey and met with Higgins' widow. Helen Eliza Higgins was the daughter of Mr Thomas Burgon, an old colleague of another BM staff member, Augustus Wollaston Franks. In 1866 Franks had founded the Department of British and Medieval Antiquities and Ethnography and was on a crusade to fill his department with objects from around the world, using much of his own private wealth. During their visit, Read and Edge-Partington made detailed notes on the collection, though they did not acquire anything at that time. In one of his notebooks, held in the archives at the BM, Franks noted that Charles Longuet Higgins

had bought most of his collection at the Thomas Dawson sale, and that the objects were likely to "be interesting as collected a long time ago". The catalogue for the Christie sale in 1851 advertised the objects as being from:

> The Extensive Museum, of Thomas Dawson, Esq., of Grasmere, Cumberland; including the War and Domestic Implements, Idols, Costumes, etc., from the Islands of New Caledonia, New Zealand, Society, Sandwich, Friendly, Marquesas, and Soloman's Archipelago; many of them brought by the "Dromedary", sloop-of-war, and the "Driver", as well as from the Collections of Captain Cook and Sir Ashton Lever. Also A Few Specimens of Antiquities, from the Collections of Belzoni and Mr. Salt

It is not possible to establish the history of how Thomas Dawson amassed this range of artefacts, though something is known about his background. He was born on 6 June 1811 in Salford, Lancashire, and was the son of a draper who owned a number of businesses and properties in the Manchester area. At the age of just seven when his father died, Thomas inherited a number of properties and eventually became a man of substantial independent means. He gained a BA and a MA in Law at Cambridge, although he never practised. In 1834 he married into the wealthy Aspinall family and purchased the house Allan Bank in Grasmere, Cumbria. Dawson had three daughters with his wife Martha and in 1849 the family relocated to a village near Taunton in Somerset. It is likely that his collection was housed at Allan Bank for a time, before it was sold at auction following the move to Somerset. Many of Thomas Dawson's objects can be found in museum collections around the UK and the world.

Douglas, John (1828-1904)

Collector of a cuirass in the British Museum

Born in 1828 in London, Douglas was the seventh son of Henry Alexander Douglas and his wife Elizabeth Dalzell. His parents died in 1837 and he was taken in by his aunts in Dumfriesshire. Douglas was educated at Edinburgh Academy, Rugby and the University of Durham. In 1851 he emigrated to Australia with his brother Edward, where he was initially employed as a gold fields commissioner. Douglas went on to have a long career as a local and regional politician in Australia, initially in New South Wales and culminating in his appointment as the seventh Premier of Queensland from 1877-1879. In 1885 he was appointed government resident and magistrate on Thursday Island off the coast of Queensland. For nearly three years from 1886-1888 he was a special commissioner for the Protectorate of British New Guinea. He died on Thursday Island in 1904 and his collection of items from Australia and Melanesia was acquired by the British Museum.

Eastman, Reverend George Herbert O.B.E. (1881-1974)

Collector of a cuirass and body armour in the Horniman Museum and a complete suit of armour in the World Museum, Liverpool

Eastman was born in Long Melford, Suffolk to a father who was the Congregational minister of Melford Chapel. In the 1911 census Eastman was described as a Divinity

Figure 9.5. Rev. George Herbert Eastman O.B.E. and his wife Winifred Eastman from a LMS exhibition in 1957. Courtesy of Aidan Eastman.

Student. He married Winifred Grimwade and in 1913 they left England for Rarotonga in the Cook Islands where he began his work as a missionary with the London Missionary Society. Together they ran the LMS mission in Rarotonga from 1913 to 1918 and Eastman began compiling a Rarotongan dictionary, which was due to be published in 1918 but was delayed for many years. In 1918 the couple were posted to the Gilbert Islands mission in Beru, taking over from Rev. Goward and his wife Emmeline. Eastman was more liberal than the man he succeeded and was prepared to negotiate with the government over rules to control Islander dancing, which his predecessor had worked to establish. He was a contemporary of Arthur Grimble, though he was not impressed by Grimble's fondness for immersing himself in Island culture. As well as collecting extensively in the Cook Islands and the Gilbert Islands, the Eastmans established a number of schools in the Islands, and the George Eastman High School remains on Nonouti. The couple were evacuated after the Japanese invasion in 1942 but returned to Beru from 1944 until 1947. Eastman received an OBE in 1948 and in the same year published a book on Gilbertese vocabulary, after which the couple retired to Swanage, Dorset.

Elphinstone, William Butler Fullerton, later Lord Elphinstone (1828-1893)

Donor of a cuirass in National Museums Scotland, Edinburgh

William Butler Fullerton Elphinstone became the 15th Lord Elphinstone in 1861 and the first Baron Elphinstone in 1885. He was the fourth son of the Hon. William Elphinstone, who had a 70-year career with the British East India Company. In 1864 Lord Elphinstone married Lady Constance Euphemia Murray. He was elected a Scottish Representative Peer in 1867. He served as a Lord-in-Waiting (essentially government whip acting in the House of Lords) under Disraeli from 1874 to 1880 and then Lord Salisbury from 1885 to 1886. Upon succeeding to the title in 1861, he completely redesigned the family estate of Carberry Tower in East Lothian. He was succeeded by his son, Sidney Elphinstone. National Museums Scotland collections contain a number of artefacts donated by the Elphinstone family, including a cuirass of coconut fibre armour from Kiribati donated in 1887 by the 15th Lord. It is, however, unclear how these artefacts were acquired.

Franks, Sir Augustus Wollaston (1826-1897)

Donor of armour in the British Museum

Born in Geneva, Switzerland, Franks began his career at the British Museum in 1851. He became Keeper of British and Medieval Antiquities and Ethnography (1866-1896). Using his own personal wealth, and the Henry Christy Fund, he greatly enhanced the Museum's ethnographic collections. As was common practice at the time, Franks frequently engaged in trading so-called 'duplicate' objects with other museums in Europe and beyond. This practice, which involved the swapping of objects already represented in an institution's collections for more desirable pieces, further complicates the tracing of provenance. During research for this book, several pieces of armour were located in the British Museum that were labelled as duplicates. If an opportunity had arisen to exchange them, then Franks might have authorised their movement on to a new home. Franks died in London and is buried in Kensal Green cemetery, London.

Gordon, Sir Arthur Charles Hamilton, later Lord Stanmore (1829-1912)

Collector of armour in the Cambridge Museum of Archaeology and Anthropology

Born in London and the son of Lord Aberdeen, who was British Prime Minister from 1852-1855, Gordon was a politician, colonial governor and latterly a leading businessman with phosphate interests in the Pacific. From 1866 to 1890 Gordon was successively Governor of Trinidad, Mauritius, Fiji and finally of Ceylon (Sri Lanka). For a period he was High Commissioner and Consul-General for the Western Pacific. His governorship of Fiji (1875-1880), in which he introduced measures to restrict dispossession of Islander rights, was perhaps his most significant contribution to British colonial practice. He also tried to embed in Fiji a social structure which was said to have cultural affinities with his Scottish heritage. Following his colonial service, he was ennobled in 1893 as Baron Stanmore and later became chairman of the Pacific (Island) Phosphate Company. Its mining activities on Banaba (Ocean Island) in the Gilbert and Ellice Islands Protectorate became increasingly controversial and were the subject of parliamentary questions and investigative journalism because of the destructive impact on the environment and allegations of undue political influence by Lord Stanmore and his business associates. In 1913, a year after Lord Stanmore's

Figure 9.6. Arthur Hamilton-Gordon (Lord Stanmore), unknown photographer, albumen carte-de-visite, early 1860s. Ax9573. © National Portrait Gallery, London.

death, the New Age newspaper described the Pacific Phosphate Company as "modern buccaneers in the West Pacific". Eventually, the rapaciousness of the phosphate industry led to the environmental degradation of much of Banaba. Gordon's ethnographic collections amassed during his governorship, were donated to the British Museum and the Museum of Archaeology and Anthropology, Cambridge.

Goward, Reverend William Edward (1860-1931)

Collector of overalls and upper body armour in the World Museum, Liverpool

Goward was born in Market Harborough, Leicestershire and married Emmeline Simmonds in Hackney in 1887. Goward joined the London Missionary Society and the couple were sent to Samoa in 1888. After a successful time working in the mission stations on Upolu and Savai'i in Samoa, in 1900 they were posted to work in one of the outstation headquarters on Beru in the Gilbert Islands. The Gilbert Islands mission included the Ellice Islands, Nauru, Banaba (Ocean Island) and the Phoenix Islands. Goward set up a training school for Indigenous pastors who were subsequently stationed on the islands of Nikunau, Onotoa, Tamana and Arorae, and carried on the work of conversion throughout the Islands. Goward was a strict traditionalist and used his influence and the power of the LMS to prohibit various Indigenous customs such as dancing. With his wife, Goward collected objects from the Gilbert and Ellice Islands, some of which were acquired by the British Museum and the World Museum, Liverpool. Goward served in the Pacific from 1888 to 1919, when he retired from the LMS and lived at Cronulla in New South Wales, Australia. In 1928, the couple moved back to the UK and settled in Worthing, Sussex.

Figure 9.7. Portrait of Rev. William Goward and his wife Emmaline Goward c.1916, CWM/LMS/Home/ Missionary Portraits/Box 2. Photo: Josh Murfitt, 2017. Council for World Mission archive, SOAS Library.

Grimble, Sir Arthur Francis (1888-1956)

Collector of a pair of forearm guards in the British Museum

A British colonial administrator, ethnographer, author and broadcaster, Grimble was born in Hong Kong. He was the son of Frank Grimble, partner in an Admiralty contracting company, and Blanche Ann Arthur. He was educated in England from 1898 and attended Cambridge University (1907-1910). At Cambridge he came to know W.H.R. Rivers, whose influential anthropological research in Melanesia encouraged Grimble to join the Colonial Service in 1914 and to secure a posting to the Western Pacific. Arriving as an administrative cadet on Ocean Island (Banaba), Grimble rose to become District Officer of Tarawa, Abemama and Beru, and the first Native Lands Commissioner. He ended his posting in the Gilbert and Ellice Islands as its Resident Commissioner (1926-1933) having studied and mastered the Gilbertese language. Knighted in 1930, Grimble became Governor of the Seychelles (1936-1942) and Governor of the Windward Islands (1942-1948). Upon his retirement to Britain in 1948, Grimble wrote a memoir about his experiences in the Gilbert and Ellice Islands called *A Pattern of Islands* (1952). It was a major publishing success and was followed by a sequel *Return to the Islands* (1957) and a feature film based on his experiences, *Pacific Destiny* (1956). Grimble also became a popular broadcaster on BBC Radio and was regarded as a specialist in the myths and oral traditions of the Kiribati people. As such, he published papers in the journals of the Royal Anthropological Institute and the Polynesian Society. Grimble's interest in ethnography led him to acquire numerous Kiribati objects, which are now housed in museum collections. Retrospectively, Grimble has been seen as a more controversial figure in the history of Banaba. In the 1970s, Banaba took legal action against the British government over the environmental impact of phosphate mining on the island and the way royalty payments had been handled. Grimble's role in these matters as Resident Commissioner was strongly criticised by the Banaban

Figure 9.8. Sir Arthur Grimble, K.C.M.G. © BBC Photo Library.

petitioners. With hindsight, Grimble's record, like that of other early twentieth century colonial administrators, can be seen as complex and even contradictory in its treatment of Islanders. Colonial officials, in this era, often struggled to balance their concern for Indigenous people and their customs with their role as representatives of the Crown.

Hardy, Norman Heywood (1864-1914)

Collector of body armour in the Pitt Rivers Museum

Hardy was an artist and illustrator, primarily of anthropological texts. Little is known of his early life save that he lived in London and was fond of visiting the city's museums. In 1883 Hardy met the prominent ethnographer John Beddoe and provided him with several illustrations for Beddoe's work, *Races of Mankind*. In 1891 Hardy left England for Sydney where he worked as an artist at the Sydney Mail. During his time in Australia Hardy travelled widely and began to collect weapons and utensils. Throughout this period he undertook voyages to Papua New Guinea, Solomon Islands, the New Hebrides (Vanuatu) and travelled to China. The artwork he produced in these places was used to illustrate a great number of texts, including *The Savage South Seas* published in 1907 and *Women of All Nations* in 1911. Hardy's work reached a relatively wide audience and was reproduced in texts for many years. His art depicted the everyday life of Indigenous peoples in the Pacific and their complex encounters with European traders. He was a member of the Anthropological Institute from 1890.

Harris, Commander Henry (1851-1893)

Collector of a cuirass in the Royal Albert Memorial Museum, Exeter

Henry Harris joined the Royal Navy in 1865 as a cadet. He rose through the ranks, serving on a number of ships, becoming a Lieutenant in 1875 and a Commander in 1892. HMS *Emerald*, one of the vessels on which he served as Lieutenant (1878-1882), was assigned for those years to the Australia Station, the naval command responsible for the Western Pacific. During that time *Emerald* was sent to the Solomon Islands to take punitive action against Islanders who had killed the Commander and three crew members of HMS *Sandfly*. In 1881 *Emerald* visited the Ellice Islands, which is where Harris may have acquired the coconut fibre armour cuirass now in the Royal Albert Memorial Museum collection. He later served as Lieutenant on HMS *Flying Fish* from 1883 to 1887, a vessel that was assigned to the Australia Station in 1886 for survey duties. Harris died of pneumonia, in 1893 at Haslar Hospital in Gosport. A wall tablet at the Church of St Peter St Paul and St Thomas of Canterbury, Bovey Tracey, Devon is dedicated to his memory.

Hutchin, Reverend John Joseph Knight (1857-1912)

Collector of a waist band in the Cambridge Museum of Archaeology and Anthropology

Hutchin was born in Yorkshire, the son of a Congregational minister. In 1882 he married Ellen Davies in Essex and together they embarked on a voyage to Rarotonga in the Cook Islands. Until his death 30 years later, Hutchin worked as a missionary for the London Missionary Society in the Cook Islands, although he had a brief stint in Orokolo in Papua New Guinea. As well as being a missionary and teaching the gospel, Hutchin and his wife immersed themselves in the local communities in which they lived and worked. Much

Figure 9.9. Portrait of Rev. John Joseph Knight Hutchin, CWM/LMS/Home/ Missionary Portraits/Box 2. Photo: Josh Murfitt, 2017. Council for World Mission archive, SOAS Library.

time was spent learning local languages, translating and editing a Rarotongan newspaper, as well as making recordings of local legends and songs. Ellen established a girl's school at Takamoa on Rarotonga and Hutchin ran a training college for future missionaries. He believed that the success of any mission came from training native pastors to teach their own community once they returned to their Islands. The couple had four sons and four daughters during their time serving the LMS. Their first child, John Davies Hutchin, born in 1886, was the only son to survive. During his service Hutchin amassed a large collection of material culture, most of which is now housed in the Pacific collection at Te Papa Tongarewa in Wellington, New Zealand.

im Thurn, Sir Everard Ferdinand (1852-1932)

Collector of a porcupine fish helmet in the Pitt Rivers Museum and body armour and a cuirass in the World Museum, Liverpool

An explorer, anthropologist, naturalist, photographer and colonial administrator, im Thurn was born to a Swiss-German father and English mother. He was educated at Marlborough College and Oxford, Edinburgh and Sydney universities. His first book, dedicated to his headmaster, was a study of *The Birds of Marlborough* (1870). He joined the Colonial Service and, at the age of 25, was appointed curator of the Museum of the Royal Agricultural and Commercial Society of British Guiana (now Guyana). This appointment was made on the recommendation of Sir Joseph Hooker, Director of the Royal Botanical Gardens, Kew. Throughout his residence in the colony, im Thurn sent plant and flower specimens back to Kew, a practice he continued during his long career in colonial administration. im Thurn combined his colonial career with anthropological fieldwork, a pioneering use of field photography and wide-ranging research into tribes and customs. He published numerous works across the fields of ethnography, botany, geography, ornithology and the study of Indigenous cultures. In 1882 he was appointed as a regional magistrate in British Guiana and, from 1891 to 1899 he was a District Government Agent. Returning to London, im Thurn spent two years in the Colonial Office before being posted to Ceylon (now Sri Lanka), where he was Acting Governor from 1903 to 1904. For six years he served as Governor of Fiji and High Commissioner, Western Pacific. During this period (1904-

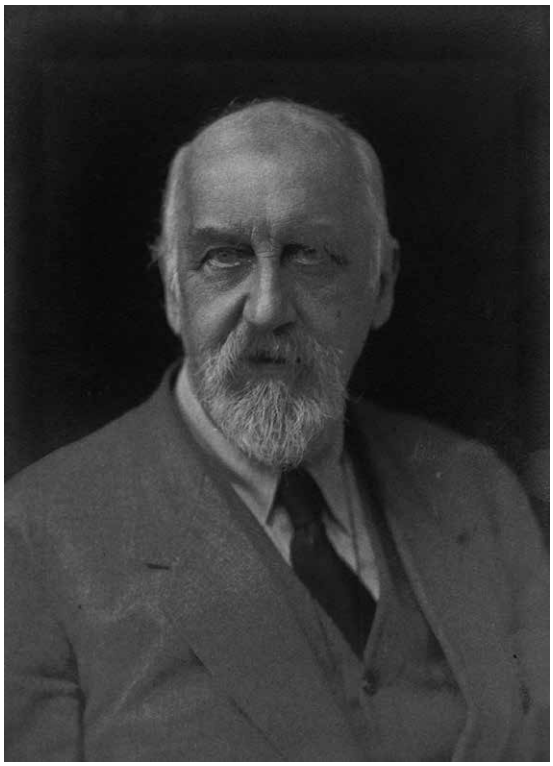

Figure 9.10. Sir Everard im Thurn by Walter Stoneman, bromide print, 1918. x168522. © National Portrait Gallery, London.

1910) im Thurn travelled extensively throughout the Pacific and collected material culture, most of which was presented to the Pitt Rivers Museum in 1909, with a second donation in 1923 and a later donation to National Museums Scotland. In 1905, he was knighted (KCMG) and in 1918 he received the KBE in recognition of his war services. In retirement he received many honours, including fellowship of the Royal Geographic Society (1914-1917) and the presidency of the Royal Anthropological Institute (1919-1920). He also had conferred on him the LLD by Edinburgh and Sydney universities. For im Thurn, a belief in the benefits for all of an irreversible colonializing process seems to have come to the fore with his arrival in the Pacific. This senior colonial role gave him less freedom to follow his anthropological activities and establish a sympathetic understanding of Indigenous people than in British Guiana where, in his more junior colonial position, the inherent tensions between the colonial presence and his anthropological and scientific pursuits could more easily coexist. Tellingly, in a lecture he gave in Australia in 1914, as the president of the Anthropological Section of the British Association for the Advancement of Science, im Thurn was distinctly uncomfortable with the use of terms 'savage' and 'civilised' – a possible insight into an underlying tension he felt between his colonial outlook and anthropological interests which followed him into retirement – complexities he shared with Lord Stanmore and Sir Arthur Grimble.

Iredale, Lancelot (1789-1848)

Collector of body armour, a tunic style cuirass and a waist band in the Great North Museum: Hancock

Trained and employed as a blacksmith in Newcastle-upon-Tyne, Iredale was convicted of stealing iron bars and transported to Australia in 1816, leaving behind his wife and three daughters. Emancipated following a conditional pardon in 1820, he established a successful ironmongery firm in Sydney (Iredale and Co) and by 1822 had convict-labour in 'assigned' service with him. His wife, Sarah, who joined him with their children in 1827, died the following year. Iredale remarried in 1829 and went on to play an active part in Sydney community life. He was Treasurer of the Sydney Infirmary, a member of Sydney Hospital and Sydney College committees and later a councillor in local government. He was also part of the early Methodist leadership (along with other Emancipists) and a financial supporter of a Wesleyan chapel. In 1844, Iredale and Co. provided supplies to an expedition mounted by the naturalist Ludwig Leichhardt which navigated almost 3,000 miles across Australia, from the Darling Downs in Queensland, north to Port Essington. In the same year, Iredale was made an alderman of Sydney. Prior to his service as alderman began, Iredale took his family to England, and these dates correspond with the acquisition from him (in 1841) of a whole suit of Kiribati armour. Museums Victoria hold artefacts donated by Iredale, including copper tokens issued by his company after his death. However, three pieces of coconut fibre armour held in Melbourne have no known connection to Iredale.

King, Reverend Joseph (1839-1923)

Possible donor of armour in the British Museum as well as Rev Whitmee's armour in the Pitt Rivers Museum

King, a missionary with the London Missionary Society, was born in Downend near Bristol. He grew up in Oxfordshire and worked as an apprentice in Reading before becoming a member of Trinity Congregational Church, Reading, in 1857. King volunteered as a missionary in 1860, married Miriam Walkington in February 1863, and was ordained five days later before embarking on a mission to Australia. Having spent time in Victoria, Tasmania, South Australia and New South Wales, and after forming a great affection for the country, King left Australia for Apia in Samoa. From 1863 to 1865 he served as a missionary on Upolu and later on Savai'i until 1872. During this time, King worked closely with his contemporaries in the Samoan mission, Rev. George Turner and Rev. Samuel Whitmee. Due to his wife's failing health, the Kings left Samoa in late 1872, first heading for Australia and finally arriving in England in early 1873. After spending around a year in England, likely having visited the British Museum as well as the Ashmolean in Oxford, King and his wife sailed back to Victoria in September 1874 where his first daughter was born the next year. He continued to teach the Protestant missionary cause in the Pacific from his base of Victoria and from 1889 he became the intermediary between members of various missions, LMS headquarters and the British government. Around this time he also formed close friendships with missionaries and colonial administrators acting in British New Guinea, especially William MacGregor. Over the decades that followed, King continued his advocacy

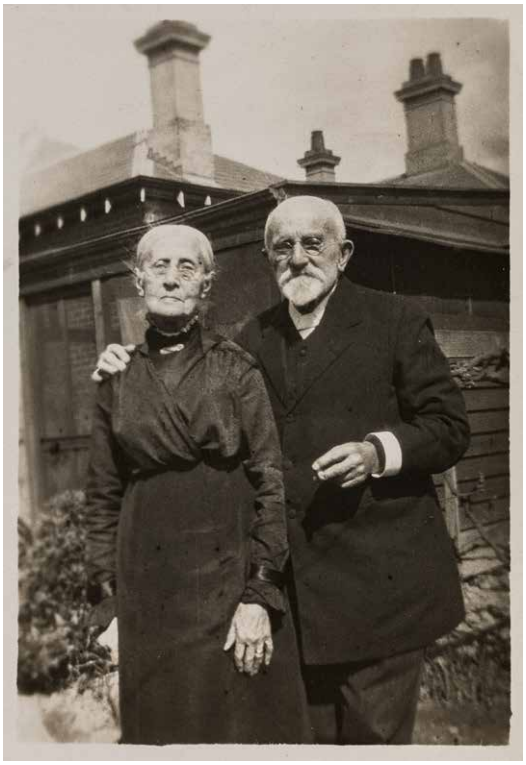

Figure 9.11. Portrait of Rev. Joseph King and his wife Miriam King in 1922, CWM/LMS/Home/ Missionary Portraits/Box 3. Photo: Josh Murfitt, 2017. Council for World Mission archive, SOAS Library.

work for the LMS until his retirement from the mission in 1911. He was described as having a genial disposition and – a rare ability for the time – to communicate with a wide range of people which meant that he made friends easily. King died in Victoria in September 1923, survived by his wife Miriam, two sons and five daughters.

Layard, Edgar Leopold (1824-1900)

Collector of a cuirass in the Manchester Museum

Born in 1824 in Berti Palace, Florence, to an English family of Huguenot ancestry, Layard was the seventh son of Henry Layard (of the Ceylon civil service) and his wife Marianne Austen (the daughter of a Ramsgate banker). Edgar's eldest brother was the statesman and archaeologist Sir Austen Henry Layard. The family returned to England from Italy when Edgar was around ten years old and he continued his education at Richmond, Wheaton Aston and then Cambridge. Layard had a childhood passion for nature and had collections of shells and butterflies and a keen interest in taxidermy. His father disapproved of these pursuits and his mother harboured hopes that her youngest son would dedicate himself to the church. Layard's father died shortly after their return to England and his mother moved the family to her parents' home in Ramsgate. There, Edgar met a Mr Thompson, who was a naturalist and taxidermist and taught him to skin and mount birds. According to Layard, this acquaintance "set fast the colour of my life". He met Barbara Anne Calthrop, daughter of Rev. John Calthrop, who shared his passion for zoology and trained in art in order to assist his naturalist endeavours. The

two were married in 1845 and together they left England for Ceylon (Sri Lanka), where Layard had been offered a position working on the machinery at a coffee estate. There they explored the local flora and fauna together. During their ten years in Ceylon, Layard became a colonial administrator, first working at the customs house and then taking the Bar and becoming a magistrate, travelling the administrative districts and adjudicating in disputes. On one occasion, his interest in natural history was put to good use when he used the presence of molluscs to determine the correct location of a drain and therefore the true boundary between two properties. Layard had contact with many other eminent naturalists of the day, including Darwin who wrote to him in 1855 requesting assistance with acquiring specimens – particularly pigeons. While in Ceylon, Layard began a long correspondence with Edward Blyth, the Curator of Zoology at the Museum of the Asiatic Society in Calcutta. Blyth sent Layard a list of the 182 known bird species of Ceylon and by the time Layard left the country, his collection had increased that number to 318. In 1854 Layard worked for the Governor in South Africa and was made curator of the South African Museum, significantly expanding the collections and exhibits and doing so largely at his own expense. Layard's most significant legacy is the book *Birds of South Africa*, which he published in 1887. In 1873 Layard travelled to Fiji where he was one of two authors of a report to the Colonial Secretary, Lord Kimberley, on the condition of the islands. This report led to the annexation of Fiji in 1874 and the appointment of Arthur Gordon to the Governorship. From 1876, Layard was the honorary British Consul in New Caledonia. Between 1870 and 1881 he travelled and collected extensively in the Pacific. He is known to have visited the New Hebrides (Vanuatu), Samoa, Tonga, the Solomon Islands, New Britain and Norfolk Island. Many of the avian specimens collected during this period went to the Natural History Museum, others are now in the National Museums and Galleries on Merseyside. Layard died in Devon in January 1900.

Lizzy Leckie (1965 -)

Maker of new armour in the Cambridge Museum of Archaeology and Anthropology

Lizzy Leckie was born in Milton, Aotearoa New Zealand. She is a weaver who has worked with Maori and Kiribati weavers learning traditional techniques. Lizzy was project manager for *Tungaru: The Kiribati Project*. She not only works weaving fibre but also weaving people, communities and their stories. Following extensive museum research, she helped to create the contemporary suit of armour which is now in the care of the University of Cambridge Museum of Archaeology & Anthropology.

Luard, Admiral Sir William Garnham (1820-1910)

Collector of overalls in Saffron Walden Museum

Luard was born to a prominent family of Huguenot merchants who had fled to England in the late seventeenth century. His father, William Wright Luard, was an Essex magistrate. Luard entered the Royal Naval College, Portsmouth aged 13. He had an extensive naval career and saw action in the South China Sea, for which he was recognised in dispatches and decorated for gallantry and bravery on a number of occasions. He served in the First Anglo-China (Opium) War 1839-1842 and other British naval engagements, including the taking of Rangoon in 1852 in the Second Anglo-Burmese War, after which he was

awarded the Burmese Medal and the Medal of the Legion of Honour 4th class by Emperor Napoleon III. Following service as captain and Commander of HMS *Formidable* and HMS *Conqueror*, Luard became superintendent of Sheerness Dockyard and the Malta Dockyard. From 1882 to 1885, he was President of the Royal Naval College at Greenwich. He was promoted to Rear Admiral in 1875, Vice-Admiral in 1879 and Admiral in 1885. During her Diamond Jubilee in 1897, Queen Victoria advanced Luard to KCB. Luard retired to his estate in Essex where he served as a Justice of the Peace and as an active member of the court of Quarter Sessions. He died as a result of injuries sustained in a carriage accident. Although there is no evidence to explain how he acquired the armour, his naval career and contacts would have provided plenty of opportunity.

MacGregor, Dr William, later Sir (1846-1919)

Possible collector of armour in the Pitt Rivers Museum

Born in October of 1846 in Aberdeenshire, William MacGregor had a 40-year career as a colonial official, initially as a medical officer and then as a governor. He was the eldest son of John MacGregor, a crofter, and his wife Agnes. He studied medicine at Aberdeen and graduated MD. MacGregor joined the Colonial Service in 1872 and was initially posted to the Seychelles as an assistant medical officer. He then travelled to Mauritius where he came to the attention of Sir Arthur Gordon, who was then the Governor. Gordon assisted MacGregor in his rise up the ranks, making him the Chief Medical Officer of Fiji in 1875; this coincided with a deadly measles outbreak that killed 50,000 Fijians. In 1884 MacGregor saved several lives when a ship carrying indentured labourers ran aground near Suva. He received two medals as a result of his actions. On several occasions MacGregor acted as Governor for Gordon and he was also made acting High Commissioner and Consul-General for the Western Pacific. In 1888 MacGregor was appointed the first administrator of British New Guinea. Here he explored along the coast and into the interior, receiving the Founder's medal from the Royal Geographic Society in 1896 for his mapping of the territory. MacGregor was made Lieutenant Governor in 1895 and remained until 1898. In 1899 he was appointed Governor of Lagos Colony, Nigeria, where he drained swamps to help prevent the spread of malaria. In Newfoundland, where he was Governor from 1904-1909, he was concerned with preventing cases of tuberculosis. In 1909 he became the Governor of Queensland, Australia. He retired from the service in 1914 and returned to Scotland and died in 1919. MacGregor collected artefacts throughout his long career and donated his collection to various museums. He left approximately 8,000 objects in trust with the Queensland Museum with the stated wish that they be repatriated to the people of New Guinea when a suitable institution could be built there. Much of his collection now resides in the Papua New Guinea National Museum and Art Gallery in Port Moresby.

McNaughton, Dr J.G. (1872-1953)

Collector of two cuirasses, one in the Royal Albert Memorial Museum and one in National Museums Scotland

Little information is available about Dr J.G. McNaughton, save that the hospital at Funafuti, Tuvalu – formerly part of the British Gilbert and Ellice Islands – came under his supervision in 1916 and that while there he became involved in the treatment of a form of tuberculosis. After some time working at the hospital on Tarawa, he resigned in 1919 and left the Islands. The hospital itself was located on Fongafale, the main settlement on Funafuti, and was founded in 1913 by G.B.W. Smith-Rewse, the first District Officer who administered the Ellice Islands from 1909 until 1915 when he was appointed to the New Hebrides (Vanuatu). National Museums Scotland holds a number of objects from McNaughton in its collection.

Oldman, William Ockelford (1879-1949)

Donor of panel for overalls in the Horniman Museum and Gardens

Oldman was born in Lincolnshire and was the son of a Cumberland farmer. He is best known for his collection of Polynesian artefacts and his printed catalogues of the 1890s. William Downing Webster, a contemporary collector, considered him a protégé. Oldman was a major figure in the network of collectors, curators and dealers and was elected a fellow of the Royal Anthropological Institute in 1905. There, he came into contact with Henry Balfour and James Edge-Partington, who was a close friend. He retired as a dealer in 1927, but continued to purchase objects for his own collection which he kept at home in Clapham Park, London. In 1948, his Polynesian collection was sold to the New Zealand government and subsequently distributed to a number of museums. After his death, his widow, Dorothy, continued to dispose of his collection to the British Museum and, finally, at a Sotheby's sale in 1950.

Pitt-Rivers, Augustus Henry Lane Fox (1827-1900)

Armour in the Founding Collection of the Pitt Rivers Museum

An archaeologist and army officer whose collection formed the Pitt Rivers Museum in Oxford, Pitt-Rivers was born Augustus Henry Lane Fox in Yorkshire. He was the son of William Lane Fox and Lady Caroline Douglas. In 1853 he married the Honourable Alice Margaret Stanley; the couple had nine children who survived to adulthood. Upon inheriting the estate of a great uncle in 1880 he took the name Pitt-Rivers, which was a condition of the bequest. Pitt-Rivers served in the military for 32 years, having been educated at the Royal Military College at Sandhurst for six months at the age of fourteen. He saw action during the Crimean War, fighting in the Battle of Alma, and spent much of the rest of his military career involved in weapons development and training. He was heavily involved in the replacement of muskets with rifles. He retired from the military in 1882 having achieved the honorary rank of Lieutenant-General. Pitt-Rivers is considered by some to be the founder of British archaeology. He became interested in archaeology and ethnology in the 1850s while still in the military and he began collecting ethnographic objects from around the world. By the time of his retirement he had a collection of tens of thousands of objects and artefacts. The estates Pitt-Rivers inherited in 1880 contained significant archaeological materials

from the Saxon and Roman periods which he excavated over several years, using methods that were rigorous by the standards of the day and included the cataloguing of all objects found, rather than just those that were beautiful or had aesthetic value as had previously been the case. This focus on more humdrum objects allowed a picture of everyday life to emerge. Pitt-Rivers also had a significant impact on the style and nature of museum displays, due to the way in which he organised his collection to support his nineteenth century views on cultural evolution. He displayed his artefacts in 'typological series' – placing objects of the same type together, for example weapons, and arranging them in a particular order, in this case chronologically. Pitt-Rivers used this method to highlight trends in the evolution of design and technology. In 1882 Pitt-Rivers became the first Inspector of Ancient Monuments, tasked with protecting archaeological sites. The creation of this post was the first time the state had taken a lead on the issue of heritage. The Pitt Rivers Museum was founded in 1884 with the gift of around 30,000 objects from Pitt-Rivers to Oxford University. Today the museum houses over a quarter of a million objects from all over the world and amongst its displays are several examples of Kiribati armour.

Prince Philip, Duke of Edinburgh (1921-)

Collector of a porcupine fish helmet and cuirass, part of the Royal Collection, housed at the British Museum

Prince Philip of Greece and Denmark was born on the Greek island of Corfu, the only son of Prince Andrew of Greece and Princess Alice of Battenberg. He had four older sisters. Philip is the great-great grandson of Queen Victoria and Prince Albert. In September 1922 Philip's uncle King Constantine I was forced to abdicate by the new military regime. Prince Andrew was imprisoned and ultimately the family was exiled from Greece for life. The family moved to Paris where Philip was educated at an American school; he then left for England where he lived with his maternal grandmother while attending Cheam School. He later briefly attended a school in Germany before moving again to Scotland. In 1939, Philip joined the Royal Navy College at Dartmouth and graduated a year later at the top of his class. It was here that he met the then Princess Elizabeth when she toured the college with the Royal Family. The two began a correspondence and the couple announced their engagement in 1947, marrying on 20 November 1947 at Westminster Abbey in a ceremony that was transmitted to radios around the globe. On the day of the wedding Philip was created Duke of Edinburgh. The Queen and Prince Philip have four children, Charles, Anne, Andrew and Edward. Philip served in the Royal Navy during the Second World War. In October 1942 he was promoted to First Lieutenant of the HMS *Wallace*, making him one of the youngest First Lieutenants in the Navy's history at the age of 21. Philip continued to serve actively in the Navy until 1951, reaching the rank of Commander. In 1953 on the death of King George VI, Elizabeth was crowned Queen and Prince Philip's role shifted to that of Royal Consort. In 1956 Prince Philip launched the Duke of Edinburgh award scheme for young people. In 1959, following his solo tour of India and Pakistan, Philip travelled to Kiribati aboard the Royal Yacht *Britannia*. While visiting Tarawa, he was presented with the porcupine fish helmet and coconut fibre cuirass that today reside at the British Museum. Links between Kiribati and the Royal Family continued after

Figure 9.12. Photograph of a group of people performing a dance and carrying HRH Prince Philip in Bairiki on Tarawa, Kiribati in 1959 by Tony Atkinson. Gelatin silver print. Oc,A11.11. © Trustees of the British Museum.

the Islands declared their independence in 1979, with the republic sending a gift of a silver ice bucket to the Royal Family to mark the wedding of Prince Charles and Diana Spencer. It is now held in the Royal Collection.

Ramsden, Robert Henry (1784-1865)

Collector of overalls and a tunic style cuirass in the Pitt Rivers Museum

Ramsden lived at Carlton Hall, the family manor in Nottinghamshire, where he became High Sheriff in 1837 and was later made a Justice of the Peace. He married Frances Matilda Plumptre on 29 July, 1816. They had nine children. Robert died at the age of 81. It is not known how or why Ramsden acquired his collection of ethnographic objects, which was purchased by the University of Oxford in 1878, although it is thought that he was influenced by another one of our collectors Sir Arthur Gordon. Ramsden's collection was housed first at the University Museum [of Natural History], then at the Ashmolean Museum between 1878 and 1886, before finally being transferred to the Pitt Rivers Museum.

Rutter, Arthur (1850-1909)

Donor of two cuirasses and a coconut fibre helmet in the Museum of Cambridge Archaeology and Anthropology

Arthur Rutter was a Cambridge-based auctioneer and estate agent whose premises were located on Sidney Street and who was also active in Bury St Edmunds. In 1903, Rutter donated a number of items, including coconut fibre armour, to the MAA. He also donated a whip made of rhino hide from central Africa. As there is no evidence that Rutter ever travelled to the Pacific or Africa, it seems reasonable to conclude that these objects had come into Rutter's possession through the auction house. The original collectors are unknown.

Scott, Richard (1792-1833) and Ann (1802-1890?)

Donors of overalls in Whitby Museum

Ann Avitt married 'gentleman' Richard Scott on 8 January 1828 and they lived in Cliff Lane, Whitby. Although his father and grandfather were mariners in the Baltic trade, it is likely that Scott never strayed far from Whitby because of a medical condition that prevented him from strenuous work. Richard Scott inherited all the family land and the annual income as well as the house in Cliff Lane. He died aged 40 years old with no other siblings, leaving £3,000. Provision was made for his wife (provided she did not remarry), any surviving children and the children of his cousin Thomas Parkinson, also a mariner. Scott and Parkinson were of similar age, were close friends, cousins and neighbours and Scott was the first witness or best man at Parkinson's wedding in 1816. In 1829 Richard Scott donated objects from Fernando Po, an island off the west coast of Africa (now known as Bioko). And in 1838, five years after her husband's death, Ann Scott donated coconut fibre armour, together with some other objects from Fernando Po, to the Whitby Museum. The armour could have been collected by the Scotts' long-standing friend, Parkinson, while on board a vessel anytime between 1822 and 1825, when there were several voyages to the Pacific led by Whitby captains. Merchant ships often visited the Islands to pick up supplies and resources for the journey ahead, as well as trading resources for souvenirs.

Swayne, Charles Richard (1843-1921)

Collector of a suit of armour in the British Museum

Swayne was the first British Resident Commissioner of the Gilbert and Ellice Islands (Kiribati) from 1893-1895, making him one of the few collectors we can definitely place on the Islands. Swayne reported to Sir Arthur Gordon in his capacity as High Commissioner for the Western Pacific and had previously worked as a Stipendiary Magistrate in Lau (Fiji). Swayne's approach to governing was to advise rather than instruct and he focused on educating Islanders in order that they may play a role in governing themselves. He became interested in researching local laws from across the Islands, in an attempt to devise a common legal code. Swayne spent most of his two years in the Protectorate instructing local governments on their duties and despite facing difficulties with transport and scarce resources, he successfully shaped the founding principles of administration for the Protectorate. During his time in the Islands, he made a collection of objects, which are today in the British Museum. He also acquired items from Fiji, during his years of service there between 1880 and 1890.

Thompson, Wellington James (1874-1956)

Donor of a cuirass in Nottingham City Museum

Thompson was born in Wolverhampton, where his father owned a photographic business. His father died when Wellington was only eight, leaving the family in difficult circumstances. They subsequently moved to Nottingham where the police helped Thompson's mother find work and accommodation. As a result, Thompson never forgot the charity shown to his family during this period and it was this kindness that led to him gifting his collections to the city in the 1950s. Thompson was a talented artist and, although he won a scholarship to the Nottingham School of Art, his mother was unable to provide the funds, and instead he was apprenticed to a sign writer. Upon completion of his apprenticeship, Thompson chose to go into antiques dealing, opening a shop in Nottingham and moving premises several times, until the Great Depression of the 1930s made the trade so difficult that he chose to relocate to London. There he specialised in arms and armour and had shops in Drury Hill and later in Castle Gate. Thompson returned to Nottingham around the outbreak of the Second World War and opened a shop on Carlton Hill. Thompson was a passionate collector who established a number of different collections, including unusual keys, ladies muff pistols and his ethnographic collection of arms and armour. He never travelled abroad himself and his collection was acquired through auction sales and visits to stately homes. Upon his retirement in the 1950s, Wellington Thompson donated both his key collection and his ethnographic collection to the Mansfield Museum and these objects, including the coconut fibre cuirass, still form the base of the Museum's world cultures section today.

Toms, Herbert Samuel (1874-1940)

Donor of a cuirass in Brighton Museum and Art Gallery

Lecturer, archaeologist, curator and protégé of Pitt-Rivers, Toms was born in Dorset. After attending his village school he was asked to stay on as pupil-teacher and did so until the end of 1892. In 1893 he was employed for three years by Pitt-Rivers on an excavation of Bronze Age enclosures. It was during this time that Toms was exposed to Pitt-Rivers' ethnographic collection at Farnham which assisted him in his later role as a curator. Toms began his 43-year museum career at Brighton Museum in 1897 and was fascinated by Sussex archaeology and later folklore and the spiritualist movement, both of which he lectured on extensively. Together with other local enthusiasts, Toms founded the Brighton and Hove Archaeological Club in 1906. The club (later Society) undertook many local excavations using the meticulous record-keeping and attention to detail that Toms had learnt during his time with Pitt Rivers. The club also published regularly and between 1907 and 1927 many detailed reports were produced of important Sussex archaeological sites, with Toms himself being published in several academic journals. Although brisk and military in his demeanour, Toms was a pacifist by nature and a medical condition prevented him from enrolment in the army. His interest in ethnography continued and flourished over his years as curator and it is known that he would often find new curiosities to add to his collection in the markets of Upper Gardner Street in Brighton. Toms taught himself to proficiently curate the natural sciences, zoological, mineralogical and geological collections, as well as archaeological finds and ethnography. His museum legacy is a rigorous system of accessioning and an

organised storage system, which is thought to have been developed during his tenure with Pitt-Rivers. Toms retired from Brighton Museum in 1939 and died a year later.

Tufnell, Henry Archibald (1854-1898)

Possible collector of armour in the Pitt Rivers Museum

Tufnell was born in 1854. His father was Henry Tufnell, a Whig politician and Privy Counsellor. The Tufnell family owned the Tufnell Park estate in Islington and made its wealth from developing the land during the nineteenth century. Tufnell's father died the year he was born and little else is known of his family life save that he was raised by an uncle. He died unmarried in 1898. The Pitt Rivers Museum has a document that suggests that Tufnell amassed his collection while travelling the Pacific, possibly with William MacGregor. After Tufnell's death, his objects seem to have been combined with some artefacts from MacGregor's collection and later passed to Henry Anson who bequeathed them to the Museum.

Turner, Reverend Dr George (1818-1891)

Collector of a cuirass and trousers in The Hunterian Museum

Turner was a Scottish missionary and collector who was born in Irvine, Ayrshire in 1818, the youngest of ten children. First registered at the University of Glasgow in 1837, he undertook studies in theology at the Relief Divinity Hall, Paisley, and Cheshunt College. In 1840 he was ordained, married Mary Ann Dunn and the couple were immediately posted by the London Missionary Society to Tanna in the New Hebrides (Vanuatu). Turner worked with Rev. Henry Nisbet in an attempt to convert the Islanders, until 1843 when they were forced to relocate to Upolu in Samoa due to rising hostilities. Turner joined the Rev. John Williams and his wife Mary who in 1830 had established a mission in Savai'i, with Turner acting as Secretary. He oversaw the opening of a native ministry at Malua in 1844 and this led to the gospel being widely accepted throughout Samoa. Turner wrote extensively on Samoan culture and dialect and on a return visit to England, in 1860, he brought the second revision of the Samoan Bible for publication, along

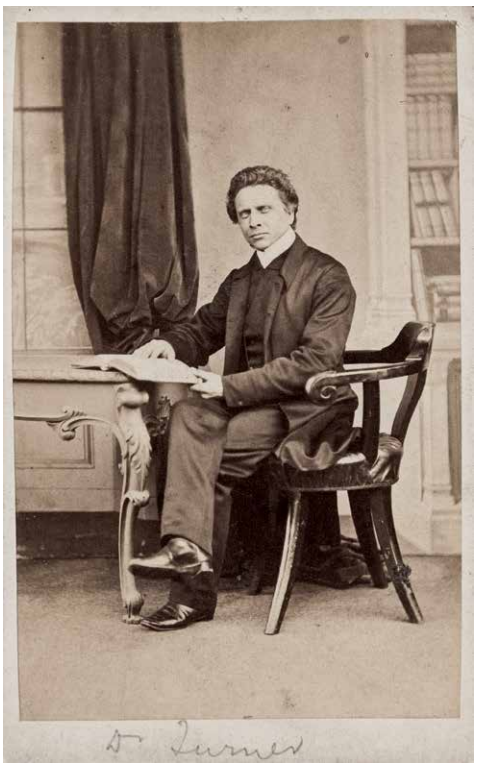

Figure 9.13. Portrait of Rev George Turner seated c. 1860s, CWM/LMS/ Home/Missionary Portraits/Box 6. Photo: Josh Murfitt, 2017. Council for World Mission archive, SOAS Library.

with his notes for the 1861 publication *Nineteen years in Polynesia: missionary life, travels, and researchers in the islands of the Pacific*. That year Turner was awarded the honorary degree of LLD by Glasgow University. In 1863 Turner returned to Malua and continued his missionary work. After a while Mary's health began to fail and the couple left Samoa, arriving in England in February 1870, where she died two years later. A year later Turner married Mary McNair, widow of missionary Rev. James McNair, and they returned to Samoa in 1874. Due to his own failing health, Turner returned to England for the final time in 1882 where he continued to work on his Samoan Bible and other publications. He died in London on 19 May 1891 having served the London Missionary Society for over 50 years. Turner was a prolific collector. Many of the artefacts he amassed are today on display in the Hunterian Museum, Glasgow.

Veitch, John Gould (1838-1870)

Collector of a porcupine fish helmet in the British Museum

Veitch was born into a horticultural dynasty and was an intelligent and witty man who was also a gifted botanist and plant hunter. In 1860 he was one of the first Victorian plant hunters to visit Japan aged just 21 years old. After sailing to Australia in 1864 he joined the HMS *Salamander* to acquire specimens along the east coast. With a pressing sense of adventure he joined HMS *Curaçoa* as botanist the following year, sharing the voyage with Julius Brenchley, who was an explorer and author of independent means who had been travelling the world since the 1840s. Brenchley had undertaken voyages to North America, Central and South America, north Africa, the Far East and the

Figure 9.14. Portrait of John Gould Veitch. JG2CNH. © Paul Fearn/ Alamy Stock Photo.

Hawaiian Islands where he had lived with Indigenous communities. It is likely to have been Brenchley who encouraged Veitch to collect material culture as well as botanic specimens. The HMS *Curaçoa* set sail in June 1865 and visited Norfolk Island and Australia where they met George Adams, son of a Bounty mutineer from Pitcairn Island. The voyage continued to the Islands of Niue, Samoa, Tonga, Fiji, the New Hebrides (Vanuatu), Santa Cruz, Solomon Islands and New Caledonia, returning to England in February 1866. It is likely that Veitch collected the helmet at some stage during the voyage. During the next five years Veitch fathered two sons with his wife Jane and, due to his failing health from the years he had spent travelling, they wintered in the Mediterranean. He died on 13 August 1870 of tuberculosis at the age of 31. His brother Harry Veitch, horticulturist and head of the family business (1870-1890), donated John's collection to the British Museum in 1887.

Wallace, Joseph Ritson (1805-1895)

Possible collector and donor of a cuirass in the National Museums Scotland

Traveller, collector, editor and curator, Wallace was born in Lorton, near Cockermouth in Cumbria. After serving as an apprentice at a sugar refiners until it went out of business in 1826, he worked briefly as an artist and became an avid collector. On 6 February 1832 Wallace married Elizabeth Lonsdale at Distington near Whitehaven in Cumbria and just nine days later he joined Elizabeth's half-brother Captain Lawson on board the *Zeno*, where he acted as supercargo. The voyage to the southern hemisphere and the west coast of South America lasted 16 months, and provided Wallace with an opportunity to add to his already growing collection. He met other travellers and collectors and conducted many exchanges of novel and unusual artefacts, especially during a three-month period in Chile. This collection formed the basis of his first museum which he opened at 10 Great George Street, Douglas on the Isle of Man on 4 May 1835. Not content with being curator of a museum which brought in very little income, in 1836 Wallace co-established and became editor of the newspaper the Manx Liberal. However, the enterprise closed in 1842 and three years later Wallace was sued for libel, having

Figure 9.15. Joseph Ritson Wallace c.1880s by George Patterson. MNX3598359. © Manx National Heritage (Isle of Man)/Bridgeman Images.

acquired a reputation for outspoken articles. This setback, combined with local bad feeling, prompted his relocation back to Cumbria with his wife, three children and 7,000 objects. Undaunted by his experience in Douglas, Wallace opened the Distington or Cumberland Museum in the family home in 1850. He was constantly acquiring, regularly visiting local collections in Cumbria to network and trade objects, and it is likely that he acquired objects from the Hutton Museum in Keswick in the 1840s. It is also likely that he acquired a large number of objects from his friend, the collector George Bell when he died in 1849 and objects from Thomas Dawson's Christies sale in 1851. With the knowledge that there were many interesting sale collections to be mined, he started working as an auctioneer in 1858. In 1870 the Crosthwaite Museum collection was sold off by public auction and Wallace's acquisitions took his overall collection to 25,000 objects. Wallace suffered a stroke in August 1890 and died on 9 December 1895. His Manx antiquities were purchased by the Trustees of the Manx Museum for £40 and these are now in the Museum of Manx Heritage, Douglas. The rest of Wallace's eclectic collection was sold at auction by Reginald R. Cross on 1 August 1899 and was dispersed in less than a month.

Waterfield, Richard (1874-?)

Collector of a coconut fibre helmet in the Royal Albert Memorial Museum

Waterfield was the son of Sir Henry Waterfield, who spent 44 years at the India Office as Private Secretary to successive Secretaries of State for India. Richard was educated at Westminster School and then at Christchurch College, Oxford. In 1897 he enrolled in the Indian Finance Department. Between 1913 and 1920 he climbed the ranks from Deputy Accountant General in Punjab and Bengal, to Officiating Accountant in Bombay. In 1922 he was made Deputy Auditor General for the United Provinces (now Uttar Pradesh). From the 1920s Waterfield lived in Exeter and then Teignmouth. He became President of the Devonshire Society in 1946. In September of 1945, Richard donated 96 objects, primarily originating from India and Burma, to the ethnographic collection of the Royal Albert Memorial Museum in Exeter. No evidence has been found to account for how he acquired the Kiribati helmet.

Figure 9.16. Kaetaeta Watson demonstrating the process of making coconut fibre string, Cambridge, 2016. Photograph by Josh Murfitt.

Kaetaeta Watson (1946 -)

Maker of new armour in the Cambridge Museum of Archaeology and Anthropology

Kaetaeta Watson is an I-Kiribati master weaver and artist. She was born on Eita Village on Tabiteuea. As a girl she watched

her mother, grandmother and other female relatives weave virtually all the things they needed around the house. Working with Lizzy Leckie and Chris Charteris, Watson created the contemporary suit of armour which is now in the care of the University of Cambridge Museum of Archaeology & Anthropology.

Webster, William Downing (1868-1913)

Donor of a cuirass and body armour in Kelvingrove Art Gallery and Museum

Webster was born at Greenwich in 1868 to Robert Burrow, a potato dealer, and Sarah Elizabeth Webster, both originally from the North West of England. Webster was raised in Lancashire and educated within the family. His artistic talents surfaced early and by the age of sixteen he was producing quality amateur watercolours of fossils found locally. Webster went on to train as a stained-glass window designer in Lancaster and is thought to have travelled Europe promoting his work. It is not known if any of his designs were commissioned. In 1891, he married Agnes Harrison and the couple went on to have two daughters. During the early 1890s Webster became a collector of, and a dealer in, ethnographic artefacts. He was one the last dealers not to depend on the break-up of museum collections as a significant source of his stock. He bought and sold extensively, travelling the country attending auction sales, purchasing from individual collectors and, in particular, members of the armed forces who had returned home from foreign shores. It was from former soldiers that he obtained such a large quantity of artefacts plundered during the infamous Punitive Expedition to Benin in 1897. In 1895, Webster began to issue what may well have been the first illustrated catalogues detailing ethnographic objects for sale. Initially released every two months, they went on to become quarterly publications. The early series contained lithographed drawings of Webster's own design. By 1898 he had switched to using photographs to illustrate the catalogues. The photographs were provided by a Robert Webster, who may have been his brother. Initially based mainly on European arms and armour, Webster's sales expanded to include a wide range of artefacts from the Americas, the Pacific and Africa. Weapons featured frequently; however, there were a host of other artefacts available for purchase. In March 1897, for instance, buyers could acquire a Fijian whale tooth necklace, a Maori tiki or Inuit implements. For reasons unknown, possibly financial, Webster sold his collection over five days in November 1904. At the time it was dispersed, the collection was described as "probably the finest outside any museum". A copy of the sale catalogue survives in the British Museum. Webster died of chronic alcoholism in 1913 in Pinner, Middlesex.

Wellcome, Henry Solomon, later Sir (1853-1936)

Donor of armour in the Horniman Museum and Gardens, World Museum, Liverpool and the Kelvingrove Art Gallery and Museum

An American-British pharmaceutical entrepreneur and eccentric collector who, through his will, established the Wellcome Trust, which became a worldwide medical charity. Wellcome's formidable drive encompassed not only the foundation of medical research laboratories and global expansion, but also a fanatical collecting ambition. Wellcome anonymously funded (and personally directed) extensive archaeological excavations in Africa, but by 1919, had become something of a recluse. After his death

in 1936 his astounded trustees were left with warehouses of artefacts to administer that exceeded in volume the collections of the British Museum. The Wellcome Trust maintains the Wellcome collections (including its library collection). Much of Wellcome's non-medical ethnography and antiquities were presented to the BM and other museums in the 1950s.

Whitmee, Reverend Samuel (1838-1925)

Collector of a waist band, body armour and a cuirass in the Pitt Rivers Museum

Whitmee was born in Stagsden, Bedfordshire. He was ordained and married Mary Cousins on 11 February 1863 and sailed to Samoa with the London Missionary Society on 6 March the same year. Tragically, less than a year after arriving Mary died and in 1865 Whitmee married Martha Mills (née Turner), Rev. George Turner's daughter, who had been widowed the year before. In 1866, Whitmee and Rev. Henry Nisbet were appointed to visit the LMS outstations in Tokelau and the Ellice and Gilbert Groups (now Tuvalu and Kiribati). Due to a variety of difficulties their trip did not happen until 1870. They sailed on the LMS missionary ship the *John Williams*, taking with them Samoan teachers and their wives to each island they visited. Whitmee kept a journal during this time, which he published as *A Missionary Cruise in the South Pacific being the report of a voyage amongst the Tokelau, Ellice and Gilbert Islands in the missionary barque "John Williams" during 1870*. Whitmee undertook a great deal of original scientific research while in the Pacific and brought back many objects and over 1,000 natural history specimens which he deposited at the British Museum and the Royal Botanic Gardens, Kew. He was considered an expert in Polynesian flora and fauna and wrote extensively on the subject of botany, being published in many journals of the time. He travelled between England and Samoa a number of times over the years that followed and regularly visited various LMS outstations. Whitmee resigned from the LMS and became a pastor in Dublin in 1879 where around one year later Martha died, prompting him to accept the role of pastor in Arley Chapel, Bristol. In 1891 the LMS requested that he return to Samoa, where he became a close friend of Robert Louis Stevenson to whom he taught the Samoan language. Whitmee

Figure 9.17. Portrait of Rev. Samuel Whitmee c.1871, CWM/LMS/Home/ Missionary Portraits/Box 6. Photo: Josh Murfitt, 2017. Council for World Mission archive, SOAS Library.

finally retired in 1894 and died aged 87. He is admired for his pioneering work in Samoa and the Gilbert Islands and was immortalised on a stamp in the Gilbert and Ellice Islands in 1970.

Wilkins, Robert Francis (?-1909)

Donor of body armour to the Pitt Rivers Museum

Little is known about Robert Francis Wilkins save that he was living in Middlesex prior to 1879 when he purchased a Devon estate known as Brookhill. In 1887 Robert's only daughter, Edith Wilkins married Henry Balfour, the first curator of the Pitt Rivers Museum and another of our donors. Wilkins purchased the collection of the illustrator and artist Norman Heywood Hardy, and presented Hardy's coconut fibre armour collection to the Museum in 1900.

Wood, Reverend John George (1827-1889)

Donor of a waist band to the Pitt Rivers Museum

Wood was born in London, the eldest son delivered to John Freeman Wood, a surgeon and his wife Juliana Lisetta. Wood was sickly in childhood and so was educated at home until 1838 when he was declared healthy enough to attend school. The family moved to Oxford in 1830 where Wood was able to explore the outdoors and where he developed an interest in natural history. Wood got his BA from Oxford in 1848 and his MA in 1851. He was ordained as a deacon in 1852 and became curate of the parish of St Thomas the Martyr in Oxford. He was ordained priest in 1854. In February 1859 Wood married Jane Ellis and they had a son, Theodore. From the early 1850s, alongside his roles within the church, Wood became a prolific author, primarily of books on natural history but he also wrote on other diverse subjects. He published over 70 books, some under the pseudonym George Forrest. Wood was influential in bringing natural history to the wider public. His texts were not scientifically rigorous, however, they sold extremely well and helped to popularise the subject. It is not known how Wood came to acquire his coconut fibre armour, since he did not travel to the Pacific himself. However, he did travel to lecture in America and around the UK. Of particular interest is his book *The Natural History of Man: Being an Account of the Manners and Customs of the Uncivilised Races of Men*, in which he writes about coconut fibre armour but incorrectly describes it as being Samoan in origin.

Other collectors and donors of armour

In some cases, little or no information is available about how individuals came to be associated with coconut fibre armour and its accession into museum collections. Listed below are those people whose role in the network of collectors and donors has yet to be established:

- Henry Anson – Pitt Rivers Museum
- Alexander Cruickshank – Montrose Museum
- Mrs Samuel Dick – Dr Grierson's Museum
- Eckhart – The British Museum
- J. Evans – The British Museum
- George Alexander Kennedy – Manchester Museum
- J.K.B. Lister – The British Museum
- W.M. Logan – The Hunterian Museum
- W.M. Newton – Cambridge Museum of Archaeology and Anthropology
- Fred Sessions – World Museum, Liverpool
- Mr Shewring – Bristol Museum and Art Gallery
- Mrs Sindall – The Horniman Museum and Gardens
- George Wild – Manchester Museum
- Captain M. Wodehouse – World Museum, Liverpool
- George C. Yates – Bolton Museum

CHAPTER 10

Catalogue

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This is a complete and comprehensive catalogue of all coconut fibre armour held in UK museums.

In the captions we have retained the original geographical provenance, as it was recorded in the registers and archives of the institutions involved. This decision illustrates the complexity of colonial histories and their legacies, as well as the convoluted practices of museum documentation. It also demonstrates the challenges facing those seeking to chart the biographies of these artefacts.

Many of the images in this catalogue were taken by professional museum photographers and we are grateful for their time and expertise. In some cases, it was not possible to get professional photographs. In these instances we have included our own photographs, often taken in storerooms or through glass when pieces were on display. Although the quality of the image is inevitably compromised we prioritised being able to include something over not showing anything at all. We thank the museums involved for supporting our decision to do this.

Where no image is shown for an object, it is because its current location is unknown.

Bankfield Museum, Halifax

Coconut fibre helmet, 1930.147. Gilbert Islands. Purchased from Whitby Museum in 1930. Current location unknown.

Birmingham Museum and Art Gallery

Courtesy of Birmingham Museums Trust.

Cuirass, 1918A17.10, 80cm (h). Gilbert Islands. Collected by the Chamberlain brothers c.1877-1899 and donated by Captain Norman Chamberlain in 1918. Photograph by Josh Murfitt.

Bolton Museum

Originally made as overalls but seen here as upper body armour, BOLMG:1890.14b.11(a). Kingsmill Islands. Bought from auctioneers Capes, Dunn & Pilcher in 1890 from the collection of George C. Yates. Photograph by Josh Murfitt.

Cuirass with shells, BOLMG:1890.14b.11(b), 52cm (h) torso. Kingsmill Islands. Bought from auctioneers Capes, Dunn & Pilcher in 1890 from the collection of George C. Yates. Photograph by Josh Murfitt.

Brighton Museum and Art Gallery

Cuirass, WA509098, 86.5cm (h). Gilbert Islands. Acquired by Herbert Toms and loaned to the Museum in 1927, purchased in 1939.

Bristol Museum and Art Gallery

Courtesy of Bristol Culture.

Cuirass, E3855, 79cm (h). Gilbert Islands. Donated by Mrs Shewring in 1870.

Overalls, E3856, 119cm (l). Gilbert Islands. Donated by Mrs Shewring in 1870.

The British Museum, London

Overalls, Oc.1108, 175cm (l). Gilbert Islands. Donated by Henry Christy 1860-1869.

Cuirass, Oc.1973, 77cm (h). Kingsmill Islands. Transferred from the Royal Botanic Gardens, Kew in 1866.

Waist band, Oc.7378, 80.5cm (w). South Seas. Presented by A.W. Franks in 1871, previous collection, Inman.

Porcupine fish helmet, Oc.7979, 41cm (h). Kingsmill Islands. Purchased from Eckhart, a dealer in Hamburg in 1872.

Overalls, Oc.8043, 160.5cm (l). Gilbert Islands. Purchased from Mr King (Rev. Joseph King) in 1873.

Upper body armour, Oc.8042, 160.5cm (w). Gilbert Islands. Purchased from Mr King (Rev. Joseph King) in 1873.

Tunic, Oc.8044, 53cm (h). Gilbert Islands. Purchased from Mr King (Rev. Joseph King) in 1873.

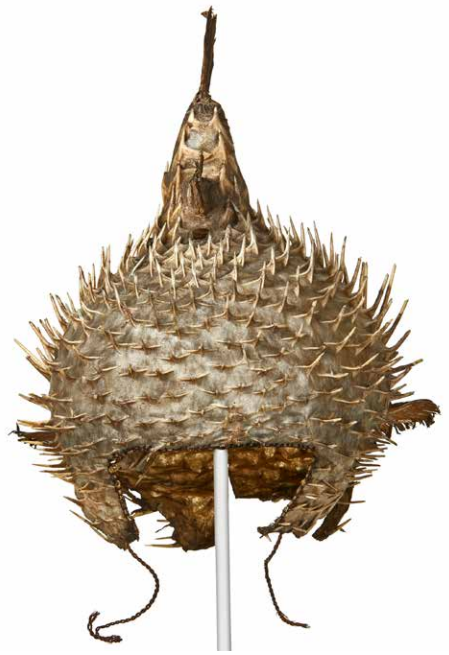
Coconut fibre helmet with tropic bird feathers, Oc.8045, 54cm (h approx). Gilbert Islands. Purchased from Mr King (Rev. Joseph King) in 1873.

Pair of gauntlets edged with shark teeth, Oc,+.5788.a-b, 15.5cm (l). Kingsmill Islands. Found unnumbered in the Elgin Gallery at the Museum in 1892. Acquisition details unknown.

Gauntlet, Oc.8046, 18cm (w). Kingsmill Islands. Purchased from Mr King (Rev. Joseph King) in 1873.

Gauntlet, Oc.8047, 19cm (w). Gilbert Islands. Purchased from Mr King (Rev. Joseph King) in 1873.

Cuirass, Oc1848,1118.1, 76cm (h). South Seas. Purchased from J. Evans, High Holborn in 1848.



Porcupine fish helmet, Oc1887,0201.54, 37.5cm (h). Gilbert Islands. Collected by John Gould Veitch and donated by Harry Veitch in 1887.

Porcupine fish helmet, Oc1894,-.219, 67cm (cir). Arorae, Gilbert Islands. Collected by Captain Davis in 1892.

Cuirass, Oc1894,-.218, 77cm (h). Arorae, Gilbert Islands. Collected by Captain Davis in 1892.

Porcupine ray skin waist band, Oc1895,-.1, 76.5cm (w). Kingsmill Islands. Previous owner Miss Eva Cutter and donated by A.W. Franks in 1895.

Shoulder armour, Oc1904,-.283, 48.5cm (l). Kingsmill Islands. Purchased from Turvey Abbey in 1904, possibly from the collection of Thomas Dawson before 1851.

Porcupine fish helmet, Oc1904,0621.28, 33cm (h). Gilbert Islands. Collected by Captain Davis in 1892.

Waist band, Oc1910,-.308, 78cm (w). Gilbert Islands. Purchased from the London Missionary Society in 1910.

Cuirass with ray skin frontage, Oc1904,0621.29, 70cm (h). Gilbert Islands. Collected by Captain Davis in 1892.

Cuirass, Oc1914,Loan01.22.a, 80cm (h). Navigator Islands (Samoa). On loan from the Tower Armouries since 1914. Collected before 1859.

Tunic, Oc1914,Loan01.22.b, 55cm (h approx). Navigator Islands (Samoa). On loan from the Tower Armouries since 1914. Collected before 1859.

Forearm guard edged with shark teeth, Oc1921,0221.81 and Oc1921,0221.82, 36cm (l). Gilbert Islands Collected by Arthur Francis Grimble before 1921.

Overalls, Oc1914,Loan01.22.c, 159cm (l). Navigator Islands (Samoa). On loan from the Tower Armouries since 1914. Collected before 1859.

Cuirass, Oc1922,1009.1, 96cm (h), coconut fibre helmet, Oc1922,1009.2, 24cm (h) and waist band, Oc1922,1009.3, 103cm (w). Gilbert Islands. Collected by Charles Swayne 1893-1895.

Upper body armour, Oc1922,1009.4, 161.5cm (w). Gilbert Islands. Collected by Charles Swayne 1893-1895.

Overalls, Oc1922,1009.5, 133cm (l). Gilbert Islands. Collected by Charles Swayne 1893-1895.

Coconut fibre helmet, Oc1938,1001.66, 23.5cm (h). Gilbert Islands, collected by J.K.B. Lister in 1891.

Waist band, Oc1944,02.926, 71cm (w). Banaba. Donated by Irene Beasley in 1944 from the Harry Beasley Collection. Before 1924 in the E. Heymann collection.

Upper body armour, Oc1972,Q.100.a, 159cm (w). Gilbert Islands. Acquisition details unknown.

Waist band, Oc1972,Q.100.b, 83cm (w). Gilbert Islands. Acquisition details unknown.

Gauntlet, Oc1972,Q.100.c, 10.5cm (w). Gilbert Islands. Acquisition details unknown.

Gauntlet, Oc1972,Q.100.d, 11cm (w). Gilbert Islands. Acquisition details unknown.

Overalls, Oc1972,Q.104. Gilbert Islands. Acquisition details unknown. Current location unknown.

Porcupine fish helmet, Oc1975,Loan01.84, 37cm (h). Beru, Gilbert Islands. Presented to HRH Prince Philip in 1959, Royal Collection Trust (no. 74039). © Royal Collection Trust / © Her Majesty Queen Elizabeth II 2017.

Cuirass, Oc1975,Loan01.98, 82cm (h). Beru, Gilbert Islands. Presented to HRH Prince Philip in 1959, Royal Collection Trust (no. 74052). © Royal Collection Trust / © Her Majesty Queen Elizabeth II 2017.

Hood made of knotted coconut fibre, Oc1980,Q.954, 41cm (h). Kingsmill Islands. Acquisition details unknown but in the Museum before 1900.

Hood made of knotted coconut fibre, Oc1980,Q.955, 57cm (h). Kingsmill Islands. Acquisition details unknown but in the Museum before 1900.

Overalls, Oc1980,Q.957, 140cm (l). Kiribati. Acquisition details unknown.

Coconut fibre helmet, 2017,Q.38 19cm (h). Kiribati. Found in the duplicate collection in 2017 but illustrated in James Edge Partington's 'An album of the weapons, tools, ornaments, articles of dress of the natives of the Pacific Islands' *1890. Acquisition details unknown.*

Cuirass, 2014,Q.9, 96cm (h). Gilbert Islands. Found in the duplicate collection in 2014. Label attached reads: 'sent from Australia by Mr J. (John) Douglas'.

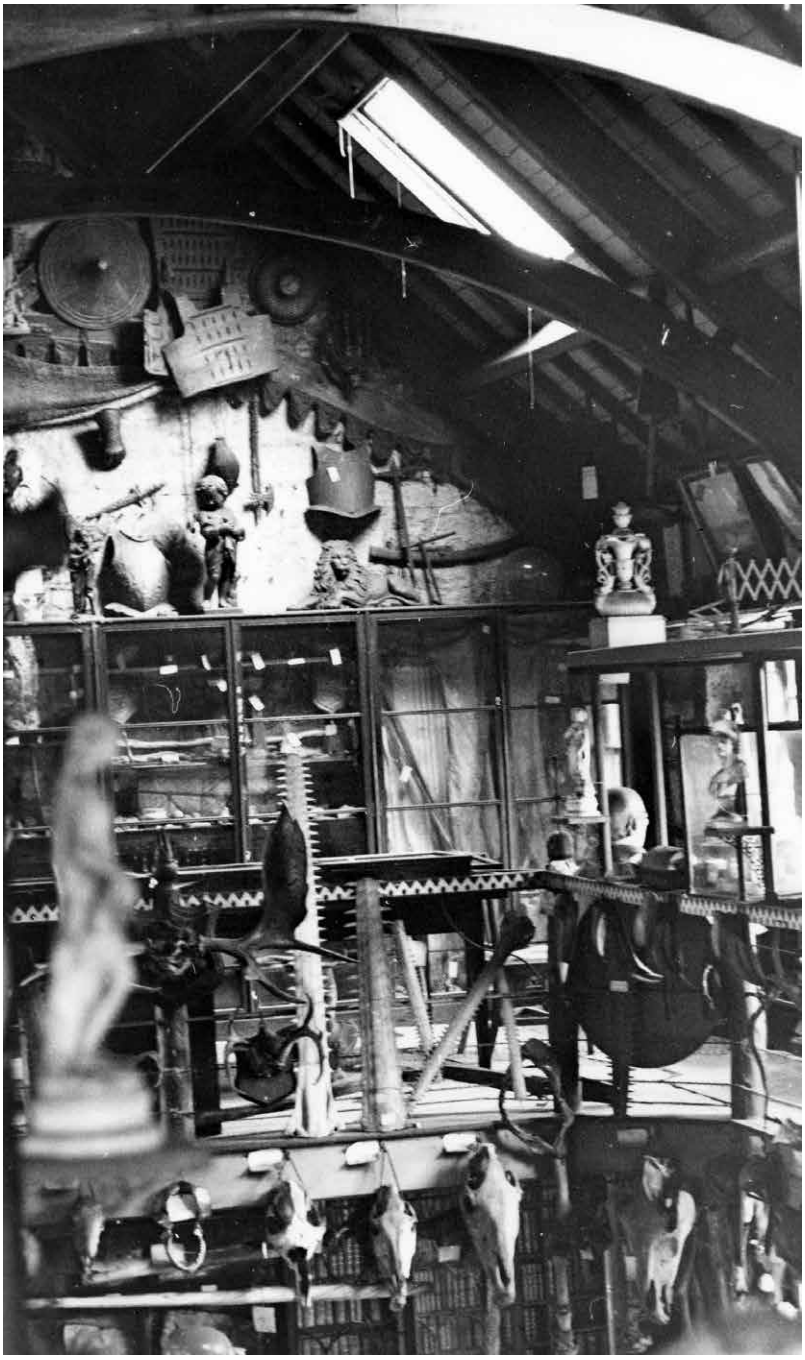
Upper body armour, 2017,Q.39, 151cm (w). Gilbert Islands, collected by J.K.B. Lister in 1891.

Overalls, 2017,Q.40, 110cm (l). Kiribati. Collected by Dr Joseph Barnard Davis c.1860s.

Coconut fibre helmet with cowrie shell, sitting inside a porcupine fish helmet, not yet registered. Kiribati. Acquisition details unknown.

Dr Grierson's Museum, Thornhill

Courtesy of Dumfries Museum.



Cuirass. Duke of York Islands (Tokelau). On display in Dr Grierson's Museum, Thornhill, near Dumfries. The collection was dispersed in the 1960s. Photograph taken in 1965 by James Williams.

Great North Museum, Hancock

Overalls, NEWHM C730, 180cm (l). Tongatoboo (Tongatapu, Tonga). Collected by Lancelot Iredale and donated in 1841.

Pair of sleeves, NEWHM C731, 62cm (l sleeve). Tongatoboo (Tongatapu, Tonga). Collected by Lancelot Iredale and donated in 1841.

Coconut fibre tunic, NEWHM C732, 62cm (h). Tongatoboo (Tongatapu, Tonga). Collected by Lancelot Iredale and donated in 1841. Photograph by Andrew Agate, 2017.

Waist band NEWHM C733, 83cm (w). Tongatoboo (Tongatapu, Tonga). Collected by Lancelot Iredale and donated in 1841.

Upper body armour, NEWHM C574, 158cm (w). Fiji. Collected by Juliana Boyd in 1891. Photograph by Andrew Agate, 2017.

Overalls, NEWHM C574, 163.4cm (l). Fiji. Collected by Juliana Boyd in 1891. Photograph by Andrew Agate, 2017.

Horniman Museum and Gardens, South London

Cuirass, 9.30, 60cm (h approx). Gilbert Islands. Purchased from Mrs Sindall in 1909.

Panel from overalls, 9.218, 39cm (w).Gilbert Islands. Purchased by William Oldman in 1909.

Cuirass, 21.1.59/15, 81cm (h). Gilbert Islands. Transferred from Leicester Museum in 1959.

Porcupine fish helmet with hair plume 30.12.50/8, 36cm (h). Gilbert Islands. From the Wellcome Collection in 1950.

Waist band, 30.40, 32.5cm (h). Gilbert Islands. Collected by Captain Davis in 1892.

Cuirass, 1969.286i, 95cm (h). Gilbert Islands. Collected by Rev. George Herbert Eastman O.B.E. c.1920 and donated by the Congregational Council for World Mission in 1969.

Upper body armour, 1969.286ii, 136cm (w). Gilbert Islands. Collected by Rev. George Herbert Eastman O.B.E. c.1920 and donated by the Congregational Council for World Mission in 1969.

Overalls, 1969.286iii, 142cm (l). Gilbert Islands. Collected by Rev. George Herbert Eastman O.B.E. c.1920 and donated by the Congregational Council for World Mission in 1969.

Upper body armour, HM/05 81ii, 147cm (w). Gilbert Islands. Acquisition details unknown.

Overalls, HM/05 81i, 139cm (l). Gilbert Islands. Acquisition details unknown.

Te Tia Kawakin (the guardian/protector) Kiribati Eco-Warrior helmet *made by Chris Charteris in 2017 of recycled motorcycle helmet, turret shells (Maoricolpus roseus), liquid nails and reed lining. P972. Photo by Lizzy Leckie, 2017. © Chris Charteris.*

The Hunterian, Glasgow

Cuirass, GLAHM:E.462. Collected and donated by Rev. George Turner c.1840-1860s, and trousers, GLAHM:E.454, Gilbert Islands. Likely collected by Rev. George Turner c.1840-1860s and donated by W.M. Logan in 1869.

Ipswich Museum and Art Gallery

Cuirass, no number, 77cm (h). Kiribati. Acquisition details unknown.

Kelvingrove Art Gallery and Museum, Glasgow

Reproduced courtesy of Glasgow Museums.

Porcupine fish helmet, A.1951.82.r, 30cm approx (h). Gilbert Islands. From the Wellcome Collection in 1951.

Right: Cuirass, A.1966.12.a, 82cm (h), overalls, A.1966.12.b, 127cm (l approx) and upper body armour, A.1966.12.c. Micronesia. Transferred from the Tower Armouries in 1966. Purchased from William Downing Webster before 1895.

Manchester Museum

Courtesy of Manchester Museum © The University of Manchester.

Cuirass, 0.666, 89.5cm (h). Gilbert Islands. Collected by Edgar Leopald Layard and donated by John W. Layard in 1900.

Porcupine ray skin waist band, 0.6223, Gilbert and Ellice Islands. Donated by George Wild in 1941-1942.

Upper body armour, 0.6224, 141cm (w). Gilbert and Ellice Islands. Donated by George Wild in 1941-1942.

Overalls, 0.6225, 119.9cm (l). Gilbert and Ellice Islands. Donated by George Wild in 1941-1942.

Porcupine fish helmet with pandanus leaf lining, 0.8102, 42cm (h). Gilbert Islands. From the Wellcome Collection in 1951.

Upper body armour, 0.8633 and overalls, 0.8634. Gilbert Islands. From the Wellcome Collection in 1953.

Cuirass, 0.9322/12, 97cm (h). Kiribati. Transferred from Salford Museum in 1969.

Porcupine fish skin helmet, 0.9322/338, 14cm (h). Kiribati. Transferred from Salford Museum in 1969.

Cuirass, K.1. 95cm (h). Kingsmill or Gilbert Islands. In the collection of George Alexander Kennedy and Henry Christy before 1890.

Overalls, T.325, 166cm (l). Kiribati. Acquisition details unknown.

Panel from overalls, T.326, 65.5cm (w). Kiribati. Acquisition details unknown.

Montrose Museum, Angus, Scotland

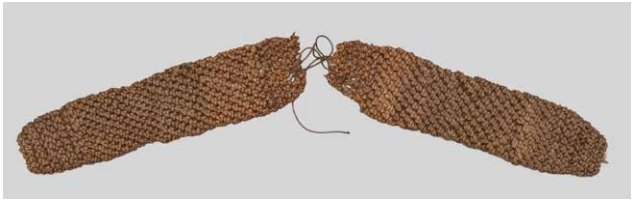
Courtesy of ANGUSalive Museums.

Cuirass, M1980.4987, 71cm (h). South Sea Islands. Presented by Alexander Cruickshank in 1842.

Museum of Archaeology and Anthropology, Cambridge

Trousers, E 1902.361.1, 104cm (l). Kingsmill Islands. Donated by W.M. Newton in 1903.

Cuirass, E 1902.425.1, 62cm (h). Kingsmill Islands. Donated by Arthur Rutter in 1903.



Pair of sleeves, E 1902.361.2, 147cm (w). Kingsmill Islands. Donated by W.M. Newton in 1903.

Protective panel from overalls, E 1902.425.2, 62.5cm (l). Kiribati. Acquisition details unknown.

Protective panels for overalls x4, E 1902.362. Kingsmill Islands. Donated by W.M. Newton in 1903. Current location unknown.

Cuirass, E 1902.426, 102cm (h). Kingsmill Islands. Donated by Arthur Rutter in 1903.

Coconut fibre helmet, E 1902.427 75cm (cir). Kingsmill Islands. Donated by Arthur Rutter in 1903.

Waist band E 1903.27, 24.3cm (w). Gilbert Islands. Purchased from Rev. John Joseph Knight Hutchin in 1903.

Cuirass, 1918.1.1, 185cm (h). Kingsmill Islands. Deposited by Sir Arthur Gordon in 1912.

Overalls, 1918.1.2, 165cm (l). Kingsmill Islands. Deposited by Sir Arthur Gordon in 1912.

Upper body armour, 1918.1.3, 146cm (w). Kingsmill Islands. Deposited by Sir Arthur Gordon in 1912.

Strip of knotted fibre, likely from overalls, 1918.1.4, 60cm (l). Kingsmill Islands. Deposited by Sir Arthur Gordon in 1912.

Cuirass, 2011.11.1, 94cm (l). Ellice Islands (Tuvalu). Acquisition details unknown.

Overalls, 2011.11.2, 194cm (l). Kingsmill Islands. Acquisition details unknown.

Upper body armour and overalls, 2011.93.2, 46cm (w) and 180cm (l). Thought to be associated with cuirass 2011.93.1. Taputeuea (Tabiteuea), Gilbert Islands. Donated by Evert Jan Brill before 1871.

Cuirass, 2011.93.1, 71cm (h). Taputeuea (Tabiteuea), Gilbert Islands. Donated by Evert Jan Brill before 1871.

Porcupine fish helmet, 2011,93.3, 24cm (h). Taputeuea (Tabiteuea), Gilbert Islands. Donated by Evert Jan Brill before 1871.

Gauntlet edged with shark teeth, 2017.13, 19cm (l). Kiribati. Acquisition details unknown, thought to be made in 1990s.

Protective panel from overalls, Z 7030, 56.9cm (w). Gilbert Islands. Thought to be part of E 1902.362.1-4 not located panels donated by W.M. Newton in 1903.

Sample, Z 7031, 34.3cm (w). Gilbert Islands. Thought to be part of E 1902.362.1-4 not located panels donated by W.M. Newton in 1903.

Protective panels from overalls, Z 7032, 62.6cm (w). Gilbert Islands. Thought to be part of E 1902.362.1-4 not located panels donated by W.M. Newton in 1903.

Cuirass, Z 7034.1, 102cm (h), upper body armour and overalls, Z 7034.2-3, 156cm (w), 165cm (l). Gilbert Islands. Deposited by Sir Arthur Gordon in 1912. Porcupine fish helmet, 2011.93.3, see p.172.

*Suit of armour, '*Kautan Rabakau (to awaken)*', made of manila rope, nylon netting string (dyed brown). Cuirass 2017.14.1, 86cm (h), overalls 2017.14.2, 59cm (l), upper body armour 2017.14.3, 135cm (w) and porcupine fish helmet 2017.15, 27cm (h). All made by Chris Charteris, Lizzy Leckie and Kaetaeta Watson 2016-2017.*

National Museums Scotland, Edinburgh

Upper body armour, A.1890.434(a-b), 155cm (l), Kingsmill Islands. Bought from Fenton & Sons, London in 1890. Cuirass, A.1899.251, 108cm (h), Solomon Islands. Bought from Distington Museum in 1899. From the collection of Joseph Ritson Wallace.

Cuirass, A.1887.619, 78cm (h). Gilbert or Kingsmill Islands. Gift of Lord Elphinstone in 1887. Reproduced by kind permission of National Museums Scotland.

Cuirass, A.1916.4, 69cm (h). Ellice Islands (Tuvalu). Collected by Dr J.G. McNaughton c.1910s.

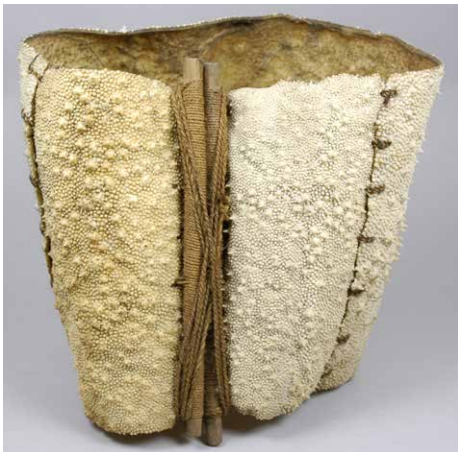
Nottingham City Museum

Courtesy of Nottingham City Museums and Galleries.

Cuirass, NCM 1987-1490, 100cm (h). Gilbert Islands. Donated by Wellington Thompson in 1952.

Pitt Rivers Museum, Oxford

Waist band, 1884.31.3, 23cm (w). Gilbert Islands. Collected by Rev. Samuel Whitmee c.1870.



Porcupine ray skin waist band, 1884.31.4, 32cm (h). Kingsmill Islands. From the 1878 Devitt and Hett sale and part of the Augustus Henry Lane Fox Pitt-Rivers founding collection.

Upper body armour, 1884.31.34. Kingsmill Islands. Part of the Augustus Henry Lane Fox Pitt-Rivers founding collection 1884. Current location unknown.

Upper body armour, 1884.31.35.1, 163cm (w). Kingsmill Islands. Probably collected by Rev. Samuel Whitmee c.1870.

Overalls, 1884.31.35.2, 144.4cm (l). Kingsmill Islands. Probably collected by Rev. Samuel Whitmee c.1870.

Coconut fibre cuirass decorated with shells, 1884.31.36, 70cm (h). Gilbert Islands. Collected by Rev. Samuel Whitmee c.1870. Photograph by Josh Murfitt 2017.

Pair of sleeves, 2017.212.1-2 (1884.31.37.2), 83.5cm (w). Kingsmill Islands. Collected before 1862, part of the Augustus Henry Lane Fox Pitt-Rivers founding collection.

Cuirass, 1884.31.37.1, 82.5cm (h). Kingsmill Islands. Collected before 1862, part of the Augustus Henry Lane Fox Pitt-Rivers founding collection.

Overalls, 2017.213.1 (1884.31.37.3), 147cm (l). Kingsmill Islands. Collected before 1862, part of the Augustus Henry Lane Fox Pitt-Rivers founding collection.

Porcupine fish helmet, 1884.32.31, 33cm (h). Kingsmill Islands. From the 1878 Devitt and Hett sale, part of the Augustus Henry Lane Fox Pitt-Rivers founding collection.

Waist band, 1884.48.2, 24.5cm (w). Samoa. In the collection of Rev. John George Wood before 1878. Part of the Augustus Henry Lane Fox Pitt-Rivers founding collection.

Overalls, 1884.48.11.1, 142cm (l). Kingsmill Islands. Part of the Augustus Henry Lane Fox Pitt-Rivers founding collection.

Upper body armour, 1884.48.11.2, 157cm (l). Kingsmill Islands. Part of the Augustus Henry Lane Fox Pitt-Rivers founding collection.

Tunic, 1886.1.1386, 58cm (l). Kingsmill Islands. Collected by Robert Henry Ramsden before 1878 and transferred from the Ashmolean Museum in 1886.

Overalls, 1886.1.1385, 155cm (l). Collected by Robert Henry Ramsden before 1878 and transferred from the Ashmolean Museum in 1886.

Porcupine fish helmet, 1899.62.466, 45cm (h). Gilbert Islands. Collected by either Henry Archibald Tufnell or William MacGregor in the late 19th century and donated by Henry Anson in 1899.

Coconut fibre helmet, 1899.62.467, 16cm (w). Gilbert Islands. Collected by either Henry Archibald Tufnell or William MacGregor in the late 19th century and donated by Henry Anson in 1899.

Cuirass, 1899.62.468, 102m (h). Gilbert Islands. Collected by either Henry Archibald Tufnell or William MacGregor in the late 19th century and donated by Henry Anson in 1899.

Cuirass, 1899.62.469, 101cm (h). Gilbert Islands. Collected by either Henry Archibald Tufnell or William MacGregor in the late 19th century and donated by Henry Anson in 1899.

Upper body armour, 1899.62.470, 150cm (w). Gilbert Islands. Collected by either Henry Archibald Tufnell or William MacGregor in the late 19th century and donated by Henry Anson in 1899.

Upper body armour, 1899.62.471, 117cm (w). Gilbert Islands. Collected by either Henry Archibald Tufnell or William MacGregor in the late 19th century and donated by Henry Anson in 1899.

Upper body armour, 1899.62.472, 147cm (w). Gilbert Islands. Collected by either Henry Archibald Tufnell or William MacGregor in the late 19th century and donated by Henry Anson in 1899.

Overalls, 1899.62.474, 148cm (l). Gilbert Islands. Collected by either Henry Archibald Tufnell or William MacGregor in the late 19th century and donated by Henry Anson in 1899.

Overalls, 1899.62.473, 207cm (l). Gilbert Islands. Collected by either Henry Archibald Tufnell or William MacGregor in the late 19th century and donated by Henry Anson in 1899.

Overalls, 1900.55.650.1, 145cm (l). Kingsmill Islands. Collected by Norman Heywood Hardy in the 1890s and donated by Robert Francis Wilkins in 1900.

Upper body armour, 1900.55.650.2, 162cm (w). Kingsmill Islands. Collected by Norman Heywood Hardy in the 1890s and donated by Robert Francis Wilkins in 1900.

Porcupine fish helmet, 1909.34.14, 45cm (h). Gilbert Islands. Collected and donated by Sir Everard Ferdinand im Thurn before 1909.

Porcupine fish skin helmet, 1918.37.21.1-2, 25cm (l). Gilbert Islands. Presented by Henry Balfour in 1918.

Coconut fibre helmet, 1941.2.74.1, 24.7 cm (d). Kingsmill Islands. Harry Beasley acquired this helmet in 1930 from the Rijksmuseum, Leiden. Before that it was in the collection of the Horniman Museum.

Cuirass, 1941.2.74.2, 47cm (h torso). Kingsmill Islands. From the Harry Beasley collection, previously in the Horniman Museum until 1929.

Upper body armour, 1941.2.74.3, 70cm (w sleeve). Kingsmill Islands. From the Harry Beasley collection, previously in the Horniman Museum until 1929.

Overalls, 1941.2.74.4, 105cm (l visible part). Kingsmill Islands. From the Harry Beasley collection, previously in the Horniman Museum until 1929.

Royal Albert Memorial Museum and Art Gallery, Exeter

Courtesy of the Royal Albert Memorial Museum and Art Gallery, Exeter City Council.

Cuirass, 164/1907, 88.5cm (h). Kingsmill Islands. Collected by Henry Harris, late 19th century. Photograph by Peter Stephens.

Coconut fibre helmet with human hair, 9/1945/37, 28.4cm (h). Kiribati. Collected and donated by Richard Waterfield in 1945.

Cuirass, 48/1943/1, 63.5cm (h). Tapitowaya (Tabiteuea), Gilbert Islands. Collected by Dr J.G. McNaughton c.1910s.

Cuirass, 367/2005, 76cm (h). Kiribati. Acquisition details unknown.

Royal Cornwall Museum, Truro

Reproduced with the kind permission of the Royal Institution of Cornwall.

Coconut fibre helmet with top knot, TRURI:1500.450.1, 17cm (h). Kiribati. Acquisition details unknown. Photograph by Mike Searle.

Overalls, TRURI: 1500.450, 138cm approx (l). Kiribati. Acquisition details unknown.

Saffron Walden Museum

Overalls, Ln; 378.12.a, 128cm (l) and pair of sleeves, Ln; 378.12.b, 64.5cm (l each sleeve). Gilbert Islands. Transferred from Colchester Museum in 1981. Photograph by Josh Murfitt.

Overalls, Ln; 2107.1, 128cm (l). Marquesas Islands. Collected by William Garnham Luard and donated in 1837. Transferred from Chelmsford Museum in 1963, formerly in the Chelmsford Philosophical Society collections. Photograph by Josh Murfitt.

Whitby Museum

Courtesy of Whitby Museum.

Overalls, WHITM:ETH419, 133cm (l). New Zealand. Donated by Mrs Scott in 1838. Photograph by Josh Murfitt.

World Museum, Liverpool

Overalls, 49.58.51, 168cm (l). Gilbert Islands. Mr Fred Sessions donated it to Gloucester City Museum who transferred it to Liverpool Museum in 1949.

Cuirass, 51.68.514 DP Temp 1785, 85.5cm (h). Nanouti Island (Nonouti Island), Kingsmill Islands. From the Wellcome Collection in 1951.

Cuirass, 51.68.513 DP Temp 1788b, Nanouti Island (Nonouti Island), Kingsmill Islands. From the Wellcome Collection in 1951.

Overalls, 51.68.515 DP Temp 1778, 199cm (l). Nanouti Island (Nonouti Island), Kingsmill Islands. From the Wellcome Collection in 1951.

Overalls, 51.68.516 DP Temp 1782, 158.5cm (l). Nanouti Island (Nonouti Island), Kingsmill Islands. From the Wellcome Collection in 1951.

Cuirass, 54.45 DP Temp 1780, 85cm (h approx). Gilbert Islands. Acquired in 1954 from the Wellcome Collection, purchased from a Stevens sale in 1899.

Upper body armour, 51.68.517 DP Temp 1776, 133cm (w). Nanouti Island (Nonouti Island), Kingsmill Islands. From the Wellcome Collection in 1951, purchased from a Stevens sale in 1899.

Cuirass, 54.111.6, 73cm (h body). Gilbert Islands. From the Harry Beasley Collection, collected before 1935.

Overalls, 54.131.49, 207cm (l). Gilbert Islands. Collected by Rev. and Mrs William Goward, late 19th century.

Upper body armour, 54.131.50a, 144.5cm (w). Gilbert Islands. Collected by Rev. and Mrs William Goward, late 19th century.

Upper body armour, 54.131.50b, 140cm (w). Gilbert Islands. Collected by Rev. and Mrs William Goward, late 19th century.

Upper body armour, 56.24.454 DP Temp 1791, 150cm (w). Nanouti Island (Nonouti Island), Kingsmill Islands. Collected by Sir Everard Ferdinand im Thurn before 1920 and purchased from Norwich Castle Museum in 1956.

Cuirass, 56.24.454, 102cm (h approx). Nanouti Island (Nonouti Island), Kingsmill Islands. Collected by Sir Everard Ferdinand im Thurn before 1920 and purchased from Norwich Castle Museum in 1956.

Overalls, 56.24.454a, 182cm (l). Nanouti Island (Nonouti Island), Kingsmill Islands. Collected by Sir Everard Ferdinand im Thurn before 1920 and purchased from Norwich Castle Museum in 1956.

Cuirass, 56.25.686 DP Temp 1793, 97cm (h). Gilbert Islands. Possibly collected by Captain M. Wodehouse and purchased from Norwich Castle Museum 1956.

Gauntlet edged with shark teeth, 57.66.20. Gilbert Islands. Collected by Rev. George Herbert Eastman O.B.E. between 1918 and 1947.

Overalls, 57.66.24, upper body armour, 57.66.25, cuirass, 57.66.26, 82cm (h) and porcupine fish helmet, 57.66.27, 46cm (h). Gilbert Islands. Collected by Rev. George Herbert Eastman O.B.E. between 1918 and 1947.

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FIGHTING FIBRES

This book brings together artists, curators, researchers and conservators to consider the significance of coconut fibre armour from the islands of Kiribati. Taking as its focus the armour found in museum collections, it investigates the historical context that led to these unique artefacts leaving the Pacific and entering the orbit of British collectors and institutions, as well the legacies of those practices in the present.

As well as exploring the historical milieux surrounding its collection, the book includes essays from expert conservators that discuss the challenges of caring for coconut fibre armour. Other contributions include case studies focusing on the construction and variety of the armour and helmets, and the findings of a comprehensive survey which has tracked down and documented every piece of Kiribati armour held in UK museum collections. Finally, the book considers the significance of coconut fibre armour in the present, with particular reference to the work of a group of I-Kiribati artists whose creativity and innovative research has led to the production of a contemporary suit of armour inspired by the armour of the past.

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