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FROM MAKER TO MUSEUM: FIBRE SKIRTS FROM CENTRAL PROVINCE, PAPUA NEW GUINEA

E. S. Lilje

A thesis submitted for the degree of Doctor of Philosophy at the University of Sydney

March 2013
Abstract

This dissertation takes as its starting point the view that museum collections of cultural material can be a fruitful source of evidence about the past and the lives and experiences of the indigenous people who made the artefacts in them. Focusing on the period 1871-1975, my study is centred on a single category of object sourced from one region: fibre skirts acquired in Central Province, Papua New Guinea. A methodology is devised to develop a historical perspective that illuminates the experiences of Papuans. The combination of artefact-derived data with written historical sources can produce a different and, in many ways more intimate, view of the past than can be derived from written sources alone. The results obtained show that through tracing chronological changes in the material properties of fibre skirts, it is possible to uncover Papuan responses, negotiations and actions in response to the changing circumstances of their lives in the wake of colonial forces and the lead up to independence. My reconstruction of social change based on fibre skirts provides an insight into the rarely heard perspectives of local communities, that encompasses women, and helps us to perceive them as integrated and engaged in the world.

To interrogate museum collections of fibre skirts, I applied theoretical and analytical perspectives derived from archaeology. Particularly important are the emphases on materiality as a source of information about social processes and the utility of exploring much larger temporal and spatial scales than normally embraced within ethnographic studies. I have used practice theory as developed in archaeology to conceptualise the linkages between historical skirt producers and users and the material properties of museum collections. To help track social change through the study of fibre skirts, I adopted the perspective of the chaîne opératoire to explain how the sequences of tasks needed to produce, exchange, or use artefacts are tied to networks of social relations that connect many people, places, and times.

Data from ethnographic and historic sources show that fibre skirt practices create and maintain social relations. An important component of the research was the fieldwork. The study of fibre skirt manufacture and my interviews and tutorials with present day makers made it possible for me to grasp all of the processes involved in the manufacture of a fibre skirt, from raw material to completed garment. The ethnographic research combined with hands-on experience of skirt making was essential for setting-up and interpreting an analysis of the fibre skirts in collections. This assisted the development of attributes in the museum collections of
skirts that would detect changes in key properties such as expertise, skill and effort invested.

Although ten museum collections were surveyed, the specific analyses were based on a sample of 162 fibre skirts accessed primarily from six museum collections in the UK, Italy and Australia. The most important finding was the remarkable persistence throughout the studied period of skirt practices, such as making, decorating and wearing them. Certainly, the experiences of missions, colonial governance, and World War II led to the loss of some expertise and skills and reduced the significance of skirts as a means of signally social status. Despite these impacts, however, the breadth of knowledge about skirt making practices has been surprisingly stable over the period studied. The major temporal differences observed relate to changes in the social context in which skirts were worn as shown by alterations in sizes and features such as splits and waistband fringes. Finally, the importance of asserting local identities for Central Province communities in the lead up to independence is highlighted by the reappearance of traits that had lapsed through time, together with new, creative modifications of fibre skirts, to create new fashions that better suited contemporary lifestyles.

The results obtained from my study of historic fibre skirts from Central Province demonstrates that the active presence of people can be discerned when appropriate methods are applied to the analysis of museum collections of material culture. By adopting an archaeological perspective with its wide scope across time and geographical area and the emphasis on how aspects of peoples’ lives and practices can be linked to changes in the material properties of objects, I have identified actions of Central Province Papuans concerning innovation, negotiation, and the creation and maintenance of identities. The study highlights the future potential of museum collections of ethnographic objects for opening up new perspectives on historical processes such as European colonialism.
Acknowledgements

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Huffman, Melanie van Olfen, Rebecca Fisher, for help with accessing collections and documentation. At the Macleay Museum, University of Sydney, Rebecca Conway and Jude Philp accessed the relevant collections for my research. The staff of the Mitchell Library were very helpful in retrieving archival material about Reverend Lawes during our visit with Dairi Arua.

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My research team travelled to Maipa village under the care and direction of Roger Kipo. In Maipa village our major hosts were Chief Michael Ame and his wife and daughter Margaret Ori. We were welcomed graciously by Chief Ani Kineka, Chief Patrick Uae, and Chief Aloysius. In Pinu village I was kindly shown gardens and source plants by Ara Kere and her family including Phillip Aro, Bea Aro Kere and Naime Kassman. I also wish to acknowledge Mure Eli Lilje and Dairi Arua for their translations during interviews. I am grateful for the hospitality and assistance of my KilaKila family, the children and grandchildren of the late Momo Rabura Girigi and Ovaro Eli. Phil Priestley, Gorame Momo, Stuart Fancy, Moi Eli, Paul Fancy, Tacheen Fancy and Vili Romney are thanked for their gracious hospitality and generous support.

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Notes on the Use of Terms and Abbreviations

The boundaries of the areas in Papua New Guinea now known as Central Province and National Capital District are taken as the boundaries of this study. The people of this region have been collectively called ‘Papuans’ as is common today and in the past. Spellings of village and personal names differ markedly in historic texts. In general I have used the excellent text, Village and Language Guide (Dutton 1973) to standardise these.

Common abbreviations for the museums in this study

Australian Museum – AM
British Museum – BM
Cambridge University Museum of Archaeology and Anthropology – CUMAA
London Missionary Society – LMS
Macleay Museum – MM
National Library of Australia – NLA
National Museum and Art Gallery of Papua New Guinea – NMAG
National Museum of Prehistory and Ethnography ‘the Pigorini’ (Italy) - PM
Queensland Museum – QM
Summer Institute of Languages – SIL
Chapter 1

FIBRE SKIRTS AND SOCIAL CHANGE

Figure 1.1  Detail of ‘61. Women of Tupeselei going for water,’ P.12861.LTD, CUMMA. Photo: JW Lindt 1887.

Framing the Study

As an integral part of the complex web of relationships that make up a society, women undoubtedly participate in shaping the world and are themselves shaped by the social contexts in which they find themselves. Yet there is a dearth of knowledge about the lived experiences of women in the past. In order to gain insights into the perspectives of women, we must utilise sources of evidence that can connect us to them. In historically literate societies these sources can potentially encompass the writing of women, but in non-literate societies this is not an option. For example, there have been
literate people in Papua New Guinea (PNG) since the 1870s, but it was not until the twentieth century that a culture of writing emerged of a kind that might produce first person writing by local women. Fortunately, the research reported here shows that other sources exist that can be used to connect us to women of the past in this region. This study seeks to enrich our understanding of women’s experiences of the colonial process in the Central Province region of Papua New Guinea (Figure 1.2) and elucidate the ways in which generations of Papuans negotiated a century of rapid social changes comprising 1873-1975.

At the beginning of the 1870s, in the area now known as Central Province, the indigenous people, known as Papuans, lived in coastal and inland villages and spoke diverse languages. There existed a series of trade networks, some of which linked coastal villages, others connected coastal to inland villages. Archaeological evidence suggests that various configurations of trade networks have existed in the area, for centuries (Kirch 1991:144, 150). The interrelationships between groups whether friendly, accommodating, or antagonistic, were the outcome of social negotiations between Papuans at the level of individuals, villages, or groups of villages. No overarching authority or power presided over the top of these webs of relationships.

The arrival in 1873 of the first foreigners to take up permanent residence, South Seas missionary teachers, signalled the beginning of a new era for indigenous groups. Although the first wave of teachers lived, and died, in tenuous circumstances with their Papuan hosts, the subsequent missionary onslaught, with the support of the British government, became the vanguard of colonial power proper. The establishment of London Missionary Society HQ at present-day Port Moresby formalised the westerners as a new locus of power. The mission houses, supply lines, and the connections to local people established by missionaries meant that they would play a significant role as a gateway for scientific and commercial interests during the earliest years (1873 to 1880s).

Developments did not simply roll over Papuans like a smothering blanket of colonial domination. Although the colonial project of the British and later the Australian governments must be contextualised in the realm of international politics and economics, at the Papuan ground-level the colonial process was articulated through webs of social relationships. Obviously both Papuans and westerners played active roles, but due to the lack of contemporary written records, we know little about how generations of Papuans experienced the colonial process or negotiated social change in general.

Although historical texts make a contribution, these are almost exclusively written
by Europeans. Papuan perspectives rarely make an appearance and have been filtered by the author. Papuan oral accounts of historical experiences passed down to the present are highly situated and, like personal accounts in general, may privilege some people’s perspectives over others. Written and oral sources are especially limited in what they can contribute to our understanding of the lived experience of non-literate Papuans during the earliest decades of sustained contact with western foreigners (1873 to 1900s). Non-literate Papuans did not produce written documents. Christianity was extending its reach over this time period and oral history that casts back to that time may be subject to revisionist reframing. Implicit in the design of this study is an understanding of people as historically located. People can be familiar with the accounts that they have been told by older generations but they cannot know the dispositions of people of another time, including their own ancestors, or how they experienced and engaged with the world simply by reflecting upon the matter. This study presents a methodology that does not depend on timeless, ahistorical accounts, but attempts to use data contemporary with the period of interest.

The primary assertion of this study is that lived experiences of Papuans can be accessed through the objects they made and used, some of which are now housed in ethnographic collections. By designing an appropriate methodology, and selecting an artefact type that was predominantly associated with females, it is possible to observe the daily practices of women. These inform us about how the makers and users of objects experienced and negotiated the rapid social changes that were initiated by the colonial process.

To uncover the perspectives of Papuan women, I made a study of fibre skirts, an item of apparel intimately connected with women. My research shows that despite changes in the way it was expressed, cultural identity was a key concern of Papuans over the entire period.
My study area comprises Central Province, PNG, which is situated along the southeast coast of Papua New Guinea and includes the current national capital at Port Moresby (Figures 1.2 and 3.2). It was selected because it was the centre of colonial process in this region. Prior to the arrival of Europeans the region was densely populated by diverse cultural groups. The emergence of an administrative hub at the site of the capital was initiated by the first wave of foreigners to take up residence on the southeast coast, the London Missionary Society (LMS), who established headquarters there. Later, the governments of Britain (1884-1906) and then Australia (1906-1975) also based their administrations there. In 1975 Port Moresby became the capital and primary economic centre of the independent nation of Papua New Guinea.

The time frame under study (1871-1975) encompasses a wide range of cross-cultural interactions during a period of rapid change beginning with brief shore-side encounters (1871-1873). These were occasions for barter with the visitors resupplying their vessels with fresh produce and the locals making the most of the opportunities to acquire trade goods. This was followed by missionaries, years under colonial administrations, war in the Pacific, the post-war administration and the lead-up to Papua New Guinean independence. In addition, it captures the decades of the late nineteenth and early
twentieth century when museums were most avidly acquiring ethnographic material. The resultant collections provide ample sample sizes to support the artefact analysis of the fibre skirts.

My primary data source for monitoring changes in identity during this period are fibre skirts. These are gendered objects of material culture that within Central Province have been made and used primarily by women and girls. Although fibre skirts represent a type of artefact that is largely ignored in material culture studies based on museum collections because they appear to be simple undecorated items, this study demonstrates that these relatively humble artefacts can tell us about the fairly intimate domain of women’s changing practices and preferences as well as social, economic, political change.

As garments, skirts provide a special intimate perspective on the past. In the past they were a familiar part of daily life and even to the present day, when western clothing styles are ubiquitous, fibre skirts remain an important part of the visual and cultural vernacular. As quotidian objects associated with females and female bodies, fibre skirts provide a source of data that is sensitive to gender and day-to-day life, a valuable supplement to the perspectives most often represented in historical sources.

This study represents the first detailed description and historical analysis of fibre skirts from Central Province in Papua New Guinea. The results highlight the value of focusing upon a key domestic day-to-day artefact that is largely made and used by women, rather than spectacular objects, for gaining an intimate insight into social change. In concentrating on a single object type found in museum collections, I have demonstrated that existing theoretical frameworks, such as practice theory, can have new applications at multiple scales and over long periods of time. The study of fibre skirts demonstrates that it is not only possible to reveal social connections across a region such as Central Province, but also to see in these materials the imprints of people and their social realms.

As well as expanding our view of women’s daily lives in Central Province, this study also contributes to the field of museum-based research. Artefacts held in museum collections provide a tangible link to the people who made and used them. Viewing or handling a specific object can evoke a sense of connection at an emotional or imaginative level. A challenge for those engaged in museum-based research has been to move beyond this point and find ways of drawing out the nascent potential of collections to provide data about the past. An achievement of this study has been to
develop an artefact-centred methodology for systematically utilising museum collections as data sources. The approach entails unpacking the material properties of artefacts in order to detect and characterize the social connections and contexts of which they were a part. Used in combination with other historical and ethnographic sources, artefact analyses can uncover historical perspectives that cannot be elicited from other sources alone.

It has been noted by numerous scholars, that the formation and characteristics of museum collections are the result of multiple social relations (cf. review in Byrne et al. 2011) that span both the producing and collecting cultures. This study shows that it is possible to place the experiences of Papuans in the foreground by focusing upon the physical properties of objects in ethnographic collections. As discussed at more length in Chapter 2, the materiality of cultural collections offers an opportunity to engage with unrecorded aspects of history, such as women’s labour and local/indigenous viewpoints and activities. They also provide an insight into social relations and negotiations in the context of broad historical processes.

During the course of my research on Central Province fibre skirts I have developed a new approach to the use of collections as a source of data. From the outset an objective has been to attain unique insights into social change and elicit a connection to the lived experience of Papuans, including women, during a period of rapid change. Parameters were chosen that would help to develop a novel approach. These were to look at timescales longer than the life of an individual collector and to encompass a geographical area larger than a cluster of villages.

The material culture collections held by museums constitute a significant amount of primary source material that is today seldom utilised to create history (Gosden and Knowles 2001; Specht 2003; Philp forthcoming). Collections research of the last two decades has attempted to enliven historic ethnographic materials in museums through contributing to our understanding of collecting societies (Welsch 2006; Thomas 1991; Bonshek 1990, 2004) but have been less enlightening about the creator communities, i.e. the people who made and used the artefacts. This point is discussed at more length in the next chapter. A dependence on museum documentation to provide a context to the material in such studies has had the effect of emphasising single geographic locations and the role of the collector of ethnographic materials, particularly by promoting the narrow time period of the collector and their actions at the expense of the producers of the material (Welsch 1998, 2006; Philp 2009; Quinnell 2000; Davies 2013b). Instead, I have
taken an artefact-centred approach, focused on a single kind of object, namely fibre skirts from Central Province. In addition, the approach emerges from an archaeological perspective, and is able to consider larger blocks of time and space than are usually dealt with in Anthropology or event-based histories.

**Perspectives on Social Change**

The study was embedded within a larger Australian Research Council project entitled ‘Producers and Collectors: Uncovering the Role of Indigenous Agency in the Formation of Museum Collections.’ The goal of this collaborative project is to detect and characterise the multiple social connections and negotiations that are integral to the formation of collections and implicit in the materiality of artefacts. The dominant methodology of the project enables researchers to engage with ethnographic collections as sources of data about individuals, societies, social change and long term historical processes. This project orientated my research in terms of the questions I have addressed and the case study centred on the ethnographic collections of Central Province, Papua New Guinea. I collected data from 162 fibre skirts housed in six separate institutions, consisting of the Australian Museum, Macleay Museum in the University of Sydney, Queensland Museum, British Museum, Cambridge University Museum of Archaeology and Anthropology, and the Museo Nazionale Preistorico Etnografico Luigi Pigorini. In addition to these I also viewed the collections of the Horniman Museum in London, National Art Gallery and Museum of Papua New Guinea, the Museo Nazionale di Antropologia e Etnologia oggi Sezione del Museo di Storia Naturale dell'Università degli Studi in Florence, and the Museo delle Culture del Mondo di Castello D’Albertis in Genoa.

Artefacts are both the product of a particular person as well as a material aspect of the social world of which they are a part. This means that the material patterns that are perceived (and produced) through an analysis of fibre skirts can be used to draw inferences about large-scale phenomena. This line of reasoning becomes more complex if we move beyond a snapshot and factor in the interrelationship of individuals and the social worlds of which they are a part.

Complex webs of social relations are involved in the creation of a skirt. These encompass an array of actors, for example ranging from the captain of a missionary vessel to the land-owners on which a grove of sago palms stand. I have used the ideas of practice
theory to bring to the foreground the actions of Papuans through time. This study conceives of the production of material culture as both contingent upon past practices and also understood as a social negotiation that brings about changes (Pauketat 2001:88). This means that material culture, as a component of broader practices, can be used to tell us about the everyday worlds of people and connections that extend over larger temporal and spatial distances.

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**Figure 1.3** The multiple kinds of agency that contribute to museum collections expressed within long-term historical processes (after Byrne *et al.* 2011b:7).
Behind each artefact in a collection is a chain of connections that extend back to the maker of the skirt. In the introduction to the volume *Unpacking the Collection* (Byrne *et al.* 2011a), the editors focus on the multiple kinds of agency expressed in the complex processes that contribute to museum collections Byrne *et al.* (2011b). Contributors to the volume use theories about agency and materiality, and draw upon insights from Latour’s Actor Network Theory (e.g., Latour 2005) to investigate the wide range of practices involved in assembling museum collections (Byrne *et al.* 2011b:8). The major forms of agency explored by the authors are neatly encapsulated in Figure 1.3 taken from the introductory chapter (Byrne *et al.* 2011b:7). The gamut of potential agents and activities listed make up the kinds of complex networks that connect creator communities to museum visitors. Such activities may also span considerable spatial and temporal distances.

The processes a maker used to produce a skirt are the material manifestation of their connections to other people. *Chaîne opératoire*, which is described in Chapter 2, provides a useful tool for discerning the ways social relations are embedded in practices and leave their imprint on the material properties of artefacts. For example, this concept provides a fruitful way of conceptualising connections between fibre skirt makers and the material properties of objects in museums because the capacity to make a fibre skirt that is fit for the purpose intended is made possible through the bequest of knowledge and practical skills that have passed through many hands. These are first received as a novice and later imparted as instructor who may conserve and/or alter the practices.

The majority of museum studies have concentrated on short periods of history, typically comprising the life of a collector, to understand museum collections. In addition written documentation and oral recordings comprise the majority of the data used. As discussed in Chapter 2, it is also possible to detect an individual’s actions through a single object, as for example, something seemingly as obscure and mundane as the length of a hemline. In this case the traces of the body of the wearer can be measured from the customisation of the garment. Although the opportunity of gleaning such specific and intimate information about an individual is not sustainable over a larger sample, there are many other characteristics that offer important views of social process and change. By using established archaeological analytical techniques that focus on assemblages, the variables recorded about museum skirts can be used to make inferences about the past. This process of reconstruction is described in Chapter 2 and illustrated in my analyses in Chapters 6 and 7.
Outline of Key Findings

In order to locate women in the past through the study of material objects, I had to develop a theoretical approach which is discussed at length in the next chapter. Concepts concerning practice and agency are key to the methodology that I have devised for studying fibre skirts. I also situate the study in relation to current theoretical approaches to material culture as well as the conceptual frameworks in archaeology that structure my macro history. I conclude with a case-study that demonstrates the productiveness of using collections to find out more about the people who made them.

Following the discussion in Chapter 2 of the theoretical ideas that I developed, I turn to broader themes in Chapter 3. Here, I place the study in a geographical and historical framework. Within this I consider the importance of pre-colonial large trade voyages undertaken by the Motu and Mailu peoples. I also outline the characteristics of the colonial administrations of the British and Australians. I emphasise the role of missions, colonial legislation concerning land and labour and the armed native constabulary.

In Chapter 4 I turn to the museum collections themselves beginning with a discussion of how museums can be used as sources of documentation and the particular intricacies of this resource. I situate the collections under analysis through the history of the specific organisations and collectors that account for my study sample of fibre skirts. After considering how social relations may have developed between Papuans and foreigners, I move to a methodology for my research. I present an anatomy of a skirt and discuss its constituent parts. From here I move to a discussion of how my study was informed through both practice (i.e. my learning the skills to make a skirt) and interviews with cultural experts from Central Province.

In Chapter 5, I begin the summary of my findings about fibre skirts from Central Province. I begin by charting what can be summarised from published ethnographic and historic sources concerning the geographical variation in the shapes, sizes, and decorations of fibre skirts in Central Province. Next, I consider the various social contexts in which different types of fibre skirts were worn. These data are essential for recognising gaps in the geographical distribution of skirts in the collections and for devising ways to identify social status from the material attributes of the skirts.

In the second part of Chapter 5 I continue my goal to construct a basic *chaine opératoire* for fibre skirt making to provide a framework for the detailed analysis of the museum collections. My research focussed on two components, firstly the sequence of
actions required to make a skirt and secondly, the knowledge that a maker must have in order to construct a skirt. To acquire these understandings, I interviewed current skirt makers and wearers and was fortunate to receive tuition in contemporary practices on both accounts. Putting all the data together, I conclude the chapter by detailing all the steps in which skirts makers must negotiate social relations. These range from acquiring raw materials such as sago palms, converting raw materials into fibres, as shown in Figure 1.4, to the construction of the end product.

Figure 1.4 Women making fibre, Central Province, EH-9790-0 QM. Photo: Unknown.

My knowledge of the ethnographic contexts of the production, use, and exchange of fibre skirts informed the type of data I chose to record about the artefacts in the collections. A close observation of the production of fibre skirts through fieldwork gave me an understanding of the pragmatic aspects of production, such as the labour, time, and raw materials needed for different stages in the production sequence. In addition, it attuned my appreciation of the socially significant properties of production such as the expertise and skill of skirt makers.

After establishing a series of historical time periods in Chapter 6, I apply the understandings I have gained from cultural experts to select the relevant variables for analysis. Only through grasping all processes involved in the manufacture of a fibre skirt,
from raw material to finished product, is it possible to appreciate the many social relationships from which they are formed. For this reason I give attention in this chapter to the step-by-step instruction I received in the production of raw materials and point to the variations in construction of a fibre skirt that I learned and documented through study with cultural experts in museums and in Papua New Guinea. I then introduce the reader to varieties of waistband, fibres, and stitch types.

Each of the variables was selected on the basis of discussions with cultural experts, as in the case of stitch types, or through patterns noted in the collections, as with the use of colours upon a skirt. By understanding the particular properties that make up a skirt and charting these against the historical phases, I show how it is possible to describe aspects of the social history of skirt makers and users that is sometimes at variance with the received accounts of history. In concluding Chapter 6, I consider significant absences in the collections and the cultural reasons that may account for these. I further examine the importance of the persistence of skirt making and use in Central Province.

My conclusions, based on the artefact analysis, are presented in Chapter 7. A key finding of the study was the strong persistence in skirt making lasting from the arrival of the first skirts in the collections to PNG independence. The material evidence shows that women have been significantly engaged in the work of projecting expressions of cultural identity throughout the century studied. The continuity in the breadth of knowledge held by Central Province skirt makers was only perceivable through the kind of methodology I developed with its strong focus on relatively long time periods combined with detailed practical knowledge. The collections showed that Papuans continued to be active participants in the social changes that unfolded from the period of the pioneer missionaries through to the British and subsequent Australian colonial administrations. Consequently, the research provides concrete data on Papuan activities that support the notion proposed by Gosden and Knowles (2000) that each colonial culture is a unique product of the interactions of local and outsider populations.

The thesis concludes with a consideration of future directions that may be seeded through the work that I have done. Certainly, the sample size could be increased, particularly with the aid of conservation techniques to carefully unroll many examples, but most importantly, the study showcases the large potential of ethnographic collections now housed in museums for providing new and different stories about the past. As with the fibre skirts, many of the pictures of Papuan life and perceptions derived from detailed
artefact analyses are likely to challenge established views about the pervading power and dominance of the coloniser.

Notes on Language and Terms

This section seeks to clarify some of the terms used in this study. Some of these are generic and will be the subject of further elaboration throughout the dissertation. To begin with culture I have taken my definition of this term from the Australian Bureau of Statistics, rather than a definition derived from anthropology as the former is an inclusive kind of definition while the latter imposes categories of difference. For the ABS culture is ‘the shared sense of meaning that determines a group’s way of life. Following from this, activities that focus on defining, interpreting or expressing this meaning can be seen as cultural activities’ (Australian Bureau of Statistics 2001, cat. 4160:270). Community in this study predominantly relates to the peoples of Central Province. Two kinds are differentiated. Intra-community incorporates only the maker and their village/family. Inter-community refers to all of the people involved in social networks required in the production and use of a fibre skirt and includes people across geographical and social boundaries.

As defined by International Council of Museums (ICOM), a museum is ‘a non-profit permanent institution in the service of society and its development, open to the public, which acquires, conserves, researches, communicates and exhibits the tangible and intangible heritage of humanity and its environment for the purposes of education, study and enjoyment’ (ICOM 2007). This definition is apt not only because it is the international standard today, but also because it agrees with the general principles of the museums under investigation. Collection is used solely as a noun to refer to the material derived from Central Province and held in museums. I have used collector in a general sense to encompass individuals who contributed to museum collections. The individual may or may not have visited Central Province or been in contact with makers but is the person that has been recorded by a museum as the donor or vendor of a given object. Foreigner is used to mean a person who is conceived of as or perceives themselves as not coming from Papua New Guinea or sharing a cultural-social background with Papuan cultural-social life. This is an abstract term that is interchangeable with ‘colonial’ and ‘westerner’ used by some authors.
Papuan is used in this study to refer to persons originating from the south coast of Papua New Guinea. It is used in the colloquial sense that continues today, ‘I am a Papuan’ meaning I come from a specific geographic area (personal communication Deveni Temu 2009). My use does not encompass the racial theories of late nineteenth century scientists in which this term was derived from perceived visual differences in the physical characteristic of peoples in this region.
Figure 2.1 Raw data: the ‘Central Province aisle’ at the Australian Museum. Photo: Robin Torrence.
Museum Collections and Negotiations

The aim of this study of the fibre skirts housed in museum collections is to present a new perspective on Papuan women’s experiences of the colonial process and elucidate the ways in which they negotiated a century of social change. The analyses will show that material culture held by museums represent a rare direct link to the people who produced it. This study set out to make the most of such collections as a data source from which it might be possible to excavate the perspectives of past Papuans. To achieve this, however, it was necessary to answer a basic methodological question: ‘what can cultural collections tell us about the people who made them?’ Its posing immediately generates more questions that require an elucidation of the specificities: whose ‘cultural collections’; what can collections ‘tell us;’ and, who are ‘the people?’ As my research will show, the answers to these questions are complex because ethnographic collections can be understood as a creation of interactions between artefact-producing and artefact-collecting cultures.

Museums represent the product of a European collecting culture that arose from the seventeenth century. The historical and social contexts that fostered the impetus to gather together and keep the artefacts of ‘other’ peoples have been intelligently explored by researchers since the 1970s (Stocking 1985). The artefacts that ended up in museum collections were made by the peoples who produced them for specific social contexts, the nature of which has changed over time: for example, for customary indigenous use, traditional exchange, trade to obtain European goods, or sale to tourists. In each case, however, the skills and knowledge required to make an artefact can be conceived of as embodying a maker’s past social connections. The technical, aesthetic and material forms of museum artefacts are socially negotiated. They are a product of material practices that have been repeatedly retuned in the light of changing social contexts and resources. Consequently, it is the relationship between materiality and webs of social connection that provide a basis for utilising artefacts to make inferences about the lives of past people.

To interpret museum artefacts as material evidence I make two assumptions. The first is that both artefact producers/purveyors and collectors were active participants in the interactions that resulted in the movement of artefacts into museums. The second assumption is that the resulting artefacts and collections themselves can inform us about the specific social relations in which the objects circulated. Together these assumptions
orient this enquiry towards linking artefact producers/purveyors and material held in museums in a way that acknowledges the agency of all parties rather than privilege collectors as is normally the case in analyses of ethnographic collections.

Historically, artefact-centred research on ethnographic material in museums took a number of forms. This led to a change in focus from technology, best exemplified by the collections of Pitt-Rivers (Bowden 1991), to material culture (Hicks 2010). As Stocking (1985:4) notes, museums emphasised the idea of an object as a ‘survivor’ ‘not only of the past from which collection wrenched them, but from those later pasts into which any given act of exhibition has placed them. Museums, in short, are institutions in which the forces of historical inertia are profoundly, perhaps inescapably, implicated’ (Stocking 1984: 4).

This idea of cultural survivors further strengthened by the theoretical views of the late 19th century that provoked many to make ethnographic collections and which accounts for the rise in ethnographic objects within museums: ‘... the desirability of having representatives, or repetitions, of all the objects made by vanishing tribes of natives’ (Haddon 1897:566). The anthropologist, Alfred Haddon, is perhaps the most famous writer of this kind of thinking about an object as the physical embodiment of a cultural act (see Herle 1998). In this ‘salvage’ paradigm the aim of a collection is to acquire objects that represent large periods of time ‘before contact’ (e.g., Haddon 1935). Change in this case is an anathema, as the ‘native’ is no longer in essence ‘a native of x’ but changed through contact into another kind of individual. In this approach, innovations such as the use of new materials, for example when modern dyes are used in fibre skirts or European cloth or trade beads added to artefacts, were conceived of as the loss of authentic form (Herle 1998). This also represents the era of the standard source when monographs on particular types of artefact were produced.

Following a long period of disengagement with museums and museum collections (Sturtevant 1969), a re-sparked interest in museums was in part signalled by what has been termed ‘The New Museology,’ as described in Peter Vergo’s landmark book of the same name (Vergo 1989). This edited volume was part of broader theoretical developments that began to emerge in the 1980s. These were characterised by the wide-ranging critique and review of academic disciplines largely derived from French sociology and philosophy (e.g., Foucault; Derrida; Bourdieu). Emerging from this critique was the realisation that academic disciplines, including institutions such as museums, produce value-laden and political understandings of the world (Macdonald 2006:3). An important aspect of these assessments was that they were ‘reflexive,’ which, following Foucault (1980), entailed
paying close attention to the processes by which knowledge is produced and disseminated, and its positioned nature.

The renewed interest in museums took numerous directions that emerged from this milieu and generated extensive scholarship focusing on ethnographic collections (e.g., Ames 2006; Bennett 1995; Clifford 1988; Hooper-Greenhill Pearce 1995; 1992; Stocking 1985). In these critical reviews, ethnographic collections were argued to be inherently political, testaments to colonial ambition and conquest, and not necessarily the representative sample of material culture that had been widely assumed.

Subsequent work has built on this critique. A new research agenda emerged whose aim was to identify the impact on the character of collections of the cultural and ideological biases held by late 19th and early 20th century explorers, missionaries, government officers and entrepreneurs as well as the desires of private collectors and museum curators that guided the acquisition of objects (e.g., Bonshek 1990; Cochrane and Quanchi 2007; Herle and Rouse 1998; O'Hanlon and Welsch 2000; Thomas 1991).

This area of research emphasised the individuals acquiring the collection materials and thus focused attention on the contacts artefact-producing cultures had with European collectors (ter Keurs 2007; Young 2004; Lawrence 2011). The body of work along these lines, from Stocking onwards, has led to the odd position whereby ethnographic collections have yielded more information about the collecting society than about the people who made and exchanged them.

This startling conclusion was a key impetus that motivated principal investigators Anne Clarke, Jude Philp, and Robin Torrence, to instigate the ARC-funded research project ‘Producers and Collectors: Uncovering the role of Indigenous agency in the formation of museum collections;’ of which this study is a part. These two archaeologists and an anthropologist/curator envisaged museum collections as sources of knowledge wider than just the collectors. Their previously published works (e.g., Torrence and Clarke 2000a; 2000b; 2011; Clark and Torrence 2011; Philp 2006, 2011; Gardiner and Philp 2006; Herle and Philp 1998) and professional experiences provided the grounding for the project’s design, with its emphasis on Indigenous peoples as producers of artefacts and as active participants in the negotiations that brought material into ethnographic collections. The conception of my study and the method and theory employed has grown out of the Producers and Collectors project.

At the inception of my project on fibre skirts, research into ethnographic collections was being explored along two separate lines of enquiry. One purposefully focused on the
individual collector and their social contexts (e.g., Young 2004) and the second on indigenous participation (e.g., Peers and Brown 2003). These two strands of study had quite different outcomes, with one offering an historical examination of the past and the other providing an example of how the past is used by present day societies. The former, with its focus on the life-time of the collector, generally used collections as a way of seeking knowledge about the historical period in question and more commonly used the collections as illustrative of the individual collector’s world and of the people they worked with ‘in the field.’ The latter, with the methodological focus on indigenous participation, employed the voices and understandings of people of the place from which the collections were drawn to establish that there was continued interest in the collections from source communities and also to add information to the collection record from modern-day knowledge of the past.

The third strand of museological research that had direct bearing on my research developed the concept of agency. With the publication of *The Social Life of Things*, edited by Arjun Appadurai (1988), the idea of keeping a single object at the centre of investigation by following its ‘biography’ from multiple viewpoints, was a key theoretical tool through which many authors came to understand objects in collections. The concept offered a neat way to give space to the many socio-cultural world views that interacted with a single object over the time of its existence.

Another, linked, strand in the development of agency was the publication of *Entangled Objects* (1991) in which Nicholas Thomas focused on objects at the centre of cross-cultural negotiations. Although a number of researchers worked on the importance of indigenous agency in the formation of museum collections (Thomas 1991; 2000; Torrence 2000; Gosden and Knowles 2001), it had proven difficult to detect. As Thomas (2000:274) observed, ‘... it is striking just how difficult it is to recover and characterise Indigenous agency in any specificity, from the historical record.’

The Producers and Collectors project identified the need to develop new conceptual frameworks and methodologies to uncover the role of indigenous agency from studies of museum objects. My study of fibre skirts attempts to develop relevant concepts and methodology partly through the use of archaeological methodologies, such as assemblage composition and artefact analysis along the lines first proposed by Torrence (2000) in her study of changes in the way obsidian-tipped spears from the Admiralty Islands, Papua New Guinea had been manufactured and decorated. Historical records are very useful for uncovering the actions and activities of people from the collecting (and document-
producing) society, but they are much less revealing about the perspectives of contemporaneous indigenous (artefact-producing) people. Similarly, anthropology can be useful in drawing from contemporary people’s oral traditions on the past, but application of these methods is limited when the material covers a large area and includes multiple language groups, such as an area like Central Province. Individual bias is another problem in the analysis of texts produced in history and anthropology. In contrast, museum artefacts provide a direct, material link to the people that produced them. By focusing on the artefacts themselves and adopting appropriate conceptual and methodological approaches, it is assumed that one can access the perceptions and actions of the people from the artefact-producing societies and the interactions of which they were a part.

Producers and Collectors built upon a conceptual innovation previously developed by Torrence and Clarke (Torrence and Clarke, 2000a, 2000b). They argued that the participation of Europeans and Indigenous producers/purveyors in the bartered exchange of goods can be framed in terms of ‘negotiation.’ They recognised the importance of concentrating on the role of negotiation in interactions between indigenous groups and outsiders. Negotiation as a process of interaction and engagement that allows for both the actors in ‘cross-cultural’ relationships to be recognised, even in encounters that are often assumed to have been one-sided. Torrence and Clarke show that by acknowledging indigenous participation, the research question can move beyond asking if indigenous agency is present in collections to more fruitfully ask how it is materially in evidence. This perspective permits us to track the responses of indigenous people to changing social and political contexts over the period when ethnographic collections were made. In addition, assuming that indigenous parties were knowledgeable actors allows us to think about the participation of all parties, without presuming to know what was in the heads of individuals.

Building on their work I have sought to broaden the social contexts that might be considered in analyses, to encompass interactions between Papuans. For example, artefact producers negotiating with land owners to access natural resources such as sago plants, the purchase of dyes from a store, negotiations by men on trading voyages to exchange pots for sago fibre or skirts, adapting the form of an artefact with a view to improving its appeal to tourists, or a group of people from one cultural group negotiating permission to use an admired dyed pattern belonging to another group. Subsequent to leaving Central Province, artefacts could have been sold or given to individuals or institutions and, once in a museum, they might have been exchanged with items from another museum (Bryne et al.)
2011; Gosden and Larson 2007). It is also important to note that the negotiation process continues up to the present day, a point that is well made by Torrence and Clarke (2000a).

The exchange and production of artefacts take place in the context of what has gone before and, in turn, shape what follows. In part this context was defined by the various social relations needed for the production and exchange of an artefact at a particular moment in time. An aspect of this was the knowledge and experience that a producer could draw upon to make an artefact. The know-how to make an artefact has often been acquired from other people. A producer may have learned by observing and emulating people engaged in the activity or by more formal training methods. The opportunity to have gained knowledge and skills from other people would have been dependent upon the social relations of which the producer was a part. In some cases such knowledge may be restricted to a particular category of person, meaning that it is not only a matter of who one knows but who one is in terms of social position within the community. Once experienced, a producer might in turn teach others. In addition to these relatively local connections makers were a part of broader social contexts, aspects of their lives, such as the structure of law, that were relatively non-negotiable.

**Webs of social connection**

Torrence and Clarke (2000a) share similar concerns to those that emerge from Gosden and Knowles’ (2001) study of ethnographic collections that considered links between the production and exchange of artefacts and the production of social relations. In their collection-based study of New Britain objects, Gosden and Knowles (2001:22) use the concept of *chaîne opératoire* to explain how an object is enmeshed in sequences of action, including production, exchange and use, which link together objects and people stretching from New Guinea to museums. The key concept the *chaîne opératoire* was developed by the archaeologist Leroi-Gourhan (1943; 1945) to look at how the sequences of tasks necessary for making artefacts are acquired in a social context and are therefore socially efficacious. By recognising that artefacts produce social relations and that the skills needed to produce an artefact are socially learned, it is possible to perceive that production is tied into the network of obligations and social relations (Gosden and Knowles 2001:19). The resulting social networks mean that *chaîne opératoires* are not single sequences of action unfolding at particular moments.
but can potentially link many times and places in a manner determined by the specifics of their social connectedness (Gosden and Knowles 2001:19).

The concept of chaîne opératoire makes it clear that museums and their collections can be understood as materialising multiple social relations. Moments of cross-cultural exchange are one set of social relations amongst many that museum artefacts are implicitly linked to. Gosden and Knowles’ (2001) use chaîne opératoire in the particular historical context of New Britain, where they envision colonial activity as continually weaving mutually entangled webs of self-definition that are expressed through the use and exchange of objects. The negotiations and exchanges involving objects that took place in the first half of the 20th century were thus crucial to the creation of colonial society because these articulated the properties of comprising a New Britain person as well as the colonial culture in which interaction took place. Putting these together they conclude that ‘colonial New Guinea was not made up of two separate societies...in collision and confrontation, but rather came to be a single cultural field of mutual influence’ (Gosden and Knowles 2001:xix).

In the 1970s Pierre Bourdieu (1977) had drawn upon the chaîne opératoire work of Leroi Gourhan in his development of practice theory. His concept of practice provides another way of thinking about the multiple layers of social relations that the production of artefacts entail. Bourdieu (1977) defines ‘practices’ as encompassing people’s actions and representations, and as embodying/enacting (materially and non-materially) their dispositions. He argued that people’s dispositions are inculcated through their experience of ‘unconscious’, or ‘nondiscursive’ forms of knowledge as they are played out in the world. In the context of practice theory the production of material culture, while contingent on past practices, may be understood as a social negotiation that brings about changes in meanings, dispositions, identities, and traditions (Pauketat 2001:88).

Pauketat (2001) identifies, and argues for, an emerging paradigmatic shift within archaeology that is centred on a theory of practice. Based on Bourdieu’s practice theory, he puts forward the idea that all people enact, embody, or re-present traditions in ways that continuously alter those traditions (Pauketat 2001:70). By adopting a practice-based approach, it is therefore possible to view practices such as the production of material culture as both the medium of tradition and the medium of social change (Pauketat 2001:80). From this perspective traditions are always in a process of becoming (Sztompka 1991). This means is that traditions exist only in practice, where they can take the form of historical processes such as revitalisation, accommodation, and transculturation (Pauketat
2001:80). Another benefit of Pauketat’s approach is that it supports the idea that people’s practices actually comprise historical processes, and are not simply the consequences of historical processes. Practices are shaped by what came before them and they give shape to what will follow (Pauketat 2001:74). From this perspective history is the cumulative effect of practices at different scales (Pauketat 2001:81).

I have adopted a practice-based approach, like that outlined by Pauketat (2001), because it provides a useful way of thinking about the interrelationship of material culture production and the broader social context. My view of this interrelationship is represented schematically in Figure 2.2. It slightly departs from practice theory, as I’ve added the concept of ‘agency’. I wanted to recognise intentional and unintentional aspects of the actions of people engaged in the production of material culture. I use ‘agency’ to refer to intentional, conscious or discursive choices and actions. The term ‘disposition’ refers to unconscious, taken-for-granted or non-discursive forms of knowledge or ways of being. Having both of these aspects matter because they will affect how one interprets the material evidence.
Figur 2.2 Schematic diagram of a practice theory approach to material culture.

Materiality and Agency

Material evidence is a fundamental source of data for archaeologists, but for the greater part of the twentieth century anthropologists have not paid much attention to material culture (Sturtevant 1968). As many writers have noted, there has been a re-emergence of anthropological interest in the inter-relationship of people and things. Cultural anthropologists working in Oceania in recent years have made ‘objects’ a prime focus of analysis. For example, in their review of material studies in the region, Bell and Geismar (2009:4) note a number of authors who have redefined objects (e.g., Strathern 1979; 1988; Thomas, 1991; MacKenzie 1991; Weiner 1992; Gell 1993; Foster 2002). They identify three properties that characterise these definitions of an object: their innate subjectivities; their role as social agents; and their ‘promiscuous’ qualities. They propose
the term ‘materialisation’ to describe ‘the dynamic process by which persons and things are inter-related’ (Bell and Geismar 2009:3). In contrast to the more commonly used terms of ‘material culture’ or ‘materiality,’ they argue that the verb ‘materialisation’ implies ‘an ongoing lived process whereby concepts, beliefs and desires are given form that are then transformed and transforming in their social deployment’ (Bell and Geismar 2009:3-4).

Although I have not adopted the term ‘materialisation’ for this study, their approach does reflect the same processual view of objects that I have employed following Appadurai (1986). In his conceptualisation things, like people, have social lives. He made this point to draw attention to the ways in which objects can acquire and lose value, change in significance, become non-exchangeable or return to commodity status throughout their existence. He suggested that it is

...through the analysis of these trajectories that we can interpret the human transactions and calculation that enliven things. Thus, even though from a theoretical point of view human actors encode things with significance, from a methodological point of view it is the things-in-motion that illuminate their human and social context (Appadurai 1986:5).

Putting these concepts together, the museum can be understood as one moment in the trajectory of an object whose life-history encompassed all the moments of its production, its movement into a collection and the engagements of which it has since been a part. By conceptualising collection items as things-in-motion, their value for illuminating social contexts is brought into the foreground. One problem with Appadurai’s model is that is posits passive objects that are successively recontextualised and does not address the significance of the materiality of objects in determining the kinds of social relations of which they can be a part or which they can produce. In other words, it does not address the active object. To tackle these issues we need to turn to another theoretical approach.

The capacity of material culture to act in the world, as discussed by Alfred Gell (1998) introduces another potential source of agency. Working within a Melanesian context, Gell developed a theory of art that linked his understanding of art as a system of social action with his interest in understanding the efficacy of the material form itself. He argues that the agency of art can be viewed from the perspective of what objects do in social networks, rather than what they represent. Art is produced to influence others and
can be said to have a kind of agency because it produces effects. Thus art embodies complex intentionalities and consequently mediates social agency. Gell’s (1998) objects are more active than Appadurai’s (1986) because, in addition to assuming shifting identities, they interact with people and produce social effects. Although Gell makes it clear that the agency of objects are of a secondary character to that of the maker, many works of scholarship have merged ideas from Appadurai’s work (1986) with Gell’s to produce work that focusses on the agency of objects in themselves (Gosden 2005; Harrison 2006). Two of Gell’s perspectives have particular significance for my study. The first is the view of art/material culture/artefacts as active in constituting social reality. The second is his framing of agency as the capacity to affect, as distinct from individual intent or actions.

Gell (1998) built on Marilyn Strathern’s (1988) notion of the ‘partible person’ who is divisible into things that circulate along specific exchange trajectories. He argued that people act through objects by distributing part of their personhood into things.

Strathern’s research in the Papua New Guinea Highlands is extensive and has predominantly focused on the sociality of exchange relations. However, as Bell and Geismar (2009:18) point out, her work on gender, gift exchange and property relations (Strathern 1988; 1991; 1999) may also be read as a theorisation of materiality. Strathern has argued that people, like things, are composed of the relations that they in turn engender. In addition, relations may themselves be conceived of as artefacts. In framing relations as artefacts, Strathern (1990:40) provides an alternative interpretation of artefacts, whereby they are experienced and are the creators of experiences. Strathern’s conceptualisation combined with the methodological approach of Pauketat have provided me with a way to conceive the multiple social relations, meanings and purposes that come into play over the lifetime of a skirt.

The ways that artefacts and persons create each other have been explored by cultural anthropologists by focusing on single object types, such as stone axes (Battaglia, 1990), string bags (MacKenzie 1991), man-catchers (O’Hanlon, 1999) and slit-gongs (Leach 2002). In Androgynous Objects: String Bags and Gender in Central New Guinea, Maureen MacKenzie (1991:27) focuses on the lifecycle of an object in order to ‘uncover the relations and meanings which surround it.’ Hers was one of the first anthropological studies to explicitly take a biographical approach to a specific class of objects, in this case the billum (Papua New Guinea vernacular name for string bag). Among the Telefol people she studied, the billum manifests and mediates social relationships of many kinds: e.g.,
nurturance; spirit divination; gift exchange; supernatural protection; and/or decoration. In addition to these she identified newer kinds of social relationships connected to the billum’s value as a trade commodity for tourist and export markets. MacKenzie’s choice of the billum enables her case study to move between male and female domains and she concentrates on the ‘different types of agency which gender demarcates’ (1991:22). She states that her focus on a particular artefact

... as a complete object made by women and men, will give me a technological and sociological understanding of its combinatory symbolism, and reveal spheres of activity that an analysis of either female work or male cult activity would miss (MacKenzie, 1991:28).

Archaeologists, as well as anthropologists, have been using various concepts of ‘agency’ to understand the past. The variety of ways that have been employed range from its conflation with the intentions of individuals (Hodder 2000) to a view that emphasises its highly structured’ or socially produced character that evacuates intent from the picture (Dobres and Robb 2000).

The perspective taken in my research is that the cultural material of the past is not only constituted by the social, but is in turn active in constituting the social world of which it is a part. The recursive relationship between the material and the social is referred to as mutuality (Gosden 1994), constitutive (Chilton 1999) and structuration (Dobres 2000). It is a relationship that is well described in terms of structuration and agency. In her book Technology and Social Agency (2000), Marcia- Anne Dobres notes that

structuration depends on the agency of people, but in turn provides the structures within which agents exist. In agency theory, then, societal institutions become structures through the agency of individuals and collectives, at the same time that agents are structured by and exist within them’ (Dobres 2000:133).

Dobres (2000) has observed that although the theoretical approach has been accepted by many, it has been difficult to see what this means in terms of its application in archaeological practice. Like Pauketat (2001) described previously, she advocates a practice theory framework for archaeology and proposes the use of a reconfigured
understanding of the *chaîne opératoire* methodology, to provide a window onto ‘the social relations, meaning, and agency’ (Dobres 2000:188) embedded in past activities.

**Designing a Methodology**

As I argued previously, most recent approaches view artefacts in collections as holding the potential to reveal something about both the collecting society and the source society, but the connections between them are also strongly anchored to specific historical contexts. In this intellectual context, artefacts are envisaged as derived from a producer and source community that are anchored to a particular moment in time. Their presence within the museum has significance with regards to a particular set of relationships. For this reason artefacts have the potential to elucidate the historical/political/societal circumstances of which they were a part. Yet, as I have pointed out above, research on museum collections has tended to either focus on the short time period of an individual life span (Young 2004), or the longer but retrospective time of ‘the past’ from the perspective of a modern person of that cultural group (Bonshek 2009).

As Torrence and Clarke (2011) have demonstrated, if approached from an archaeological perspective, the ethnographic collections in museums can be opened up to broad ‘scales of inference about social and historical processes’ (Torrence and Clarke 2011:436). By treating each instance of donation or sale as having a meaningful context in the way that archaeologists analyse an ‘assemblage’ (Torrence and Clarke 2011:437), they were then able to use archaeological principles of inference to reconstruct aspects of the social process from the material evidence. Torrence and Clarke’s analytical framework is the means by which they were able to ‘create a different scale of narrative about historical processes to that of object biography’ (2011:437). In their study, artefacts were ‘understood as elements of a material narrative about changing social relations mediated through the process of exchange’ (Torrence and Clarke 2011:444-5). The emphasis of the methodology they outline focuses on the act of exchange. Clearly ‘the assemblage’ is a fruitful approach for considering, collectively and in historical context, moments of cross-cultural exchange and what they reveal about the emerging colonial culture of the time period under study.
The simple presence of ethnographic artefacts in museums is concrete evidence for particular moments of cross-cultural negotiation and exchange. To make further inferences about Papuan experiences of the past, we must have a way of tying materiality to social relations. The flow chart in Figure 2.3 shows a generalised simplification of decisions made by skirt makers in relation to material aspects of skirt production and use. \textit{Chaîne opératoire} provides the conceptual bridge in this study. The decisions shown on the flowchart provided a basis for applying the concept of \textit{chaîne opératoire} to the study of fibre skirts.

Artefacts are produced for many reasons, some of which have origins located within the domains of indigenous social relations, while others may relate to interactions between indigenous and non-indigenous people, such as the production of souvenirs. ‘How’ and ‘what’ material culture people produced, and how things change or stayed the same over time, are analysable aspects of cultural material collections. In this study I have tried to show how an artefact analysis that focuses upon production can uncover significant information about the unfolding historical processes of which they were a part. The flow chart of decisions (Figure 2.3) provides a useful conceptual prompt for thinking through the implications of material patterning observed in a sample.
The importance of interpreting material culture, in general and in collections, in the light of some historical context, is shared by both object biographical and assemblage approaches. The tangibility of museum collections should not be conflated with their solidity as evidence (Thomas 1999:7). Following Nicholas Thomas’ *Entangled Objects* (1991), a number of scholars have noted that the study of poorly documented ethnographic collections requires a methodology that places the firm evidence we do have, i.e. the artefact, at its centre. In a later article on *tiputa* (a type of Polynesian garment), Thomas (1999) acknowledges the limitations of re-privileging the artefact, as it always requires some reference to context.

I agree with Thomas’ observation that an artefact is never just a thing ‘in itself’ that can be dissociated from the ‘bodies of knowledge, practices, and values, through which they are animated’ (Thomas 1999:7). It must, he argues, be situated within a given context. Thomas (1999) used his context focused methodological strategy to emphasize the use of objects by Polynesian peoples to create novel and distinctive values and social orders. His study of *tiputa* demonstrates the insight of Appadurai and others that the value and meanings of things change as they are recontextualised. ‘If Samoans were transforming themselves, to some extent at the instigation of foreigners, they were also effecting a shift that was internal to Samoan culture and material culture’ (Thomas 1999:17). The value of *tiputa*, he suggests, is in their dual character, that is as ‘things that mobilized certain precedents, certain prior values that cloth possessed, on the one hand, but possessed novelty and distinctiveness on the other’ (Thomas 1999:18).

**A Study of Fibre Skirts**

Following on from ethnographic studies that focus on the complex interrelations between people and object agencies, my study of fibre skirts from Central Province in Papua New Guinea takes a particular type of object as its focus. However, in adopting an archaeological approach, it differs from most anthropological studies in a number of key attributes. This study primarily investigates a material record from the past, which is the metier of archaeology. Secondly, it considers the collections as a whole (assemblages) as the dominant focus rather than single objects. While present-day producer-community members were consulted, I did not borrow the methodology of participant fieldwork used in anthropological enquiry. A large part of this choice was because the initial research question and focus was on what the material itself can reveal. In addition, the large scale
of the study, in terms of its geographical range and the lengthy time period under consideration, were not conducive to the practice. The selected class of artefacts, fibre skirts, are analysed over a relatively extensive period of time (more than a century, as opposed to weeks, months or a few years).

As primarily an archaeological endeavour, my study has sought to navigate from the tangible material in collections, artefacts, back to the people involved in their production, use, and exchange. Consequently, I have sought to find a conceptual tool that emphasises material culture production, use and discard as processes that constitute the identities of producers and users and so envisages material culture as both embodying and shaping the identities of their makers and users. Social or cultural meaning is immanent in the relationships between people and their surroundings. Mine is therefore a phenomenological approach that sees social and cultural meaning as ‘generated’ by the practices in which people are engaged, and not ‘expressed’ by them.

‘Rump Bumps:’ A Case Study

In order to demonstrate how it is possible to glean information about the producers of fibre skirts from collections, I will provide the useful example of the hemlines. I demonstrate how in using my methodology not only the circumstances of the acquisition can be discerned, but also how aspects of an individual can be traced.

As will be further explained in Chapter 4, a fibre skirt is a garment made up of several distinct parts (Figure 4.5). During the initial examination of fibre skirts it soon became apparent that the length of a skirt can vary at different points. By laying out the skirts flat, I obtained the dimensions of each skirt by measuring the length of the waistband and the size of any spaces along it, the length of the skirt (waistband to hem), and the number of waistband knots per 10cm. My initial observations were relatively simple. For example, the length of the waistband provides an indication as to whether the skirt was made for an adult or child. When I came to examine the measurements of the length of hemline, there was a curious phenomenon that could not be understood without additional information. This was that the carefully trimmed hemlines were not straight, but dipped and shortened along the length of the skirt, apparently haphazardly. Other skirts hung almost to floor length with messy hemlines and no evidence of the neatness of others. When examining the larger sample, it became obvious that most ‘neat’ skirts contained the same ‘haphazard’ dips. The consistency across the sample
revealed that the difference between the largest and smallest measurement of length was purposeful. I then discussed this observation with cultural experts, who explained that skirt hems were cut when the skirt was actually being worn by a particular person.

The distinctive dips of particular fibre skirts were thus indicative of customisation for a specific wearer. In these cases the length has been trimmed to create a level hemline whilst being worn by a particular standing person to fit her unique shape. Creating an even hemline in this way results in what I have termed a ‘rump bump.’ What I observed in the skirts as they were laid out flat was the tell-tale imprint of the wearer’s body on that day in the form of the dipping hemline. The longer sections correspond to the portion that stretches over the hips and bottom, which require a little extra allowance. Skirts are fastened, with the edges of the skirt coming together, on the side of the hip so that the dip occurs about a third of the way along the perimeter of the skirt waistband, as can be seen in Figure 2.4.

![Figure 2.4 Fibre skirt collected by Captain Owen Stanley in Redscar Bay, British Museum (Oc1851, 0103.14) shows the irregularity of the hemline termed ‘the rump bump.’ Photo: British Museum.](image)

In the ‘rump bumps’ the very personal nature of these corporeal imprints from the past can be read. But it is also possible to see something of the moment of collection. The presence of a dipping hemline is a good indication that the skirt was actually worn before coming into the collection. In other words, it was probably made primarily for use by a Papuan and not the Westerner who subsequently acquired it. In contrast, the absence of a dip together with the presence of quite long messy, irregular hemlines suggests that these skirts were collected before they had been worn. Possibly these unfinished skirts had been made for indigenous exchange, such as bride price or long distance trade with distant
communities and were therefore envisaged as an appropriate object to offer for trade with foreigners.

This example demonstrates the potential of collections-focused research but also highlights some of the difficulties. It was not always possible to determine whether hemlines dipped or not because of the practical impediments relating to the storage and condition of the skirt. Many were rolled and now friable so could not be laid out flat without extensive conservation expertise. In these cases I could not observe whether the skirt had been cut for an individual wearer.

Such characteristics reveal aspects of wear and indicate moments of use within what is otherwise a static collection. They can also help to illuminate the kinds of relationships and circumstances that were associated with the skirts. While the telling of stories through chosen objects has value and can vividly animate and personalise the past, the presence of the wearer alone is not enough to draw out the complexities of social relationships over the course of a century which has been a major objective of my research on fibre skirts from Central Province, Papua New Guinea. By bringing together practice theory and basic archaeological concepts concerning materiality, assemblage and inference, my study begins the process of writing an intimate history of Central Province peoples and their external experiences over the period 1873 to 1975.
Chapter 3
PAPUA 1849-1975

Figure 3.1 “Group of Gaile native feast” (today called Gaire), HP84.12.45, Macleay Museum. Photo: unknown.
Introduction to the Study Region

The purpose of this chapter is to introduce the study region and provide the necessary historical background to the analyses. I begin with a brief description of some of the more prominent characteristics of pre-colonial and early-colonial Central Province societies before describing the principal historical reference points of colonisation. In the second half of this chapter I examine some of the mechanisms of colonialism, such as the establishment of the armed constabulary, that are indicative of the infiltration of foreign structures into peoples’ lives.

My case study focuses on the process of social change within a colonial context as recorded in ethnographic museum collections originating from a region of the southeast coast of Papua New Guinea (PNG) that includes the national capital, Port Moresby. The study area is presently comprised of two administrative divisions, Central Province (Central Province) and the National Capital District (NCD) (Figs 3.2, 3.3). Prior to 1982 when the NCD was established, Port Moresby was a part of an older configuration of Central Province referred to as ‘Central District.’ In this study I use ‘Central Province’ in the older (pre-1982) sense and will only differentiate between modern Central Province and NCD as the need arises.

I chose Central Province for my case study because the region encompasses Port Moresby which has been the centre of foreign administration in Papua. Despite being the centre for foreigners arriving in Papua, it is one of the least represented areas of New Guinea in collections after 1900, as interests moved from the ‘known’ to the ‘unknown’ of previously unexplored areas. Initially Port Moresby was the base for the London Missionary Society (LMS), then the capital of British and Australian colonial governments, and finally it became the capital of the independent nation of Papua New Guinea. Due to their proximity to Port Moresby, the peoples of Central Province have had a greater amount of sustained contact
with Europeans than other residents of Papua New Guinea and have been at the epicentre of social changes. Unfurled across the terrain of Central Province is a history that spans Papuan and European social relations from the earliest sporadic boat-side encounters with exploration vessels (e.g. MacGillivray 1852; Moresby 1876), to the solicitations of the first non-Papuan residents, and the establishment of colonial authority in 1884 and its insinuation into many facets of Papuan lives over subsequent years. Taken together, these factors mean Central Province is an excellent place to conduct a study of social change.
Figure 3.3 Map of Central Province with districts and their headquarters (Rannells 1990: 12).

The coastline of Central Province extends over 504 km, from Cape Possession in the west to Orangerie Bay in the east (Figure 3.3). The region spreads inland to the summits of the Owen Stanley Ranges. The highest point is Mt Victoria (4036 m). Central Province has 33 islands, coral reefs and a number of natural harbours. Swamps, tidal flats and low hills occur in the west and central coasts. In many areas broad plains occur between the coast and foothills. To the east of the National Capital District, the Astrolabe Ranges rise to over 1000 metres. A series of large rivers flowing down from the ranges to the coast characterise the province. These include the Vanapa, Angabanga, Laloki/Brown and Kemp Welch (Figure 3.3).
Twenty five local languages are spoken in Central Province, along with three languages new to the area, English, and the two pidgin or contact languages Tok Pisin and Hiri/Polis Motu (Figure 3.4). The majority of people in coastal villages west of Cape Rodney and in the inland areas of Rigo and Kairuku districts speak Austronesian languages of which Motu is one. ‘High’ Motu, a colloquial term used to differentiate it from the pidgin language, is the basis of Hiri (or Polis) Motu, which is the lingua franca and main second language spoken by people in Central Province (Rannells 1990: 13).
The National Capital District of Central Province includes Port Moresby, a number of urban villages, suburbs, government centres and squatter settlements (Figure 3.5). The NCD is bordered by around 30 kilometre of coastline from Napa Napa to Bogora Inlet. There are eight islands, and inland it reaches as far as Laloki River and occupies 240 square kilometres.

The many social groups in the NCD communicate using Hiri Motu and Tok Pisin (another lingua franca originally derived from the Bismarck Archipelago region of Papua New Guinea). Government business is conducted in English. Around 14 per cent of NCD residents were born in Central (National Statistics Office 1980). Many people from Western, Gulf and Central Provinces have used past ties such as trading relationships, marriage, or church that enable them to reside in Motu-Koitabu villages. Other migrants live in scattered settlements where they pay rent to the Motu or Koitabu customary landowners.

The National Capital District heavily dominates the social and economic life of Central Province. Central Province villagers sell vegetable and fish in the NCD markets and others work in government and businesses there. Outside the NCD people are
engaged in subsistence fishing and farming activities (Rannells 1990: 11). In Central Province many village households have one or more sources of income. It is interesting to note that according to the 1980 Census, 12.6% of Central Province residents and 5% of NCD residents made artefacts to earn income (National Statistics Office 1980).

The NCD is by far PNG’s most heavily populated area. At the time of the 1980 Census only three-fifths of the population were born outside the NCD. Although Motu and Koitabu people are the original residents of the district, they are now a minority of the population (National Statistics Office 1980). Their villages in the urban and peri-urban areas are overcrowded. A large proportion of NCD people live in squatter settlements (one-fourth in National Statistics Office 1980). Government is the main activity in the District, and there are also private sector jobs in transport services, stores, factories, banking, business headquarters, tourist centres, and embassies (Rannells 1990: 108).

Central Province and the National Capital District have the driest climate in PNG. In the NCD almost no rainfall occurs between May and November (Rannells 1990: 109). On the low-lying coastal areas of Central Province there are mangroves, nypa palm groves and/or sago swamps. On the seasonally dry coastal hills and inland plains between Cape Possession and Hula, including the area of the NCD, there are broad expanses of grass and dry eucalyptus savannahs. Rainforest occurs in the mountains and in heavier rainfall areas to the east. On the high peaks of the Owen Stanley Ranges there are moss forests and alpine grasslands (Rannells 1990: 12).

**Trade Networks**

One of the reasons Central Province is an attractive region for the study of culture change and cross-cultural negotiation is that the people in this region have had a long history of contact with ‘outsiders.’ Along with trading partnerships across the Papuan hinterlands, coastline and fringing islands, traders from the Torres Strait region also frequented the area (Lawrence 1994). In the distant past, the culture of Motu language speakers is thought to have developed in the region around the 17th and 18th centuries (Bulmer 1982:127; Oram n.d.:4). It seems likely that Papuan’s familiarity with cross-cultural exchange would have impacted on the way they dealt with Europeans, as argued by Davies (2011).
At the end of the 19th century there were a series of interlinking trade networks in operation along the southeastern coast of New Guinea, between the Gulf of Papua in the West and Mullins Harbour in the East (Figure 3.6). There were two main hubs of this trade. One centred on the Motu, in the Port Moresby area, and the other on the Mailu in the Amazon Bay area. Both are thought to be around 300-400 years old (Kirch 1991: 144, 150). The Motu *hiri* and the Mailu networks were loosely connected with an overlap centred on the Motu villages near Port Moresby. The eastern end of the Mailu range had some linkage with the Massim *kula* network and shell beads (*Spondylus* sp.) from the Motu area were incorporated into *soulava* necklaces, a significant *kula* object. One difference between the two exchange systems is that craft objects form a greater part of the trader’s export material on the annual voyages of the *hiri* than in the Mailu trading system (Harding 1994:108). Specialist traders such as the Motu and Mailu secured the bulk of their subsistence items from trading networks with inland communities. The Motu, who principally traded with pots, were so dependent on trade that they referred to their pots as food (Saville 1926:153).

The *hiri* was a long-distance exchange voyage undertaken by the Motu. It was a more or less annual expedition that departed from the Port Moresby area and sailed along
the coast to the Gulf of Papua, where the Motu exchanged pots and shell arm bands for the sago and canoe hulls of their trading partners (Barton 1910; Groves 1960; 1972; Oram 1982; Seligmann 1910; Tueting 1935; Williams 1932). A fleet of large ocean-going trading canoes (*lagatois*) carried as many as 30,000 clay pots to the Gulf (Arifin 1990; Barton 1910; Groves 1960; 1972; Oram 1982). Scholars debate the degree to which the Motu’s specialised production of pottery for the *hiri* network was based on a dependence on imported sago (Allen 1977; Oram 1982).

As described by ethnographers, the Mailu network was dominated by Mailu Village, situated on an offshore island (Malinowski 1915; Saville 1926; Tueting 1935) (Figure 3.3). The Mailu Islanders controlled a coastal network extending around 150km, from Aroma in the West to Mullins Bay in the East. Mailu Islanders had a monopoly of pottery-making in the area and supplied it to the mainland Mailu speakers, mainly in exchange for food (Irwin 1974:269). In a similar way to the Motu *hiri*, they undertook an annual cycle of trading voyages which took advantage of seasonal variations of wind direction and speed (Irwin 1974:269).

In his analysis of pre-colonial trading systems of eastern New Guinea Harding (1994) observed that in the case of specialist trader communities such as the Motu and Mailu supplies of festive foods are trade-created surpluses. His analysis is useful for seeing how the foodstuffs obtained on the voyages were differently distributed. For Motu, the beach-bush trade satisfied daily needs, while the annual *hiri* brought literally tons of sago to the Motu villages. Such supplies, supplemented with locally grown pigs and tubers, were distributed in ceremonial life. The Mailu Islanders produced sago themselves, and contributed this locally produced sago to festive distribution. They relied on beach-bush trade to import pigs, particularly for festive occasions (Young 1988:62), and relied on voyaging for daily food. It is this trade which made it possible for them to reserve their own produce for feasts (Harding 1994:108).

Both the Mailu and Motu specialised maritime trading cycles were irrevocably disrupted by colonial processes. Among the major causes were the new goods and services available to many Central Province peoples via the influx of foreigners. Sago, while still consumed, became one of three staple carbohydrates along with rice and flour. Goddard (2011:283) has argued that the *hiri* transformed in the early 1970s away from an activity oriented towards seasonal acquisition of goods towards a festival celebrating Motu history, identity and locality with the political aim of validating their land holdings in a rapidly changing NCD.
Cross-Cultural Contact and Political Change

Throughout the colonial period government regulated the movement of people, but this also offered new opportunities for individuals to gain access to distant resources. During the long history of contact with the outside world, the different nature and strengths of cross-cultural interactions affected local groups in Central Province in various ways. The purpose of this historical review is to provide a backdrop for my analyses of social change as recorded in ethnographic collections of fibre skirts. My review focuses on the factors that have had the most effect on indigenous cultures in Central Province. These include Christian missionaries, control over land, the police force, the Australian Administration and the Second World War. Changes in the regional political boundaries and dates for critical events are provided in Figure 3.7.

Figure 3.7 A history of colonial occupation on the island of New Guinea (Turner 1990:17).

Early Contact with Europeans

Europeans arrived in the South Pacific region in the sixteenth century as a by-product of the struggle to control the spice trade from the Moluccan islands to the west, in present day Maluku province, Indonesia. Portuguese and Spanish navigators encountered New Guinea either en route to Mexico or because they had overshot the Moluccas. It was
Ynigo Ortiz de Retes who named the island New Guinea. The cartographer Gerard Mercator placed the name ‘Nueva Guinea’ on his world map of 1569 (Turner 1990:3). In 1606 the Spanish-Portuguese navigator Luis Vaez de Torres landed at several points on the southern coast. His expedition landed at Mullins Harbour on the southeast, in present day Milne Bay Province (Figure 3.2), where friendly ‘Indians’ gave them fresh water and pork, but further to the west at Mailu Island, in present day Central Province, they claim to have been attacked. Torres’ ships responded with firepower and removed fourteen children. They were taken to Manila in the hope that they would become Christians and citizens of the Spanish Empire (Nelson 1972:60). During the seventeenth and eighteenth centuries the Dutch, British and French sailed in the vicinity, charting parts of the New Guinea coast and the neighbouring islands. However, European nations were not in a hurry to lay claim to, or colonise, the region during this early period of contact.

In 1828 the Dutch annexed the western half of the island of New Guinea (west of the 141st meridian of East longitude) (Turner 2001:xix). The area they claimed includes the present day Indonesian provinces Papua Barat (West Papua) and Papua. The desire to protect its interests in the economically valuable ‘Spice Islands’ was prompted by the increasing frequency of British voyages in the eastern waters of New Guinea, but the Dutch did not have an administrative presence until 1898.

The British began their explorations on the southeast coast of New Guinea by mapping the coastline. The first expedition sent to untangle cartographic error and uncertainty was HMS Fly under the command of Captain Francis Blackwood (1842-1846). The voyage charted the seas off present day Western and Gulf Provinces in their attempts to clarify routes for safe passage to the new colonies in Australia. In 1848 Owen Stanley led the next expedition to survey the east coast and archipelagos. During the voyage the Rattlesnake stopped twice at Redscar Bay, in present day Central Province, primarily to trade for fresh food from the local inhabitants. In addition to food they acquired a variety of artefacts, a large number of which are held by the British Museum. These earliest material culture collections from Central Province have been documented and described recently by Philp (2009; 2013). The fibre skirt shown in Figure 3.8 was collected at this time. MacGillivray’s official narrative of the voyage includes a language name also acquired at Redscar Bay for the item ‘Petticoat : erua’ (MacGillivray Vol 2: appendix 2). These two expensive, government–funded surveys by the Fly and the Rattlesnake point to the extent of interest and movement in the area. The need for maps...
and intelligence also hints at the number of contacts, both documented and undocumented, when Central Province peoples had opportunity to learn something more of the foreigners.

Figure 3.8 Fibre skirt from Redscar Bay Oc1851,0103,14 British Museum
Photo: Erna Lilje

It was during a subsequent British survey of the coast in 1873 that Captain John Moresby, on board the hydrographical survey vessel the H.M.S. Basilisk, named Port Moresby at latitude 9° 30’ South and longitude 147° 10’ East (Moresby 1876: 153). The survey found that the many-bayed Fairfax Harbour, also named by Moresby after his father, could be accessed from two entrances. This provided an inshore route between breaks in the Barrier Reef, connecting the Basilisk Passage and Redscar Bay (Moresby 1876: 153). In the years that followed Port Moresby would become a hub for traders, missionaries, officials, tourists and others. Its social and economic importance has only grown over time as the capital city of Papua New Guinea.

A consequence of increased mapping and security across the region was the presence of the ‘curiosity’ seeker. Some, like Luigi Maria D’Albertis, spent time in the region for personal fame and profit as well as scientific purposes. D’Albertis mounted an expedition partly financed through ethnographic and natural history interest from the world’s museums (Florence and Sydney particularly, see Chapter 4). His voyage was published first in English, before the Italian edition. At the same time as he lived at Yule Island, William Macleay voyaged to the area, one of several explorations in the region at the time.
(see Mullins 2013). Adventurous younger men, such as Lawrence Hargraves and William James, who sought opportunities, did not return to Sydney with Macleay but stayed in Papua to take advantage of the rich market in natural history and ethnographic materials. Also associated with these expeditions are people like Jimmy Caledonia and Tongatabu Joe who, as their names suggest, came from elsewhere in the Pacific to call this region their home (New Caledonia and Tonga respectively). Innumerable Pacific Islanders made their living in the area through their skills in piloting, crewing and trade, often forming alliances with the LMS teachers with whom they shared a language or origin.

Increasing the numbers of (predominantly) men who visited this area of New Guinea from across the globe were those who joined the Laloki gold rush between 1873-8. This short-term gold rush was estimated to have brought a little over 100 people into the area, predominantly in 1878, for prospecting on the Laloki River (Mullins 2013; Moore 2003:131). Many prospectors died or were transported sick to Cooktown, and none struck gold in sufficient quantity to turn a profit. Even if they collected nothing of local peoples’ material culture during their prospecting or ‘on the side,’ their daily interactions in negotiating for food, water and freedom of movement, introduced more trade goods and foreign things (like horses) to the Papuans they met.

Background to the Colony

Towards the end of the nineteenth century, European powers were increasingly engaged in a scramble for overseas territory. Germany, motivated by commercial benefits, signed a ‘treaty’ with ten men from Bogadjim and Madang in October 1884, which ‘authorised’ German ownership and control of the north-eastern part of the island. On November 3rd Germany proclaimed the northeast of the mainland and adjacent islands the Protectorate of New Guinea and the Bismarck Archipelago (Turner 2001: xx), a territory of 233 000 square kilometres.

The Australian colonies were nervous at having an aggressive European neighbour just to their north. During the 1870s and early 1880s Britain had repeatedly resisted requests by the Australian colonial governments to lay claim to any part of New Guinea; and they, in turn, had declined to bind themselves to contributing to the financial cost of administering the annexation (Whittaker et al. 1975: 438). In 1883 the Premier of Queensland, Thomas McIlwraith, instructed the resident magistrate of Thursday Island, Henry Chester, to go to New Guinea and formally annex the eastern half and the adjacent
islands, in the name of the Crown. However when news of the ‘annexation’ reached London, it was disallowed by the Imperial Government (Oram 1976: 18). In response the Colonial Agents General for New South Wales, New Zealand, Queensland, and Victoria presented their reasons for wanting Britain to claim the islands of the Western Pacific to the Earl of Derby, the Secretary of State for the colonies. Their reasons reflect anxiety over the possibility of a ‘Foreign Power’ establishing a naval station so nearby and the potential threat to trade because of the vulnerability of steam vessels that must pass through the Queensland territory of the Torres Strait. They also cited the danger posed to the indigenous population by the unregulated influx of adventurers if the island was not colonised ‘under proper authority’ (Victorian Parliamentary Papers, ‘Annexation of Islands in the Pacific,’ Melbourne, 1883 referenced in Jinks et al. 1973:35).

By July 1883 the Imperial Government indicated that it was prepared to consider annexation if the Australian colonies would contribute to the costs. The colonies agreed to provide £15,000 annually for the administration of New Guinea. On November 6, 1884 Britain officially claimed the southeast of mainland New Guinea and the adjacent islands as a British Protectorate (Oram 1976:19), a territory of 223,000 square kilometres. Major General Sir Peter Scratchley was appointed as Special Commissioner (Turner 2001: xx).

![Figure 3.9](HP82.41.29) One of the ‘raising of the flag’ ceremonies for the Proclamation, 1884. HP82.41.29 Photo: John Paine studio
British Protectorate period

The Protectorate Britain established was, in many ways, quite unique, as a step forward in colonial possession. Possibly partly on account of the bad press Australian colonies received of their treatment of Indigenous Australians, possibly partly on account of changes in British attitudes towards colonisation as a whole, the Protectorate was conceived in writing as primarily for the benefit of local native peoples. No large tracts of land were acquired for the Crown, local peoples were not significantly used for labour elsewhere such as was true for British colonial Indian populations in nearby Fiji. Nor was the land used for another purpose, such as penal settlement, as had been implemented in New Caledonia by the French in the 1860s.

By the time the colonists finally set the flag to claim possession, there was already a fledgling settlement in Port Moresby with a store, church, seminary, school and a degree of knowledge about the district. Major-General Scratchley, the LMS clergymen and the large number of soldiers, sailors and staff in British service announced the establishment of the Protectorate in many ceremonies performed at known villages along the coast (Figure 3.9).

For the local people assembled to hear the various proclamations, which were translated into some local languages by William Lawes and James Chalmers, this political change was presented as one of peaceful intent – a way to protect ‘them’ from the most ruthless of ‘us’, and a way forward for ‘them’ to obtain what they saw ‘we’ had.

The initial years of the Protectorate were concerned with establishing the colonial presence and largely aimed at instituting ideas of European peaceful governance. On arrival in Port Moresby in 1888, Sir William MacGregor proclaimed the change in status of British New Guinea from Protectorate to Possession. He was an aggressive explorer, who encouraged scouting of various kinds including ethnographic, geographic and scientific. He also passed legislation that protected the rights of Papuans. He served as its Administrator until 1895, when his position was redesignated Lieutenant-Governor, a role he filled until 1897 (Jinks et al. 1973:50).

Australian colony

Britain, which had never had a real interest in the colonial possession of British New Guinea, was finally relieved of this responsibility when the Australian Parliament’s Papua
Act 1906 came into force, at which time the colony passed to Australian control. The region’s name was changed to the Australian Territory of Papua, a name that implied a close relationship with Australia. Both Nelson and Roberts in their respective histories of this period comment upon the way that many Australians saw Papua as a place that would one day be part of Australia (Nelson 1982:12; Roberts 1996:xii). John Hubert Plunkett Murray, who had been serving in Papua as Chief Judicial Officer since 1904, was appointed as acting administrator of Papua in 1907. The following year he was appointed Lieutenant-Governor of Papua, occupying the position until his death in 1940 (Jinks et al. 1973:97). Sir Hubert Murray was succeeded by his nephew, Hubert Leonard Murray, as Lieutenant-Governor in 1940, a position he would occupy until 1942.

Following the defeat of Germany in World War I, the 1919 Treaty of Versailles provided for Australian administration of German New Guinea. In 1921 a mandate from the League of Nations to administer German New Guinea was granted to Australia. Before the year’s end the Australian parliament passed an act which ended the military occupation and began the civilian administration in the Australian Mandated Territory of New Guinea (MTNG) (Turner 2001:xxii). Sir Hubert Murray unsuccessfully lobbied to secure the amalgamation of the territories, but they continued to function as distinct territories (see Figure 3.7). Papuans and New Guineans were required to get official permission to cross the border, and the public services were recruited separately. Under German control the territory had been considered as an economic venture. The administrators of the Mandated Territory were keen to continue to develop plantations. Unlike the practice in Papua, they allowed for the alienation of land and labour regulations were introduced to encourage white settlement (Turner 2001:xxxviii-ix).

The inter-war years saw a flurry of exploration into the island’s interior. This coincided with the Great Depression and a period when many men and, for the first time, many women, moved to Papua for opportunities in government work, mining, missions, and adventuring (Roberts 1996). The discovery of gold in various locations in MTNG in the 1920s drew the attention Australian prospectors and provided an extra impetus to exploration. In 1930 two prospectors explored parts of the eastern highlands and travelled down the Purari River to the Gulf of Papua. In 1933 the two prospectors, in the company of an administration officer, reached Chimbu and the Waghi Valley in the highlands and explored the area around Mount Hagen (Turner 2001:xxiii). Two years later government officers crossed the Papuan Plateau and explored the southern highlands. In 1938-39 administration officers undertook a major patrol from Mount Hagen to Telefomin. The
populations found in the highlands virtually doubled the size of the territory (Turner 2001:xxiii).

Although World War II had begun in 1939, it was not until the outbreak of the Pacific War that Papua and New Guinea felt its effects directly. In December 1941 the Japanese attacked the Mandated Territory. It was not long before Japanese troops invaded and air attacks commenced on Port Moresby. Government officials in New Guinea retreated or were captured, while those in Papua were required to hand over control to the Australian Army (Jinks et al. 1973:303). Over 500,000 allied servicemen and women served in Papua and New Guinea in the war (Nelson 1984:13), Port Moresby itself was taken over for war purposes with Motu and Koiari moved out or requested to serve.

Independence and the growth of Port Moresby

Upon the conclusion of the Second World War, the United Nations gave approval for Australian Trusteeship of New Guinea. The Australian parliament passed a provisional act in 1945 and the Papua and New Guinea Act of July 1949 which amalgamated the previously separated territories and funding was increased to ten times the pre-war level (Turner 2001:200). In 1950 the minister for external territories, Percy Spender, made his first major statement on New Guinea affairs in which he declared the ‘advancement of the native inhabitants’ as the foremost duty (Australia’s Policy in relation to External Territories, Canberra, 1950:12-15 in Jinks et al.:340).

In the global context decolonisation was forging ahead. A United Nations Visiting Mission in 1962 wanted to see a real devolution of power to Papua New Guineans and the establishment of a House of Assembly. The following year the Legislative Council was replaced by the House of Assembly. In 1971 the House of Assembly adopted a national flag, national emblem, and the name of Papua New Guinea (Turner 2001: xxvi-ii).

Gough Whitlam’s electoral victory in 1972 secured the policy of Papua New Guinean independence. In preparation, Canberra released powers to Port Moresby and Papua New Guineans were elevated in the bureaucracy. In 1973 Papua New Guinea became self-governing with many official powers handed over to Michael Somare, the Chief Minister and his ministers. After an extensive consultative process and the development of a constitution a date was chosen for Independence Day: 16 September 1975 (Turner 1990:16).
Parallel to the influx of foreigners into Central Province, there were a large number of independent travellers, or tourists. Those involved in the rule of Papua also contributed to the creation of an idealised picture of a place of interest to the casual visitor. The early British expeditions that contributed to the ‘opening up’ of Papua were also instrumental in the creation of a world-wide tourist market through the production of glossy pictorial texts of their time in Papua, often written in conversational style. This is true from the early narratives of MacGillivray (1852) from the *Rattlesnake* to J.W. Lindt’s *Picturesque New Guinea* (1887) that ostensibly documented the 1884 Proclamations. Frank Hurley’s various publications and film products called ‘Pearls and Savages’ (~1921) promised pictorial views of ‘savage’ life as did the many books published before WW2 such as *Through Wildest Papua* (Hides 1935) or *In Primitive New Guinea* (Holmes 1924). These publications provide an understanding of the kinds of expectations the 1920s and 1930s tourist brought with them.

In 1884 the Burns-Philp Shipping Company first advertised for pleasure-passengers or tourists in the *Sydney Morning Herald* as ‘an excursion trip to New Guinea’ taking five weeks and ‘about 250 miles of the most picturesque portion of New Guinea’ and included short stops ‘weather permitting’ at Yule Island, Hall Sound, Port Moresby, Hula, Kerepune and Aroma (Douglas 1994:49). It continued to be the principal company actively engaged in and encouraging tourism up to the 1960s, when the large luxurious ships of the P&O heralded a new age of tourism (Douglas 1994: 126). Papuans had some independent opportunity to gain income from the wanderings of these tourists. While, as Douglas documents (1994:83), the Lieutenant Governor complained of tourists causing ‘begging’ and inducing locals to ask ‘ridiculously exorbitant prices for insignificant services,’ the benefits for Papuans of gaining 4/- (shillings) by posing for a picture rather than gaining a similar amount through hours of manual labour are obvious.

The sporadic economic benefit of the tourist grew briefly with the increasing numbers of foreign soldiers coming into the region following the bombing of Pearl Harbour. The *Pacific Islands Monthly* of 1942 reported inflation in fibre skirts from 6d (pence) pre-war to 25/- during the war (quoted in Douglas 1994:117). It is noteworthy that this reported inflation and skirt production for sale does not correlate with their increased presence in museum collections, presumably because of the disruption of the war and the effective closure of museums out of fear of bombing over the same period. Peacetime created a
new kind of tourist. The most recent versions of these pass through Port Moresby on route to the sites of celebrated war action such as the Kokoda Trail (Douglas 1994:136).

Variables in social change

This brief history is indicative of the pulsing impact of colonialism upon Papuans and others across PNG. In Chapter 6 I have divided the history into phases against which to analyse my data. These historical phases provide a temporal context, the macros of history. I have used this time scale deliberately as a way of seeing the larger impacts of colonial action on society. These points of history, such as the implementation of laws governing movement of individuals, were non-negotiable for Papuans. However, they imposed upon and structured the lives of every individual by specifying how people could use land, trade, and even clothe themselves. The following pages expand upon some of the ways that Papuans lives were controlled through colonialism.

**Key Factors of Social Change**

Taussig (1992:84) points out that colonization tends to bring with it pressures for a new kind of person; one that will be amenable to the modernizing forms of discipline required for life within a very different social milieu than the kind that previously existed (Fife 2001:252).

Fife (2001) has suggested that the establishment of the London Missionary Society (LMS) in Papua can be viewed as the beginning of what Foucault (1979, 1980; Rabinow 1984) would have called a ‘disciplinary society,’ a term that is used to refer to the way that the imposition of discipline over individuals soon becomes a part of the ‘technologies of power,’ that is, the continual recreation of institutionalised social bodies (Fife 2001: 251). Within a disciplinary society (Foucault 1980) institutional forms such as missions, schools, and knowledge systems become the loaded contexts in which a person learns how to think and act in order to know how to fit within the social form. I suggest that in terms of my research it is possible to consider the ‘technologies of power’ that were inculcated into Papuans as new forms of habitus.
Missions Remaking Papuans

Until the establishment of the British administration (1884), the main non-indigenous presence in southern New Guinea (Central Province) was that of the missions (Figure 3.10). The London Missionary Society (LMS) were the first to establish a presence on the southeast coast (Oram 1976:26). Their procedure was to install missionaries, called ‘South Sea native teachers’ or ‘LMS teachers’ who had come to Papua from former LMS stations in the South Pacific. The teachers, who were generally married and sometimes with young children, were established along the coast as the first point of Christian engagement. Each station was overseen by the central New Guinea mission station which was first established in 1871 with Reverend Murray at Somerset in Cape York, and, by the late 1870s, with Reverend McFarlane from Mer (Murray) island in the Eastern Torres Strait. These small coastal mission stations run by the LMS teachers were the first point of sustained engagement with the church for the Papuans. The teacher’s position was vulnerable. Without a common language and ill-equipped to survive malaria, they had to trade or pay for garden produce from their village hosts (Figure 3.10).

In 1872 Rev. Murray brought Polynesian missionaries from the Loyalty Islands to reinforce dwindling numbers of teachers placed in Torres Strait and Papuan villages. Since the missionaries were largely dependent upon their village hosts for their survival, they were not in a position to impose their will upon them. On occasion material...
inducements were used to encourage attendance of school and services (Langmore 1989:136). It has been suggested that, despite their weak position, the missionaries were able to build local peoples’ familiarity with the novel forms of social and physical arrangement associated with evangelical Christianity, such as public religious services (Fife 2001:266). The first services conducted at the various stations were typically well attended by villagers, but attendance quickly declined. Fife (2001:254) has asserted that despite the fall off in participation, some of the local people would have become habituated to these forms of social aggregation.

It is difficult to appreciate the disjuncture between indigenous peoples their respective practices and habitus and the new ways that missionaries hoped to inculcate. The distance between them would have been greatest during the earliest years of sustained missionary presence, but the project to remake Papuans into good, moral Christians continued for decades. Not all forms of ‘Christian’ were British, but rather were influenced by the origins of the Polynesian teachers. A Samoan teacher may not only have expected Christian behaviour, but expected Samoan Christian behaviour. Their residence in villages and leadership of new Christian communities included introduction of gardening techniques, matting styles and dress. LMS missionaries viewed education as the key to the evangelical conversion process (Fife 2001:256), along with the use of local languages for preaching and eventually for the production of translated biblical texts and hymns (Lovett 1903:401). Missionaries did not need practice theory to understand the effects of transplanting effective structures previously employed in the form of mission stations, schools and churches.

Fife (2001:265) argues that during their first fifty years of activity in Papua, the LMS focused upon the ‘education and evangelism of local peoples through what they considered to be the Christian morality of disciplined work habits,’ however, the techniques of discipline changed significantly over time. From the outset, the idea of school played an important role in the evangelisation of villagers. No schools were built at the stations during the first few years, but impromptu classes were held inside the ordinary village houses that were used as churches. These classes became more formalised in 1873 when Murray prepared a standardised lesson sheet (Fife 2001:253). Murray saw the standardisation of curriculum as a necessary bureaucratic underpinning of schools, without which they cannot really exist (Fife 2001:253).

In 1874 Lawes was the first English missionary to take up residence on the southeast coast, where he settled with his family at Port Moresby. By 1877 there were thirteen
mission stations between Redscar Head and Keapara Point, which were run by Polynesian missionary teachers (Oram 1976:15). Lawes believed that people should be able to read Christian literature in the vernacular. He published the first book in Motu in 1877. He had started a school a couple of years after his arrival in 1874 and by 1879 a few children had learned to read and write in Motu. By 1883 Lawes and his wife were teaching 120 students between the ages of five and twenty. The more adept students were taught English (Oram 1976:15-16).

From 1874 the LMS developed a more formalised school system and more extensive church services. The English missionaries (for example, MacFarlane and Lawes) pushed the Polynesian missionaries to gain the support of local people in the construction of two buildings, a church and a school, at each station (Fife 2001:255). The missionaries hoped that these would help them to capture young Papuans and form them into Christian and civilised adults. Fife contends that this meant equipping them to understand the boundaries of the increasingly colonial situation and their place within it (Fife 2001:266). Over the next few decades, the Polynesian missionaries were also instructed to put pressure upon villagers to accept more regularised school schedules and attendance, but this continued to be resisted by many parents (Fife 2001:255). Missionaries, from the 1870s onward, complained about the lack of interest by adults in education. This was because education was a key to the evangelical conversion process (Fife 2001:256).

The presence of missionaries in Papua was not universally endorsed. In 1881 twelve people including children, eight of whom were members of the mission, were murdered in the 'Kalo massacre’. A naval vessel, HMS Wolverine, was dispatched to punish the offenders and show the indigenous people of the area the strength and speed with which retribution could be delivered. Following this the LMS missionaries were unable to make converts for nine years.

On October 30, 1876 Lawes wrote in his diary that the Papuans showed no feelings ‘except one of disappointment that they could not get more out of us’ (Oram 1976:16). This changed in 1881 when the LMS baptised seven converts, followed by a further twenty convert in 1882. Then in 1883 the first deacons were appointed, the same year that the LMS opened a training college for mission teachers in Port Moresby. Twelve young men and their wives were admitted as students (Oram 1976:16) and their influence spread widely (Figure 3.11).
Fife (2001:260) argues that from 1900 to 1920 there was an increased focus on industrial mission and individual self-sufficiency. Alongside church and school, industrial work was thought by missionaries to be an education in itself, because they believed that it could inculcate new work habits for a new Christian morality (Fife 2001:266). The belief in civilising industry was not unique to the LMS missionaries. It was an idea that had general currency at the time: J.H.P. Murray expressed similar views during this period. Drill, based on the Boy’s Brigade model, was adopted in schools by many mission stations as a means of disciplining the individual body; and an increase in the number of examinations underlined the importance of mental discipline (Fife 2001:266).

Fife (2001:266) concludes that through drill, examinations, ‘civilising’ industry, and attention to hygiene, the British missionaries of the LMS succeeded in what Foucault means by ‘disciplining,’ because it ensured a steady supply of individual Papuan students who would be inexpensive labour for their stations and inadvertently for later European settlers. The missionaries began a process that helped to develop a habitus that was relatively friendly toward the organisational forms promoted firstly by the British and then the Australian colonial governments; and was tuned to modernity and the reality of nation states.
Colonial Authority through Land, Labour, Law

In many ways the British were humane, and in many ways the Australians have been humane. The British were exploitative, but the Australians were indifferent. There is only one thing worse than exploitative colonialism - and that is indifferent colonialism’ (Ali Mazrui quoted by Martin Maden: blog: http://tok-piksa.blogspot.com.au/2011/06/rereading-history-of-papua-new-guinea.html).

The ‘protection’ of native people is a recurrent idea in the rhetoric associated with British and Australian colonialism in Papua, but, as the quote above illustrates, the way that ‘protection’ was delivered was felt differently. From the outset it was connected to indigenous ownership of lands and personal liberty. The rhetoric of ‘protection’ continued to be used by the administration and missionaries for several decades, but the types of actions deployed in its name changed over time. During the early years of the colonial period (1884-87) the administration exercised a high level of control over the types of non-indigenous people that could access indigenous people and on the kinds of engagements it was possible for them to have. From about 1900 the welfare of indigenous people had become linked to economic interests (of missions and administration) and expressed as ‘civilising industry.’ This idea held that indigenous people could derive the benefit of civilising industry through their own experience of labour and by observing the examples provided by Europeans.

The question of foreign governance of the region was never far from the Australian papers during this period and was of concern to the LMS missionaries. The early LMS missionaries were opposed to any white settlement of Papua. Although he realised that there was nothing he could do to prevent it, James Chalmers objected on the grounds that it would bring anti-Christian forces to work upon the Papuans (Wetherell 1977:12). He offered a slightly different view in 1881 arguing that any attempt to remove Papuans from their lands to work on plantations elsewhere would fail, as they would never condescend to work for others. He thought this seemed reasonable as ‘[w]e cannot give them anything’ (Wetherell 1977: 12, fn 13). In 1883 he appealed to the British government to preserve the inalienability of Papuans from their lands (ibid.).

While Chalmers sought to make Papua economically unattractive to settlers, William Lawes hinted at the dangers they would face. In 1883 he warned Australians that the skulls of the Chinese traders murdered five years earlier still decorated a men’s house at
Aroma (Wetherell 1977: 12, fn 14). Lawes shared his real convictions in a letter to James Chalmers (1883) in which he expressed dismay at the Queensland ‘annexation’. Lawes preferred that no colonial power should annex New Guinea, unless there was a probability that it be placed under British Rule as a Crown Colony and not as an appendage to Queensland. He feared for the well-being of the Papuans as ‘nowhere in the world have aborigines been so basely and cruelly treated as in Queensland – the half has never been told – and are the natives of New Guinea to be handed over to the tender mercies of the men who have done these deeds’ (Jinks et al. 1973:33).

The annexation by Queensland was disallowed by the Imperial government. In response, the Colonial Agents General for New South Wales, New Zealand, Queensland, and Victoria presented their reasons for wanting Britain to extend its claims in the Pacific to the Secretary of State for the colonies. One reason they cited echoed Lawes’ concerns for the well-being of the indigenous population but, in contrast to Lawes, they asserted that the potential danger would arise if the island were not colonised ‘under proper authority’ and the influx of opportunists remained unregulated.

who will neither show regard for the native inhabitants, nor be under any restraint among themselves; the evils and dangers which existed in Fiji will repeat themselves...and Queensland...will suffer from them the most (Victorian Parliamentary Papers, ‘Annexation of Islands in the Pacific,’ Melbourne, 1883, p.14. quoted in Jinks et al. 1973:35).

Jinks et al. (1973:37) noted that the statement given in November 1885 by Commodore James Elphinstone Erskine’s onboard the HMS Nelson has frequently been quoted as an expression of the basic British policy in New Guinea. Erskine’s audience consisted of the group of assembled chiefs that had been gathered to witness the official ceremony that would take place the next day. The intention of his speech, which was translated into Motu by Lawes, was to attempt to explain the meaning of the proclamation that they would hear on the following morning. Charles Lyne, the Sydney Morning Herald journalist who reported on the event, recounted Lawes’ speech.

In it he tells them that they will fall under the protection of Her Majesty’s Government and that this will mean that ‘evil-disposed men will not be able to occupy your country, to seize your lands, or to take you away from your homes’. He
said that the Queen, through her officers, would deliver justice. Her officers would reside among them, hear their complaints, deliver justice and would not permit those who harmed them to remain in New Guinea. He concluded the speech with the warning that on no account must they (Papuans) inflict punishment upon any white person. They must make their complaints to Her officers who will inquire into the matters brought to them (Lyne 1885 in Jinks et al. 1973:38).

From the start the idea of protection was linked with the inalienability of land and the defence of indigenous persons from unsanctioned interference. From the government perspective protection was offered, but in return it required the indigenous people to accept their authority. After the declaration of a Protectorate, Commodore Erskine made regulations to protect indigenous interests. These banned the sale of liquor, firearms and explosives (Oram 1976:21). In addition employers were required to obtain permits if they wished to move indigenous workers from their home areas, and the coast was closed to ships without permits in order to control European immigration (Oram 1976:22).

It was William MacGregor’s view that British New Guinea provided the last opportunity for the British people to show the world that they could govern a subject people humanely (Wetherell 1977:24, fn 60). Within a few months of his arrival in September 1888, MacGregor brought in three ordinances to protect the indigenous population from things that had been problematic for the subject peoples of other colonies (Lewis 1996:20). The first prohibited any dealings with indigenous people that involved firearms, opium and alcohol. The second ordinance acknowledged Papuan peoples’ ownership of all lands and stated that only the Crown had the power to make land deals with the original owners. The third closed the country to recruitment for labour abroad (Lewis 1996:20).

A few years after Papuan ownership of land was acknowledged, other ordinances were brought in that emphasised the authority of the administration. In 1890 a land ordinance, the third, was passed that provided a framework for the extensive acquisition and alienation of Crown grants (Lewis 1996:21). Part of the ordinance gave the Administrator the power to declare areas unclaimed and unoccupied by Papuans to be ‘waste and vacant’ and at the disposal of the Crown (Lewis 1996:21). In 1894 a regulation was introduced that empowered magistrates to compel people to grow coconuts (Oram 1976:29). MacGregor’s intention was to prompt Papuans into the production of cash crops, for ‘if they cannot greatly increase present exports and create new ones, they
cannot exist long as a race’ (MacGregor 1893 in Lewis 1996:23). Consequently, the Native Plantation Ordinance was passed in 1918. It empowered the Lieutenant-Governor to establish plantations of Crown or customary land, with the profits to be shared between the growers and the administration. These plantations were developed in a number of areas after 1920. They were not very successful, however, and by 1941 the amount of cash crops grown by Papuans was still small (Oram 1976:29).

In 1892 a comprehensive labour ordinance was introduced. It permitted the casual employment of Papuans within 25 miles of their villages for periods of up to month as well as contracts of service for periods of up to one year and allowed the movement of Papuans from one division to another (Lewis 1996:45). Numerous labour ordinances were to follow but the indentured labour system would remain in place until 1941 (Lewis 1996:50). An expansion of European agriculture caused the number of Papuans employed as indentured labourers to increase after 1906. They increased from 2000 in 1907 to 8000 in 1911 and from 12000 in 1918 to more than 17000 in 1940 (Oram 1976: 28). There was a considerable turnover of people because of limitations placed of the number of years for which a man could be engaged. By 1941 a large number of Papuans had begun to participate in the monetary sector of the economy (Oram 1976:29).

In 1950 local government councils were established. The Councils were intended to solve the problem posed by the absence of suitable indigenous authorities in the Territory and to serve as institutions suited to the needs of Papuan society in a period of change. In determining the constitution and membership of a Council, the Administrator should have regard to relevant native custom in the area within which it is to have authority. In addition to the powers conferred by the Ordinance, they could exercise powers that native customs might confer upon them, as long as they did not conflict with the laws of the Territory. The Councils had the power to make rules with regard to matters of ‘peace, order and welfare.’ Village constables in Council areas were to become Council constables (Jinks et al. 1973:343-4).

From 1957 Papuans and New Guineans were allowed to join the Australian government civil service (Turner 2001:xxv). The pace of change picked up in the 1960s. In 1960 there were 4000 people in the public service and this expanded to 20000 by the end of the decade. Two-thirds of these were Papua New Guineans; the one-third of expatriates occupied the middle and upper posts (Turner 1990:12).
MacGregor began his administration without armed support, but soon perceived the need for it if he was to successfully exercise power on behalf of the British Empire. While persuasion and pacification were preferred, force was also used to subdue the population. The Armed Native Constabulary (ANC) that was established in 1890 facilitated this task. In 1890 the British administration in Fiji provided MacGregor with Fijian Native Constabulary Officers and Solomon Islands policemen. They were gradually replaced by local recruits, and by 1898 the force of 110 men consisted entirely of Papuans (Jinks et al. 1973:60). The ANC played an important role in establishing British control over Papua. Detachments were sent to each government station and MacGregor sometimes employed them on punitive expeditions against groups that had killed Europeans or taken part in tribal fighting (Turner 2001:208). MacGregor became a great admirer of the ANC and in a paper published by the Royal Colonial Institute he made the claim that on the many occasions in which the constabulary had to fight their countrymen, though heavily outnumbered, they never ‘met with a reverse’ and states plainly that the use of force was integral to administration.

the administration has practically had to subdue by force almost every district now under control. This has chiefly been done through the constabulary (MacGregor quoted in Jinks et al. 1973:61).

In addition to the ANC, a separate system of Village Constables was set up in 1892 to take care of everyday law and order in the villages. MacGregor’s idea was to create a force of unarmed rural policemen to deal with issues in their own villages. He believed that a village resident would be better placed to deal with matters such as petty theft (Jinks et al. 1973:61). Macgregor estimated that in 1894-95 approximated 80 men were already on duty and their future cost to the Government, consisting of: two suits of uniform and one pound of money would be at about 35 shillings a year (Jinks et al. 1973:61). While they received no real power, they were expected to act as intermediaries between patrolling government officers and villagers (Turner 1990:6).

The ANC continued to have an important role after the British Protectorate passed to Australian control. Under Lieutenant-Governor Hubert Murray, from 1906 until 1940,
constables accompanied European officers sent out on patrols to extend administrative control and learn more about the country. Often these patrols were the first official contact that villagers had with the administration (Turner 2001:209).

Central Province on the World Stage

Through their experiences during the Second World War, residents of Central Province were forcibly drawn into a world outside of Papua. Australian military authorities established the Australian New Guinea Administrative Unit (ANGAU) in 1942 to administer areas not under Japanese military occupation. ANGAU conscripted Papua New Guineans and set them to work for the Allied troops as carriers and stretcher bearers or as labourers on roads, airstrips, wharves and plantations (Turner 2001:16). Forward movements of infantry were often accompanied by ANGAU units comprised of European and Papua New Guinean men with local knowledge. In reconquered regions ANGAU moved to restore administrative services. In many places food gardens had been damaged by Japanese and Allied actions. Many people had been killed or wounded by the armaments of both sides and difficult conditions meant that epidemics broke out in some areas. This made the provision of medical supplies, hospitals and food to Papua New Guineans an urgent task undertaken by ANGAU in these areas (Turner 2001:16).

In Port Moresby an unpleasant picture emerged of Allied troops looting the capital after it had been bombed by the Japanese. George Johnston, a war correspondent writing in 1943, described destroyed and damaged buildings, and expressed surprise that the destruction was not more complete. He observed that the consensus of opinion was that the town would in time be wiped out and had consequently been abandoned. He wrote that the town proper was generally referred to as ‘Bomb Decoy No.1’ and while there was activity by day, at night it was quiet. The other effect of the war was to make Port Moresby the capital it is today the through installation of water, electricity and other elements of infrastructure.

The impact of the war was felt to differing degrees around Papua New Guinea. Some places were the scene of intense fighting, while in other areas gardens and livestock were destroyed or commandeered by military forces. People died of hunger and from the accidental and deliberate actions of the military. People outside the fighting areas were pressed into service as plantation and manual labourers and as carriers. Of 55000 Papuans and New Guineas officially employed by the Allied army, almost 2000 died of causes
other than war injuries. Seven thousand Papua New Guineas enlisted or were otherwise involved in Allied military operations and a further thousand worked as orderlies. The statistics for those used by the Japanese are unknown (Turner 1990:10).

The wartime experience meant that Papua New Guineans gained a broader global perspective of the diversity and size of the rest of the world as well as the material goods available. There has been little investigation of the war’s effects, visible and hidden, on Papua New Guineans. Jinks et al. (1973:330) suggest a two-fold explanation for this dearth. Firstly, the pressure under which the Provisional Administration was working was not conducive to pursuing additional research and secondly, the relative ease with which order was restored in New Guinea did not bring the need for it to prominence. One of several anthropologists engaged in wartime activity, William E.H. Stanner, pointed out the difficulty of calculating more obvious damage let alone the hidden costs of the conflict as there had been widespread but unknown loss of life and sickness, the extensive destruction of gardens, villages, crops, livestock, canoes, trees, and other resources, together with the dislocation of populations by labour-recruiting (Jinks et al. 1973:330).

Stanner admitted that the ‘invisible’ effects on people could only be surmised, although clearly psychological trauma must have been widespread and severe for many people. He shared his observation that all early reports from field-officers (presumably from New Guinea) agreed on certain things.

“The natives’ ‘realized’ experience had grown; there seemed to have been significant changes of outlook and behaviour in many areas; where the fighting had been heaviest and native losses greatest the simple acceptance of European authority and prestige seemed to be no longer assured; here and there hostility towards Europeans was marked; racial awareness and a sense of cultural inferiority seemed sharper; more natives were capable of verbalizing their hopes and dissatisfactions than before.” (Stanner quoted in Jinks et al. 1973:330).

The war had greatly shaken Papua and New Guinea. Its passing changed the way that people viewed themselves, as much as it opened a window onto the wider world. Stanner’s observations give the impression that people had revealed to him the fallibility of authorities, both in their duties to protect and their capacity to do harm. The conflict consumed large areas of the land and the scale of events as well as the numbers of men and machines mobilised was far outside the prior experience of Papua New Guineans.
Perhaps the sense of ‘inferiority’ noted above relates to the experience of powerlessness in the face of such massive forces. The exposure of Papua New Guineans to a broader world context must have had very mixed effects, varying from individual to individual.

Meanwhile in Australia public knowledge about the territories had grown. Newsreels had featured the bravery of the ‘fuzzy wuzzy angels’ helping wounded Australians. The debt of gratitude ensured that the territories would receive a better post-war deal than what had gone before (Turner 1990:11). Gratitude aside, the wartime experience of the Japanese attacks had made Australians uncomfortably aware of their proximity to Asia and to possible future threats, so remaining engaged with Papua and New Guinea was also wise policy (Jinks et al. 1973:318).

**Social Change and Museum Collections**

The long history of interaction between Papuans and outsiders that I have summarised here should have affected the social relations that are preserved in museum collections. While Foucault’s ideas sit well with the written history of Papua, to what extent is this still true when an analysis of objects is taken into account? The particular quality of skirts, a personal and intimate object, enables us to look at the Papuan actors who are seldom mentioned in this history to see how the larger aspects of colonial change were enacted upon them. By realising material culture is an aspect of practice, and by observing changes in the material object, it should be possible to obtain a Papuan record of this history. As I will show, it is the Papuans’ negotiations with the colonial entity that is encompassed in the materiality of the collections. My analysis begins in the next chapter with a discussion of my methodology and the nature of the museum collections that I use to uncover the ways Papuans negotiated their way through history and contributed to the construction of a unique colonial society along the lines described by Gosden and Knowles (2001).
Chapter 4

DOCUMENTING THE COLLECTIONS

Figure 4.1 Nypa fibre skirt, MAC6010, Queensland Museum. Photo: Erna Lilje.
Producing Social Relations

My research goal is to understand changes in social connections in Central Province, Papua New Guinea and, particularly surrounding the way women’s fibre skirts were made, in pre-colonial and colonial Papua New Guinea. This required the development of methods to exploit the information embedded in ethnographic museum collections. As a first step, I selected one kind of object, fibre skirts, as the focus of this study. As I will demonstrate in this dissertation, this much neglected artefact type is the consequence of material links among the people who produced, wore, and exchanged them. As artefacts within museum collections, they can be viewed as the tangible product of multiple social relations, from the moment of their production to the museum shelf. Consequently, by studying historic fibre skirts, it is possible to reconstruct past social relationships.

As discussed in Chapter 2, my skirt study has been shaped by the conceptual framework of chaîne opératoire. Research using this approach sets out to describe and identify the material sequences of gestural acts through which resources are transformed into culturally useful objects (Dobres 1999:129). In my study of fibre skirts the significance of these tangible remains of the past, in terms of their links to dynamic social milieu, can only be grasped by first understanding the material sequences of gestural acts needed for their production. The maker must take decisions (Figure 2.3) and be knowledgeable about the processes required to first prepare the materials and, second, to construct the skirt. As I will show in the thesis, an understanding of the steps in production helps reveal the social relations that existed among indigenous parties.

Skirt production created social relations between producers with members of their own community and between producers and indigenous peoples from other communities through long-established networks of exchange. This means that a maker’s motivations for producing a skirt and the manner of its exchange need not be interpreted as primarily, if at all, resulting from the operation of demands from Westerners. The existence of collections is evidence of the social connections that existed between Papuan and non-Papuan peoples. At the most basic level the movement of artefacts from Central Province and into museums overseas materially illuminates the social links that existed at that time. A more nuanced understanding may be reached through an examination of the specific material content of these social links. To reconstruct the many social relations that resulted from the production and exchange of fibre skirts, I studied fibre skirts from Central Province, Papua New Guinea held in collections from a number of museums.
located in Australia, England, Italy and Papua New Guinea.

I used three parallel methodologies to approach the study of fibre skirts: library research; ethnographic fieldwork; and artefact analysis. Skirts in museum collections provided my main source of data, but I needed information about skirt-making and wearing in order to interpret the material traces of the artefacts from the perspective of indigenous social relations. My search for supporting information was guided by the considerations of which a skirt maker might take account when producing a skirt (see Figure 2.3). In the first place it was important to understand variations in the social contexts in which skirts were worn, in terms of variations between different social/language groups across the region of Central Province and also changes in the skirts worn depending on the local social context, such as variability among females of different ages and statuses, as well as functional differences (daily wear, garden, ceremonial). I achieved this by collecting additional data from written sources (historic documents, ethnographies, and archival materials) and from historical photos. I also obtained information, from people who are experts in making fibre skirts in Central Province today. My interviews were directed toward understanding and documenting production processes, an aspect of fibre skirts absent in written sources. Finally, I applied my understandings from library and ethnographic research to the interpretation of museum collections. The three approaches of library research, ethnographic fieldwork and artefact analysis worked to inform each other.

The aim of this chapter is to describe my methodology. I begin by introducing the principal museum collections. Building from the contextual history presented in the previous chapter, it is important to begin with a summary of historical background information on the museums themselves and the particular collections that I chose for analysis. Having situated the collections in time and space, I then describe the recording methods that I used at the various museums I visited. The analyses of these data will be presented in Chapter 6. I conclude this chapter by introducing the fieldwork that is discussed in more length in Chapter 5 with an emphasis on the informants who taught me about skirt production and use.

**Introducing the Museums**

Vital to my study of fibre skirts was the selection of which museum collections were most appropriate for analysis. I wanted a sample that represented, as fully as possible,
Central Province material in collections from the earliest period of European and Papua New Guinean engagements until independence in 1975. I began by selecting museums with relationships to ethnographers, explorers, government officers and traders dominant in the colonial history of the region. There are many more skirts to study than included in this study, but the number and choice of museums that I could include was constrained by the financial resources available to me. In addition, my ideal sample required generally good temporal provenance and, if possible, a geographical location or cultural group affiliation. As shown in Table 4.1, the Australian, British and Queensland Museums hold large collections of material from Central Province and cover the historic period from early contact up to PNG Independence. These were obvious first places to begin my research.

**Table 4.1 Major museum collections from Central Province**

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As summarised in Chapter 3, Britain was heavily engaged in early exploration of the region and eventually took it as a colony. Australia also has had a long history of colonial involvement and engagement with Papua New Guinea through explorers, business opportunities and through administration of the territory. This history therefore made Australia and Britain obvious places to look for collections of Central Province material. I began with the Australian Museum which has a relatively well provenanced and large sample of PNG artefacts, but it is limited in temporal terms because its collections were destroyed by fire in 1882 (Proudfoot et al. 2000). Although the relevant collections of the Macleay Museum at the University of Sydney comprise a small sample, they were included because they represent some of the earliest surviving material from Central Province in Australia.

Queensland had also been a significant part of the Australian history of engagement with Papua New Guinea. The Queensland Museum collection has a large, relatively well
provenanced collection and was therefore included in the study. As shown in Table 4.1, the Australian and Queensland Museum samples share a similar profile, with the amount of material entering their respective collections reaching a peak in the 1880s.

Due to British involvement in coastal surveys, expeditions and governance of the Central Province region, a variety of collections of Central Province material found its way to museums in the home country. The British Museum holds the earliest material from the voyage of the *Rattlesnake* in 1846 to 1850 (MacGillivray 1852; Philp 2009; 2013). The collection also helps to strengthen the sample for the period 1910 to 1920. Also in Britain, the Cambridge University Museum of Archaeology and Anthropology holds material collected by Alfred Haddon and by members of the 1898 Anthropological Expedition to the Torres Straits that also contributes to the sample (Haddon 1901:235-277). Finally, I included material collected by Luigi D’Albertis, one of the early explorers and traders in Central Province (D’Albertis 1881) from the national Italian collection at The Pigorini Museum, Rome.

British Museum

In a Presidential Address to The Royal Anthropological Institute of Great Britain and Ireland in 1938, H. J. Braunholtz attributed the inclusion of ethnography in the British Museum (BM) as having its nucleus in the collection of Sir Hans Sloane. The bequest of Sloane’s collection to the nation, upon the payment of £20 000 to his family, led to the inception of the Museum in 1753 (Braunholtz 1938:3). Although the term ‘ethnography’ was not yet in use, the collection included Native American material from the 17th and 18th centuries. Collections made during South Pacific voyages were added later, amongst which were items collected during the three voyages of Captain Cook (1771, 1775, 1780) (Braunholtz 1938:4). By the middle of the 19th century, the British Museum’s ethnographic collections had grown and encompassed material from numerous ‘first contact’ encounters. The collections still fell within the Antiquities Department, but in 1845 a large gallery ‘was opened to the public for the reception of the ethnographical collections’ which had been arranged in new cases (Annual Return for 1845 in Braunholtz 1938:5).

Since its inception, the British Museum has received material from official or nationally sanctioned sources into the ethnographic collections. The British Museum Melanesian collection comprises approximately 19,400 objects: of these about 11,600 are
from Papua New Guinea (Bolton 2005:2). Most of the material from Oceania held by the museum was collected very early in relation to samples from this part of the world held in other museums. Amongst the earliest Melanesian collections are objects that were acquired on the 1846-50 *HMS Rattlesnake* expedition, some forty-six of which are from Redscar Bay, in Central Province (Philp 2009; 2013). Examples relating to Papua New Guinea chosen for this study reflect acquisition sources common for ethnography, such as the collections made by administrators and officials in the colonial services (Sir William MacGregor); navigators in the naval service (Captain Owen Stanley; Captain John Moresby); anthropologists (Alfred Haddon; Charles Seligman; Bronislaw Malinowski); and Anglican missionaries (James Chalmers, Samuel MacFarlane) (see also Braunholtz 1938:8-9). The sources reflect the history of British endeavours in exploration and colonisation during the late eighteenth and nineteenth centuries.

**Australian Museum**

In 1827 the Colonial Office granted New South Wales Governor Darling the sum of £200 per annum for the formation of a public museum in New South Wales (Docker 2007:4). The new institution, called the Australian Museum although only representing one portion of the modern day country, was oriented toward ‘collecting and preserving.’ Collecting was often perilous and difficult in this period and the founding chairman and first curator, Alexander Macleay and George Bennett respectively, employed a succession of collectors to gather natural history material for the Australian Museum (Specht 1979:141-2). Important explorations also resulted in significant additions to the collections (Docker 2007:5, Sydney Morning Herald 12 August 1864). The daily newspapers published monthly lists of donations to the Australian Museum (for example Sydney Morning Herald 17 December 1853), these occasionally included illustrations of some of the more curious items, such as a live hermaphrodite goat and a radish grown into the shape of a hand (Docker 2007:5). In the 1860s, under the curatorship of Gerard Krefft, the Australian Museum began to be recognised as a truly ‘scientific’ establishment. Material was also acquired through purchase and exchanges with international institutions and international exhibitions (Docker 2007:5).

Tragically in 1882, it is estimated that the Australian Museum lost 2,000 objects that were on display in the Ethnographic Court at the Sydney International Exhibition 1879 (Strahan 1977:39). The exhibition was housed in The Garden Palace, a large purpose-
built exhibition building. The timber construction assured its complete destruction by the six hour fire that engulfed it on the early morning of September 22, 1882. Only five of the 300 Central Province items accessioned into the Australian Museum between 1877 and 1882 have survived.

In devastating the collections, the fire wiped the slate clean. In the twenty years following the Garden Palace fire, the curator Edward Ramsay actively sought new ethnographic specimens to rebuild and expand the collection and within five years had amassed an impressive ethnological collection of 7500 objects, principally from the Melanesian region (Strahan 1977:39; Specht 1977:142). At the time the theoretical concern driving museum acquisition were those of social evolution. Many perceived that colonialism rendered whole civilizations and societies culturally destitute (for example the Caribs of Spanish colonisation of the Lesser Antillies, Tasmanian Aboriginal peoples). ‘Salvage’ anthropology, as it became known, was concerned with documenting a region’s culture before the effects of colonisation took hold (Gruber 1970:1292). In museum contexts this had two outcomes, the acquisition of all cultural material that may be vulnerable to the effects of colonial expansion and an effort to collect objects that didn’t exhibit the ‘taint’ of contact (see Herle 1998; Stocking 1985). From this perspective the relatively unknown areas of Central Province and elsewhere provided fertile ground for collecting.

Sydney was a major port of call between the Pacific region and Europe. In its attempts to regain strength in its ethnographic collections, the Australian Museum traded in artefacts and specimens, by purchase or donation, with traders, ship captains, colonial officials, merchants, and missionaries. It also participated by actively funding expeditions (Philp 2007), in an active exchange program with other museums as well as field trips and expeditions (Specht 1977). By 1889 of the 7000 new objects acquired, 613 were from the Central Province area.

Queensland Museum

The area today known as Queensland separated from the colony of New South Wales in 1859. Within three years this new colony had a museum under direction of the Queensland Philosophical Society. While the Colonial Government took over responsibility for the museum in the 1860s, it was not until 1879 that a permanent, purpose-built building was allocated in William Street to house and display the
collections. By 1898 another move came and the Queensland Museum re-opened in the former 1897 International Exhibition building. Just two years later the British press lampooned the colony for using such inadequate and dangerous buildings for a public museum (Mather 1986:28). Despite practical difficulties the museum resided there for much of the following century until, in 1984, the museum moved once again to its present location on the South Bank.

Throughout its history Queensland Museum took in a variety of material for its collections, although the core collections have always been those of natural history, (including zoology, geology and, originally, botany). Technology collections were added from 1873. By 1876 alongside natural history departments, the collections were described as ‘curios, machinery, weapons and furniture’ (Quinnell 1986:222). It is telling that one of the first records of anthropological material is in 1874 when a stone adze is registered from New Guinea (Quinnell 1986:200). As noted by former curator, Michael Quinnell, even at this early date a greater proportion of the collection was drawn from peoples of the Pacific rather than Australian mainland. At first much material was acquired from people linked to the trade in Pacific labour (‘blackbirding’), but it was the establishment of the Protectorate of British New Guinea in 1884 that had the most fundamental impact, intimately linking Queensland Museum with formal collecting in Papua for years to come.

Macleay Museum

It is not recorded when the first ethnographic specimens entered the Macleay Museum’s (MM) collections, but it is thought that most ethnographic material came in as an adjunct to natural history collections. The museum was founded from three generations of the Macleay family, beginning with that of the Colonial Secretary to NSW, Alexander Macleay. The material relevant to my study date from the time of his nephew William John Macleay and the Chevert expedition he led to New Guinea in 1875. Although his own interests lay in the direction of the zoological specimens, he acquired numerous ethnographic objects from Australia and the south east coast of New Guinea during this time (Bushell 1988:134). Macleay’s short stay in the region anchored off Yule Island in Hood Bay. From this expedition 83 items were acquired by the Macleay museum.
When the Macleay family museum was donated to the University of Sydney in the 1880s, the nature of the collections changed to reflect the work of the University’s staff. While additional collections from Central Province were acquired, such as Robert Mitton’s 1970s collections, fibre skirts were not among these.

Cambridge University Museum of Archaeology and Anthropology

The Cambridge University Museum of Archaeology and Anthropology (CUMAA) was established in 1884, as the University's Museum of General and Local Archaeology. Founding collections included local archaeological collections which had been accumulated since 1839 by the Cambridge Antiquarian Society together with Polynesian material donated by Alfred Maudsley and Sir Arthur Gordon, who had recently returned from colonial posts in Fiji. After his appointment as the museums’ first Curator, Baron Anatole von Hügel added his own collection of ethnographic artefacts from the South Pacific (Thomas 2011:7). Following these foundation collections, a large proportion of ethnographic collections were drawn from fieldwork with small-scale agriculturalist and maritime populations (Thomas 2011:9). The most famous and relevant of these is material acquired through the Cambridge Anthropological Expedition to the Torres Strait in 1898 (Haddon 1901). The Expedition laid the foundations in the UK and colonies for the development of anthropology as a modern, field-based discipline, and contributed many artefacts and photographs from Central Province to the museum. The leader of the expedition, Alfred C. Haddon, played an active role in the running of the Museum and the development of anthropological teaching in the university (Urry 1972, Stocking 1983, Herle 1998; Byrne 2011). When von Hügel became ill, Haddon acted as his deputy until a new curator was appointed in 1922. Subsequent ethnographic collections from Central Province included those of Charles Seligman. Material was also drawn from colonial government sources such as William MacGregor and Patrol Officer, Ivan Champion (CUMAA database).

The Italian Museums and Collections

Luigi D’Albertis travelled as a naturalist in New Guinea, first accompanying Odoardo Baccarri in his exploration of Dutch New Guinea in 1872 and returning in 1875 to live at Yule Island for over nine months. He then explored the Fly River to the west,
returning there in 1876. As he writes in one account much of his material from Yule Island was lost at sea (1879:12). The remaining collection is distributed among three Italian Museums: Castello D’Albertis (Genoa); Museum Nazionale (Florence); and The Pigorini (Florence). According to one historian of anthropology, D’Albertis was one of the pioneers of ethnographic fieldwork in Italy.

these self-taught, militant ethnographers reflect the mentality of their generation, and their work is therefore meaningful for our present purpose. Their recording of cultural data is generally idiosyncratic; it hardly ever occurs to them that exotic societies may be studied as functioning organisms in a dynamic context. On the other hand, they are often keen in noticing cultural parallels, suggesting ethnic affinities and classifications, and tracing racial and linguistic frontiers. With few exceptions, their outlook and interests are mainly geographical and naturalistic. (Grottanelli 1977:545).

The Museo delle Culture del Mondo Castello D’Albertis in Genoa is a museum founded in the grand house built by Luigi’s cousin Enrico. It has only a few items from Central Province and no skirts and so was not used for this study. It was valuable for understanding the kinds of collections that were maintained within the family and those considered of ‘scientific’ or ‘ethnographic’ significance. The Museo Nazionale di Antropologia e Etnologia in Florence was an official sponsor for D’Albertis’ trip and it holds a significant collection not only from D’Albertis but also made by Beccari. Unfortunately it was not possible to meet formally with the curator and see the material in stores, or take measurements of those skirts on display, so this collection has been left out of this study, although I did take photographs. The Museo Nazionale Preistorico Etnografico, known also as The Pigorini, has a relatively large collection of Central Province material, all of which is derived from D’Albertis’ 1875 visit. This material was purchased from D’Albertis by the former curator to the Florence Museum, Ernesto Giglioli, who had a large private collection. This private material of Giglioli was given to the nation of Italy and forms the basis of the Pigorini collection. This useful collection has good provenance and information attached to each item.
In 1954 Papua and New Guinea’s Legislative Assembly passed an ordinance which led to the establishment of the National Museum and Art Gallery in 1959. Ten years later Lepani Watson, Michael Somare and Geoffrey Mosuwdoga were appointed to leading positions in the Museum’s administration, roles they would maintain when the colony gained independence (Trustees of the National Museum 1980). Before the establishment of the National Museum discussions began over the long-term future of the Official Collections of Papua, then housed principally in Queensland Museum. Successful negotiations allowed for a considerable proportion of the collection to go to the National Museum, including a large number of skirts (Quinnell 2000). Difficulties in the governance of the Museum during part of my study made access to the collections problematic.

**Situating the Collections**

One of the long lasting outcomes of the engagements that occurred between Papuan and non-Papuan people during the nineteenth and twentieth century has been the creation of museum collections. The artefacts were acquired by a range of individuals, including explorers, missionaries, traders, miners, and government administrators (Specht 1977). In their study of the Australian Museum’s Central Province holdings, Clarke and Torrence (2011) took the position, established in earlier research, that since relationships between Papuans and non-Papuans were often brokered through exchange, the objects involved can be used to shed light on the character of these relationships. Using the archaeological concept of assemblages, Clarke and Torrence (2011) discerned changes in collections in terms of three temporal phases of social relationships: 1875-1885; 1886-1900; 1901-1925. Their first phase (1875-1885) is characterised by the extension of traditional exchange networks to incorporate non-Papuan people and the barter of weapons and tools. In the second phase (1886-1900) the increase in exchange of personal ornaments represents indicates the creation of more lasting relationships and the reduction of social distance (Clarke and Torrence 2011:438). In the third phase (1901-1925) colonial culture became more formalised and sees the production and exchange of items aimed at facilitating interactions between Papuans and foreigners.
In Table 4.2 the collections analysed for this thesis are summarised according to the chronological periods suggested by Clarke and Torrence. The data is organised by collector, total number of objects, museum collection and the number of skirts in the catalogue as well as the number of skirts analysed. One of the limitations of the study has been the issue of objects recorded in registers but missing from current collections. In Table 4.2 this is clearly indicated in the last two columns where the differences between numbers of skirts registered and the number analysed is documented. An example here is the Mason Brothers collection for the period 1871-1885 where the Australian Museum records indicate a much larger number of fibre skirts were acquired than were available for analysis. However, despite this limitation, I was able to examine and analyse in detail 136 skirts in this time period. One of the interesting observations from the museum data is the number of people who made collections in Central Province but did not collect skirts. These are collated in Table 4.3. These collectors include people who worked and lived in Central Province for a long period, such as the missionary Samuel MacFarlane, the trader Theodore Bevan, the colonial administrator John Hubert Plunkett Murray, the collector Roland V. Oldham. They would have all observed women wearing a variety of forms of fibre skirts and possibly also observed skirts being made, yet choose not to collect these. This may reflect their particular collecting interests or, perhaps, the nature of their social relations with the local population. In the following section I turn to a discussion of the specific chronological contexts for the collections that I studied.

Table 4.2  Major collectors of Central Province fibre skirts (AM, QM, BM).

<table>
<thead>
<tr>
<th>Collector</th>
<th>CP objects</th>
<th>Museum</th>
<th>Skirts accessioned</th>
<th>Skirts analysed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1849</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stanley (HMS I)</td>
<td>46</td>
<td>BM</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Sub-total</td>
<td></td>
<td></td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>1 1871-1885</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chevert Expedition</td>
<td>51</td>
<td>MM</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Colonial and Indian</td>
<td>24</td>
<td>AM</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Exhib. 1886</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D’Albertis, L.M.</td>
<td>102</td>
<td>PM</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Gill, W.W.</td>
<td>9</td>
<td>BM</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Goldie, A.</td>
<td>245</td>
<td>AM; QM</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Liljeblad, H.F.</td>
<td>74</td>
<td>AM</td>
<td>23</td>
<td>5</td>
</tr>
<tr>
<td>Mason Bros</td>
<td>376</td>
<td>AM</td>
<td>76</td>
<td>49</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td>7</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td><strong>122</strong></td>
<td><strong>68</strong></td>
<td></td>
</tr>
<tr>
<td><strong>II 1886-1900</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gill, W.W. (AM twice)</td>
<td>49</td>
<td>AM; BM</td>
<td>AM 11</td>
<td>7</td>
</tr>
<tr>
<td>Lawes, W.G. (AM twice)</td>
<td>77</td>
<td>AM; CM</td>
<td>AM 7</td>
<td>7</td>
</tr>
<tr>
<td>Liljeblad, H.F.</td>
<td>83</td>
<td>AM</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>MacGregor Official (QM)</td>
<td>392</td>
<td>QM</td>
<td>35</td>
<td>27</td>
</tr>
<tr>
<td>MacGregor via QM</td>
<td>92</td>
<td>AM; BM</td>
<td>AM 7</td>
<td>0</td>
</tr>
<tr>
<td>Torres Strait Expedition</td>
<td></td>
<td>CM</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Others</td>
<td>4</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td><strong>74</strong></td>
<td><strong>51</strong></td>
<td></td>
</tr>
<tr>
<td><strong>III 1901-1915</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooke Daniels</td>
<td>173</td>
<td>BM; AM</td>
<td>BM 4</td>
<td>2</td>
</tr>
<tr>
<td>Ethnographic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cox, A.B.</td>
<td>10</td>
<td>AM</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Grant, J.</td>
<td>35</td>
<td>AM</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Williamson, W.W.</td>
<td>159</td>
<td>BM</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Others</td>
<td>2</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td><strong>21</strong></td>
<td><strong>16</strong></td>
<td></td>
</tr>
<tr>
<td><strong>IV 1916-1930</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allom, E.M.</td>
<td>2</td>
<td>AM</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Mead, R. and Kinghorn, J.R.</td>
<td>3</td>
<td>AM</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>M. of Applied Arts and Sciences</td>
<td>3</td>
<td>AM</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Rabbitts, E.M.</td>
<td>2</td>
<td>AM</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sherman, L.</td>
<td>1</td>
<td>AM</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Steele, S.A. and W.H.</td>
<td>21</td>
<td>AM</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Stewart, A.A.</td>
<td>5</td>
<td>AM</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td><strong>8</strong></td>
<td><strong>7</strong></td>
<td></td>
</tr>
<tr>
<td><strong>V 1931-1945</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Page, F.</td>
<td>1</td>
<td>AM</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Clausen, P.</td>
<td>6</td>
<td>QM</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>L'Estrange, M.E.</td>
<td>1</td>
<td>QM</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td><strong>6</strong></td>
<td><strong>5</strong></td>
<td></td>
</tr>
<tr>
<td><strong>VI 1946-1960</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anders, O.</td>
<td>3</td>
<td>QM</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Murray, P.D.F.</td>
<td>3</td>
<td>AM</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Schellenberger, F.</td>
<td>3</td>
<td>QM</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Scott, J.</td>
<td>1</td>
<td>BM</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>White, M.T.</td>
<td>1</td>
<td>AM</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
<td>BM</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td><strong>10</strong></td>
<td><strong>8</strong></td>
<td></td>
</tr>
<tr>
<td><strong>VII 1961-1975</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Bucknell, A.G. 15 QM 1 1
Hobba, E. and A. 7 QM 3 3
Richards, C.P. 2 AM 1 1
Schellenberger, F. 1 QM 1 1
Others 1 AM 1 0

Sub-total 7 6

Total 250 162

Table 4.3 Central Province collectors that did not acquire fibre skirts.

<table>
<thead>
<tr>
<th>Collector (non-skirt)</th>
<th>CP objects</th>
<th>Museum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I 1871-1885</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dawe, G.W.</td>
<td>38</td>
<td>AM</td>
</tr>
<tr>
<td>MacFarlane, S.</td>
<td>11</td>
<td>BM</td>
</tr>
<tr>
<td>Phillips, H.</td>
<td>53</td>
<td>AM</td>
</tr>
<tr>
<td><strong>II 1886-1900</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bevan, T.</td>
<td>25</td>
<td>AM</td>
</tr>
<tr>
<td>MacFarlane, S.</td>
<td>1</td>
<td>BM</td>
</tr>
<tr>
<td><strong>III 1901-1915</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>IV 1916-1930</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McCulloch, A.R.</td>
<td>24</td>
<td>AM</td>
</tr>
<tr>
<td><strong>V 1931-1945</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Murray, J.H.P.</td>
<td>12</td>
<td>AM</td>
</tr>
<tr>
<td>Oldham, R.V.</td>
<td>145</td>
<td>AM</td>
</tr>
<tr>
<td><strong>VI 1946-1960</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McArthur, A.M.</td>
<td>88</td>
<td>AM</td>
</tr>
<tr>
<td><strong>VII 1961-1975</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MacDonald, W.A.</td>
<td>17</td>
<td>QM</td>
</tr>
<tr>
<td>Saville, W.J.V.</td>
<td>16</td>
<td>AM</td>
</tr>
<tr>
<td>Specht, J.</td>
<td>12</td>
<td>AM</td>
</tr>
</tbody>
</table>

Earliest Interactions

Between 1846 and 1850 Captain Owen Stanley (1811-1850), on board the HMS *Rattlesnake*, carried out his orders to continue the work of HMS *Fly* and survey ‘a portion
of the Louisiade Archipelago, and the south-east coast of New Guinea’ (MacGillivray 1852:166). The accompanying ship the HMS Bramble, was committed to more detailed survey works. The Rattlesnake stopped at Redscar Bay, in present day Central Province, for a few days in September and then again in December 1849. John MacGillivray (1852), one of the naturalists on board, published the official account of the voyage that included observations made by the officers, and the natural and cultural material collected. The book also featured illustrations by Thomas Huxley, the ships’ surgeon and also a naturalist, one of which depicts a trading session at Redscar Bay. In one image Europeans are negotiating with Papuans, hoping to exchange white cloth for ornaments worn by the Papuans and a pig (MacGillivray 1852:opp.193).

Later linguistic work by Sidney Ray during the Cambridge Expedition organised by Alfred Cort Haddon shows a number of cultural groups in the vicinity of Redscar Bay, which remain current today (Haddon in Ray 1907:288). However it is not possible to know what the people who traded with those on board the Rattlesnake called themselves or the names of the villages they came from. McGillivray (1852) describes items of material culture and the hair, dress and tattoos of the local people. There are 46 items held at the British Museum that were collected from Redscar Bay by those on board the Rattlesnake. Many of these were illustrated by Huxley and these items are the earliest museum collections from Central Province. Arrows, bows and spears account for more than half of the items.

They brought off little with them for barter besides bows and arrows, and as before appeared perfectly ignorant of the use of iron. A few coconuts, plantains, and mangos were obtained from them, but they had no yams. Nearly every canoe which came alongside contained several large baked earthen pots of good construction, some with wide, others with narrow mouths, and a third sort shaped like a saucer. Besides bows and arrows, we saw many spears, mostly of small size and usually finely jagged or barbed towards the end, but of very inferior workmanship, also some shields . . . (McGillivray 1852:24).

The remainder of the Redscar material is predominantly comprised of body ornaments such as necklaces, and other personal items such as bags, lime gourds and combs, and a single tool for net-making. The two fibre skirts in the collection comprise the earliest in my sample, however, only one could be located at the time of this study.
Since ceramic pots are emblematic of trade between southeast coast communities, it seems strange that only one earthenware vessel remains. There is also a surprising disparity between the several earthen vessels brought alongside for trade with the Rattlesnake and the limited number of this type of object in the museum’s collection. Local people were bringing out their trade goods, the pots, and were clearly prepared to engage with the Europeans as just another trader. The Europeans too brought out their trade goods and were keen to trade, especially for food. The barter negotiations would have made it apparent to local people that pots were not high on the shopping list for Europeans. This illustrates observations made by Torrence (1993), Philp (2009) and Davies (2011) that many of these early interactions occurred at sea and were negotiated through barter to the mutual satisfaction of both parties. After each encounter the participants would come away having learned a little more about the needs or preferences of the others.

Consolidating Social Relations

From the 1870s and 80s a variety of missionaries, traders, and administrators descended on the south Papuan coast and acquired artefacts through gifts or trade. These artefacts would later find their way into museums. Under discussion here are those people/events that account for skirts in this study. Nikolai Miklouho-Maclay and Otto Finsch, for example, both travelled in this area at this time but I have not studied these collections. The Catholic Sacred Heart Mission was established on Yule Island 1885. Their circuit ranged from the centre at Yule Island to stations in the remote hinterlands – or from Roro lands to those of Mekeo in the early years, stretching to Kabadi, Pokao, Kuni, Fuyughe and Ononghe areas. Predominantly relying on French missionaries between 1885 and 1914, (no less than 172 of whom 60 were nuns) Sacred Heart missionaries evangelised the region (Langmore 1989:3). While this study does not include any material that is known to have been directly acquired by the missionaries of the Sacred Heart, they did have an instrumental role in acquiring contacts for others in this study, such as Charles Seligman. Their local knowledge and contacts with Roro, Mekeo, and Mafulu people made them an obvious starting point for those wanting to know more about the local people or places.

The earliest part of this period is best represented by material collected during the Chevert expedition of 1875 held in the Macleay Museum at the University of Sydney.
(Bushell 1988:135). The Chevert arrived at Yule Island in Hall Sound on 18 August 1875. It remained at this anchorage for about two weeks over August and September (Davies 2007:74).

At Yule Island, the leader of the expedition, William J Macleay, reported success in collecting generally. He employed locals to collect natural history specimens in company with other expedition members. Local people agreed to provide specimens and fresh produce in exchange for European trade goods. It is assumed that these included thimbles, thread, strings of glass beads, cloth, iron adzes and axe heads. Unusually, the museum has retained many of these trade items in the collection (Davies 2007:75). His acquisitions (51) included adzes, spears, string bag, and nets (Bushell 1988:136). Macleay’s cousin, Arthur Alexander Walton Onslow, appears to have collected about thirty artefacts during the voyage. The New Guinea part of the collection largely comprises body ornaments, bags, fibre skirts, bark cloth and domestic utensils.

Two fibre skirts acquired during the 1875 voyage of Chevert have been used for this study. The particular individual who acquired one (Figure 4.2 ETA.610, Macleay Museum) is not known. Macleay may have been responsible. He was impressed by Hood Bay women’s forthright and confident nature with foreigners and wrote ‘They wear showy and elaborate dresses, reaching from the loins about six inches down the thigh...they manufacture pottery and cloths and nets of excellent quality from various fibres’ (Macleay 1875). The other (Figure 4.3, ETA.1947, Macleay Museum) was acquired by Captain Onslow and donated to the Museum in 1963 by his descendent Lady Stanham.
A large part of the material that entered collections from the 1870s until the 1890s had their origins in the activities of the London Missionary Society. The Rev. Samuel MacFarlane first visited Redscar Bay in 1871, and was followed by William Wyatt Gill in 1872, who settled a contingent of South Sea teachers at Manu Manu, Redscar Bay (Lovett 1899). However, the teachers did not last long at Redscar Bay, and a number of them died in March of the following year. The surviving teachers were transferred to Port Moresby before the close of 1873. In 1874 teachers were placed at Boera, on the coast north of Port Moresby, and the same year Rev. William G. Lawes settled at Port Moresby with his family (Langmore 1989:271). Lawes arrived aboard the SS Ellengowan, a steam powered schooner donated to the New Guinea mission and under the command of Captain Huld F. Liljeblad. The vessel was used to move people and supplies along the coast, and provided a significant service for visitors to the area such as Luigi D’Albertis and Nikolai Miklouho-Maclay.

Following Lawes’ establishment at Port Moresby, the missionaries undertook a number of expeditions. Lawes and MacFarlane explored the southeast coast to the China Strait together in 1876. A year later, Lawes went inland for the first time where he met Koiari people. In 1878 Chalmers and his wife arrived and travelled along the southeast
coast (Chalmers 1886; Langmore 1989:271). 1881 was an eventful year as there was a massacre of LMS teachers at Kalo on the coast east of Port Moresby; the first LMS baptism, Aruadaera of Port Moresby; and Lawes and his wife returned to Port Moresby (Langmore 1989:271). MacFarlane became head of the New Guinea mission, then based at Mer in the Torres Strait, in 1874. In the next four years he made 23 voyages, visited over 80 villages, established twelve mission stations on the New Guinea mainland, learned something of six languages and published translations in two of them (Gibney 1974:153-4). In 1886 he returned to England, where he published an account of his time in Papua, *Among The Cannibals of New Guinea* (MacFarlane 1888).

A group of artefacts acquired by MacFarlane in Central Province are held by the British Museum, but only a few have secure provenance to Central Province. They were donated (purchased) by Sir Augustus Wollaston Franks and registered on three different occasions (see Philp forthcoming). Of the eight registered in 1878, six were body accessories, including three pendants and two nose ornaments and one breast ornament; the remaining two are simply identified as ‘ornaments.’ In 1885 three items were registered, lime gourd, lime spatula, and pipe. In 1895 ‘charms’ removed from a grave by MacFarlane were registered (British Museum database Oc1895,-.1222). In letters to British Museum curators MacFarlane notes he used both South Sea teachers and locals friendly to the mission to collect natural history material (Philp 2013). The British Museum also has three Central Province artefacts acquired by Chalmers, registered in 1876. Neither collection included provenanced fibre skirts (BM database).

Artefacts acquired by Rev. William Wyatt Gill in Central Province are held at both the Australian and British Museums. The nine artefacts collected by Gill were registered in the collection of British Museum in 1876. This was followed by a single lime gourd, registered in 1885. Material collected by Gill is also registered at the Australian Museum on two occasions, in 1887 and 1896. The 1887 collection was comprised of 40 items, including five fibre skirts. The 1896 collection comprised eight items including a further six fibre skirts.

Material collected by Rev. William George Lawes is held at the Australian Museum and the Cambridge University Museum of Archaeology and Anthropology. Only two items at Cambridge are identified as ‘Lawes Collection,’ but they are not skirts. Collections donated by Lawes’ were registered at the Australian Museum on two occasions. In 1885, eleven items were accessioned, followed by a further 32 items in 1893, the latter including seven skirts. It is somewhat surprising that not more Central
Province material can be attributed to him. He certainly met commercial collectors such as Andrew Goldie and must have been aware of the trade in natural and ethnographic specimens. He did engage in another commercial activity: the sale of photographs of the local people and places (State Library NSW database; Webb 1997).

Early British Colony

The establishment of a British protectorate (1884) marks the official dawn of the colonial chapter in Papua. Captain Huld Frederick Liljeblad was employed by the London Missionary Society’s to captain the *Ellengowan*. This vessel provided supplies, transport and communications to the missionary stations along the southeast coast. It was the first regular means for other travellers to move along the coast. Artefacts collected by Liljeblad were registered at the Australian Museum on two occasions, in 1885 and 1890. The 1885 collection comprised 74 items and included 23 skirts. The 1890 collection comprised 83 items and no skirts. The Mason Brothers collection was the largest single source of Central Province material for the Australian Museum. The dealer amassed the collection and sold 376 objects to the museum in 1883 of which 76 were skirts. From these 49 could be located and have been used in this study. The Mason Brothers were principally a Sydney-based shipping company. As was commonplace, they solicited the Australian Museum for business, sending letters announcing consignments of material to the curator. Goldie used Mason Brothers. However, a recent investigation by Davies (2013a) reasons that this 1883 collection is unlikely to be Goldie’s material.

Sir William MacGregor was Administrator of the Colony of British New Guinea (BNG) from 1888. Before taking up his appointment, he consulted with Charles de Vis, Curator of the QM, who agreed to send him a natural history collecting kit. MacGregor was also aware of the natural and ethnographic collecting activities of British New Guinea Government officials.

Sir William amongst other special qualifications for office is an indefatigable collector and explorer and all who sail with him are expected to do their best to pick up something (Brown 1890 quoted in Quinnell 2000:81).

During his first visit of inspection within a month of arriving in British New Guinea, he began making natural history and ethnographic collections. This material became the
foundation of the British New Guinea ‘official collection’. While government secretary of
British New Guinea later of the renamed Territory of Papua, Antony Musgrave had
proposed building a museum in Port Moresby, however the colony’s Administrator,
William MacGregor, refused to support the initiative on the grounds of expense.
Macgregor opted to house the official collections in Australia (Quinnell 2000:83).
McGregor’s stated aim was to build a collection ‘really representative of New Guinea’ (in
Quinnell 2000:83). Negotiations with the Queensland Governor in 1889 led to provision
being made for the QM to house and exhibit collections made by the Government of
British New Guinea (Quinnell 2000:83). Once MacGregor had found a home for the
official collection in Brisbane, he began sending consignments there. Five consignments
of natural specimens between 1890 and 1892 preceded 2,876 ‘ethnological’ items. There
were fourteen more consignments, one for each year except 1895. Some of these were
comprised of both artefacts and natural history specimens (Quinnell 2000:87).

Central Province accounts for six percent of the artefacts. Only Gulf Province has
fewer items at 3 percent of the total. Quinnell (2000:88) suggests that the reduced
emphasis upon the two south coast provinces reflects a conscious bias on MacGregor’s
part, as these were areas with the longest and closest contact with government, traders and
missionaries. Since areas around Port Moresby, Rigo and Mekeo had been targeted by
private collectors since the 1870s and by officials who collected since the 1880s, he
focused on other less well known regions.

Former curator of the MacGregor collection, Michael Quinnell (2000), has described
the collection’s political nature, not only in its creation, but also in subsequent
circumstances. Its earliest political use was as an instrument through which MacGregor
could expand Pax Britannica (Quinnell 2000:81). During ‘visits of inspection,’ when
many villagers would have their first interactions with government, MacGregor would
collect artefacts and trade for food to supplement rations. These exchanges became a part
of the pragmatic methods he used to establish reciprocal relationships with villagers/local
people (Quinnell 2000:84). Some ‘official’ material from BNG was acquired as a result of
other kinds of interactions, such as government seizures; but these instances did not
involve material from Central Province. In all likelihood gifts, given to MacGregor or
government officials account form some part of the collection.

During its existence, the Official Collection has been the subject of wrangling
between different interests. Some of the conflict arose in relation to MacGregor’s
determination to maintain the integrity of the collection (Quinnell 2000:89). He opposed
any actions that would disperse or dilute the official collection such as the exchange of items with other museums. MacGregor restates the objectives of the official collection in various places/instances. In an 1885 dispatch to the Queensland Governor he writes

> the collection belonging to this colony has been made with the object of its possessing as full a set of arms, utensils, products of different kinds, andc., as would illustrate its past and present position in the future (quoted in Quinnell 2000:86).

In 1897, however, MacGregor agreed that ‘duplicates’ of ethnographic material could be distributed to other museums and used for the purpose of exchange by the QM. De Vis made a selection of these and, in 1897, 949 items were sent to the Australian Museum, 833 items to the National Museum of Victoria and 775 to the British Museum. At the same time 1635 items were selected for the QM collection (Quinnell 2000:91). The dispersal of the collections would prove troublesome in the following century as moves were taken to return the material MacGregor collected to Papua New Guinea.

The repatriation of the MacGregor Official Collection to the National Museum of Papua New Guinea beginning in 1979 provides an interesting example of how in museum collection research one has to sort out confusions when new records have been created for an old collection. A register of MacGregor’s official collection was kept throughout the collecting period and closed in 1920. However, no distinction had been made between the ‘official collection’, the Queensland Museum selection, made by de Vis in 1897, or the duplicates. In addition to this, several hundred items from other sources were registered as ‘official collection’ material (Quinnell 2000:94). In the 1970s, the approach of Papua New Guinea independence saw a revival of interest in the collection. In preparation for the possible repatriation of the material, the Queensland Museum began an examination of archival records relating to the collection. Later in the process cataloguing errors made in the MacGregor register were corrected resulting in a further 2508 items being added to it by 1997.

In 1980 a formal agreement was made that a substantial part of the collection would be returned to PNG. After some negotiation, the decision was taken to include de Vis’ 1897 selection of material for the Queensland Museum. To aid the selection process, all items in the MacGregor Register were catalogued and photographed. As documentation for each category of object was completed, a copy of the documents was to be sent to Port Moresby. Between 1979 and 1992 the National Museum curator or director would visit the
Queensland Museum to make selections. Through this process 3297 items were returned to PNG and 2675 retained by the Queensland Museum. At time of Quinnell’s writing, a further 2277 spears, bows and arrows had been documented but were awaiting selection through this process (Quinnell 2000:97).

The Official Collection is now principally held in three museums: the Queensland Museum; the National Museum and Art Gallery of Papua New Guinea; and the Australian Museum. A total of 42 fibre skirts from the Queensland Museum have been used in the artefact analysis of this study. An interesting and valuable aspect of the collection is that it contains several skirts from 1921 to 1975 during which time the overall number of artefacts acquired by museums is low: five from the 1930s; four from the 1940s; two from the 1960s; three from the 1970s (Table 4.2).

Later British Colony

As MacGregor had observed, by the end of the nineteenth century, people living in Central Province were very familiar with dealing with outsiders and relationships had begun to become formalised and routinised (Quinnell 2000:88). Up until the First World War, however, there were still a number of scientific expeditions to the region that were fundamental for the first ethnographic recording by professional anthropologists. The Cooke- Daniels Ethnographical Expedition to British New Guinea 1903-1904, was funded by a Denver, Colorado department store owner William Cooke Daniels. As a member of the team, British ethnographer Charles Gabriel Seligman conducted field research in a variety of places including Papua.

In the preface to *The Melanesians of British New Guinea*, Seligman’s (1910) publication from the expedition, he thanks the Sacred Heart Mission for facilitating his visit to the Mekeo and Roro areas. It is clear from his acknowledgements that he was dependent upon his missionary hosts for interpretation and access to local people (Seligman 1910:ix). These circumstances, or methodology, would have shaped the kinds of interactions that it was possible for him to have with the people that he studied and framed the moments in which artefacts from either culture changed hands.

Three Central Province skirts, documented as having been acquired by the Expedition, were donated by Seligman to the British Museum in 1906. Of these, two were located and made available for study (Oc1906,1013.939; Oc1906,1013.944). These are both documented as having come from Roro-speaking areas (‘Maiva’ and ‘Waima’ in the
Robert W. Williamson went on an expedition to British New Guinea in 1910. In the new methodology of field research he principally stayed in one area for focussed study. He later wrote a detailed study of the Mafulu, a group of mountain-based peoples (Williamson 1912). He writes that the Sacred Heart that had been established five years previously had its remotest mission station amongst the Mafulu villages. Williamson, like Seligman before him, acknowledges the access and assistance provided to him by the Mission of the Sacred Heart (1912: vi-vii). Williamson observes in the preface to his book, perhaps hoping to convey the remoteness of the Mafulu villages, that the people had seen few white men: ‘...except some of the Fathers of the Catholic Mission of the Sacred Heart, the visits of Government officials and once or twice of a scientific traveller having been but few and far between, and only short’ (Williamson 1912:v). The list of white men that Williamson mentions has rather the opposite effect, making it seem quite a hub of activity by the time of his expedition. Indeed by the early twentieth century, numerous Europeans (adventurers; scientists; LMS missionaries; government men) had been in the area, especially on the island and coast. However, the stable presence of the Mission of the Sacred Heart (1885-1914) meant that they were able to act as intermediaries through which visitors might access the area and its’ people.’ In this function it had its counterpart in the London Missionary Society (LMS).

Five skirts acquired from Williamson during his fieldwork were accessioned into the British Museum in 1913. Four of these were made available for this study and are amongst those included in the artefact analysis (Oc1913,0407.192; Oc1913,0407.193; Oc1913,0407.216; Oc1913,0407.218). It is noteworthy that none were actually acquired from the Mafulu. Rather they are all recorded as coming from Mekeo people. The frontispiece of Williamson’s (1912) book entitled *Mafulu Women Decorated for a Dance* suggests an explanation for this absence that is confirmed further on in the book: that is, fibre skirts were not worn by Mafulu women. At the time of Williamson’s visit both men and women wore bark cloth perineal bands, which they assumed during childhood (Williamson 1912:26-29).

Williamson was struck by the gradual reduction of the women’s dress as he travelled from the coast, from the Roro inhabitants, through Mekeo, and thence by Lapeka and Idoido to Dilava, and on by Deva-deva to Mafulu. His observations are, intentionally or otherwise, amusing.
The petticoats of the Roro women gave way to the shorter ones of Mekeo, and these seemed to get shorter as I went further inland. Then at Lapeka they were still shorter. At Ido-ido, which is Kuni, the petticoats ceased, and there was only the perineal band. Then, again, at Dilava (still Kuni) this band was narrower, and at Deva-deva, and finally at Mafulu, it was often, as I have said, almost nominal (Williamson 1912:28).

Australian Colony

In 1906 the protectorate that was British New Guinea ended as the region fell under Australian rule under the name Papua. Following the redistribution of German colonial possessions from World War One, Britain initially took possession of the former German areas, formalising Australian administration of German New Guinea in 1921. Much of the focus of this time was towards Rabaul, the centre of administration of New Guinea under Australia, and the commercialisation of the area through gold finds and plantation development. The ‘discovery’ of the highland populations in the mid-1930s also drew focus away from the older settled areas of the Central Province. By 1942 this civil administration would be suspended in both New Guinea and Papua with the movement of Japanese soldiers into the region in World War Two.

Port Moresby, the focus following the end of the Pacific war 1945, was largely rebuilt as the centre of administration for both New Guinea and Papua. Having presented the historical reference points for my study, the remainder of this chapter is concerned with my methodology for research on the skirts themselves.

Designing Skirt Analysis

Having situated the sample of museum collections used in the study in time and place and commented on the social relations that surrounded their field collection, I now turn to the methods used to collect data from the fibre skirts. It is important to recognise that any study of museum collections will focus on two key aspects: (1) the physical artefacts and (2) the collection records to contextualise those artefacts. Keeping accurate and relevant field records applies as much in a museum setting as elsewhere, as these records will form the basis of all subsequent analysis and reporting (Hester et al. 1997:159).
Collection records

In order to use museum collections as a source of data, a researcher needs to understand the documentary processes museums use to organise and manage their holdings and to anchor artefacts to specific people, places, times associated with their past. Each artefact in a museum collection has concomitant records which contextualise them, and make observational data about the artefact useful for analysis. ‘Accessioning’ is the process which is followed to formally bring an object into the collection. Ideally during this process, several kinds of information are recorded about the object and it is given an accession number. The accession number should also be unique within the particular museum’s collection and follow sequentially from previously issued accession numbers. A well accessioned item will have information recorded: for example a physical description; the circumstances of its acquisition in the field (e.g., where, by whom and when); how the object came into the museum (e.g., by donation or sale) and from whom; and relevant references to other material, such as archival documents like purchase documentation.

The provenance of an object is its history and encompasses its origin and subsequent ownership. In the museum context provenance is comprised of information recorded about an object during its accession into the collection such as when, where, by whom and from whom it was acquired originally; and by what path the object came to be in the museum. The use of the term ‘provenance’ within the context of ethnographic museums is different in emphasis from that of classical antiquities and fine art. There is not always a clear cut division, since some ethnographic items (e.g., the material acquired by Captain Cook) may be treated as items of fine art. Fibre skirts are unlikely to be considered as fine art. The quality of provenance information collected over time generally varies, sometime widely, even within a single institution.

The most significant component of museum documentation is the register. It is a paper-based record in which the movement of specimens and artefacts into and out of the museum are recorded. It may also document the formal accession of items into the collection. It most often takes the form of a ledger or number of ledgers. Museums may continue to keep a paper register parallel to a digital collection management system. In some cases sub-collections within a museum will have their own register. Many museums today also have electronic collection management systems. These databases allow for a variety of forms of documentation to be stored with the accession number. The extent to
which this happens varies from institution to institution. They can also hold information about object condition, its location in the stores, and other management-related data. A database permits a user to make enquiries using any of a number of fields in combination, for example a country and type of object may be specified, such as ‘Papua New Guinea’ and ‘drum’.

In the first instance database information about each object is predominantly derived from original paper records, including the paper register. This can mean that the place names or object names may be outdated. For example, a search of the Cambridge University Museum system for ‘Central Province’ returns no records. ‘Central Division’ and ‘South-east Coast,’ neither of which are exactly synonymous with Central Province, do produce results. The former refers to an administrative area that pre-dates that of Central Province, and denotes a similar, but not identical, geographical area; the latter is simply a broad geographical area that encompasses both Central Province and the mainland parts of Milne Bay Province. From these search results, and with a little editing, it is possible to make a composite list of Central Province material.

Ideally, museums document the collections that they hold, keeping a record of the purposes, places and people that relate to an artefact. However, the links between artefacts and their records can be damaged over time, making the contextualisation and interpretation of the collection more complicated. Objects can become detached from contextual information both before they enter the museum or afterwards. There are numerous causes of poor provenance. For example, information about an object may not have been available or recorded during the accessioning process. A lack of information can be caused by the amount of distance, personal and temporal, between the collector and subsequent owners, but it may also be the result of the haphazard way in which artefacts were collected. For example, it has often been the case that ethnographic artefacts have been obtained as an adjunct to natural history specimen collecting.

The deposition of records within a museum is affected by the practices followed at the time of a collections formation. In many cases the changing importance of cultural material to a museum or collector may be reflected in the way items are recorded, or not recorded, in a register even though there is evidence to suggest that such material had entered the collections. A good example is when William John Macleay recorded in his diary the arrival of a consignment of zoological specimens and, as an afterthought, ‘some native ornaments’ (Bushell 1988:134). The family museum did not maintain a register (this began under the University post 1888) and so details were predominantly recorded on
paper labels attached to the objects and specimens. This is also true for the Giglioli material acquired from D’Albertis. Each of the specimens he personally acquired has detailed labels recording details generally entered into a register such as cultural group, collector and date. Even when an object has been properly accessioned, recorded in the register and allocated a collection number, problems can occur later. Difficulties may arise, for example, as the result of a collection being relocated, physically and/or institutionally or because the accession number on an object has come off and been lost. A museum’s present holdings may encompass collections originally made by other agents but the original documentation has been lost or the records and the specific items to which they refer may have become detached from each other. This result from the relocation of material between locations and/or institutions or simply reflect the quality of the original records. A good case in point is the National Ethnographic Collection (NEC) that was transferred to the Australian Museum from the Institute of Anatomy, Canberra and having previously been held at the University of Sydney’s Department of Anthropology. It is comprised of material systematically collected and documented by anthropologists based at Sydney University. An Australian Museum report entitled ‘The University of Sydney Anthropology Collection’ (Goodsell and Oakes 1988) found that disruption to the records was likely to have been the result of two institutional relocations. Today records for the collection, including original field notes, can be found in the University and in personal archives, while the objects are in the Australian Museum, and administrative documentation is in Canberra.

**Evaluating the sample**

In each of the collections there was a discrepancy between the number of skirts that had been accessioned and the number that were available for use in this analysis. Objects can be ‘lost’ to a museum due to curatorial misidentification, disruptions to the operations of a museum and its stores, or because they have become disconnected from provenance records, such as through the loss of a label. The material characteristics of fibre skirts, especially as they age, means they can be vulnerable to damage which may cause them to be discarded.

In the end I was able to study 162 skirts. Skirts are a small but continuous proportion of all things that were collected over the time period, as shown by Figure 4.4. Many of the other object categories vary widely over time and reveal popularity for certain kinds of
objects at certain times (Clarke and Torrence 2011). Since skirt percentages are stable through time they are a good object type for monitoring historical changes in Central Province.

The museum records show that the majority of people that acquired the fibre skirts held in collections were men (Table 4.2). This reflects the gender profile of foreigners in Central Province until the 1930s. Skirts were, and are, primarily made and worn by women and girls. It seems likely that the existing sample of skirts carries an imprint of this intersection of male collectors and female producers and users. We can easily imagine that Papuans may have been reticent to give certain classes of skirt (e.g. girls’ initiations, mourning clothes) into the keeping of a foreign man. To some extent this effect may have been mitigated by the presence of the wives of missionaries, administrators, and planters. The way, in which the sample may have differed, if women had made up a larger contingent of the foreign residents, is a matter for conjecture.

Although the presence of colonial women may indeed have influenced the composition of the skirt assemblage, the aim here is to return the focus on Papua producers and the materiality of the skirts themselves. In the following chapters, the chaîne opératoire is used to unpack the material qualities of skirts, thus keeping the focus on the social contexts and experiences of Papuans rather than on colonial women. By looking at the sequences of tasks used to produce the artefacts, rather than on moments of cross-cultural engagement, I focus the analysis upon the social contexts and experiences of Papuans.

**Figure 4.4** Relative proportion of object categories through time for AM, BM, and QM accessions.
Physical Recording of Skirts

I documented the physical details of each skirt I examined using written notes, drawings, measurements and photography. I devised a Data Recording Sheet (Appendix 1) to make the process efficient, and to collect data in a consistent format. Many of the skirts are very old and are now in a highly fragile condition. For this reason I did not unroll or otherwise straighten-out skirts. The friable condition of some skirts prohibited turning them over. In such cases I made notes on the data sheet for that skirt and photographed them in the position set by the current mounting.

I used digital SLR photography extensively. To produce a thorough record, I tried to follow a consistent, standard procedure for each skirt. The first photograph was the accession number on the artefacts label as this makes it easy to archive the images later. This was followed by shots with the entire skirt in frame, front and then reversed (where possible); detail shots of each side of the waist band; and details of the waistband string, attached decorations, mending or other peculiarities.

Anatomy of a Skirt

The major components of a skirt from Central Province are shown in the diagram in Figure 4.5. A *fibre skirt* is defined in my study as a garment composed of unspun fibre strands attached to a waistband. *Fibres* are the structural component of plant materials that form the body of the skirt. The *skirt body* is that part of the garment that drapes down from the waistband. A *waistband* is the component designed to pass around the waist or hips of the wearer. The waistband is usually constructed along a string. *Waistband string* is the string to which the unspun fibres, that compose the body of the skirt, are attached (Figure 4.6). It is a single string folded in two, with a loop tied at one end. *String* refers to spun fibres. Most often, in the skirts I studied, it takes the form of two-ply yarn. *Fringe* refers to the short decorative fibre ruffle attached to the waistband of some skirts. A *hem* refers to the bottom edge of a fibre skirt.
Attribute Analysis

The first collection that I studied in detail was in the Australian Museum. After I had measured and recorded a number of skirts, I designed the data recording sheet to speed the process. Figure 4.7 is an example of a data recording sheet with details for a skirt partly filled in. A summary of the variables that I recorded is presented in Table 4.4. Once I had used the sheet for a period of time, it was possible to gauge the scope of the variables that I was likely to encounter. I revised and improved the data sheet by listing frequently observed variables, so that they could simply be circled. Variables such as dimensions were noted on the sheet. In addition to being more efficient, listing the variables in this way provided the additional benefit of ‘fixing’ specific definitions to the plethora of terms that I needed to document and describe the skirts. Physical features and variables that were not covered by the options on the data recording sheet were described and noted on the sheet ad hoc.
Figure 4.6  Detail of sago fibre skirt waistband showing waistband string, A16040, Australian Museum. Photo: Erna Lilje.
Figure 4.7 Example of a data sheet for recording information about fibre skirts.
Table 4.4 Fibre skirt variables.

<table>
<thead>
<tr>
<th>Physical attribute</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>Waistband size</td>
</tr>
<tr>
<td></td>
<td>Skirt length (waist to hem)</td>
</tr>
<tr>
<td>Silhouette</td>
<td>Split, presence/absence</td>
</tr>
<tr>
<td></td>
<td>Split size</td>
</tr>
<tr>
<td></td>
<td>Tiers (layers of skirt body)</td>
</tr>
<tr>
<td></td>
<td>Shape of the hem</td>
</tr>
<tr>
<td></td>
<td>Special features of the hemline</td>
</tr>
<tr>
<td></td>
<td>Fringe, presence/absence</td>
</tr>
<tr>
<td>Applied colourants</td>
<td>Applied colour, presence/absence</td>
</tr>
<tr>
<td></td>
<td>Colours and respective pattern elements</td>
</tr>
<tr>
<td>Applied decorations</td>
<td>Undefined</td>
</tr>
<tr>
<td>Materials</td>
<td>Fibre used for body of the skirt</td>
</tr>
<tr>
<td></td>
<td>Fibre used for string</td>
</tr>
<tr>
<td></td>
<td>Source of colourants</td>
</tr>
<tr>
<td>Construction</td>
<td>Stitch, appearance</td>
</tr>
<tr>
<td></td>
<td>Hank (stitch) width</td>
</tr>
</tbody>
</table>

Stitch Recording

The most challenging variable to record in a consistent way was the appearance of the stitch used to construct the skirt. Initially, I made a drawing of both sides of each waistband. As I progressed through the collection, I continued to add new stitches styles as they were encountered. I built up a broad selection of stitch types and put them on a spreadsheet; this became a stitch reference sheet. When I came across stitches that I recognised, I referred to the drawings I had previously made.

I initially used the term ‘knot’ to refer to the technique used to fasten fibres to the waistband, but on the basis of information and experience gained through the fieldwork, I decided the alternative term ‘stitch’ was more appropriate. Each type was labelled alphabetically and shown with front ‘i’ and back ‘ii’ views. This meant that the front and back appearances of a waistband could each respectively be described with a letter and Roman numeral, for example BiEii.
Table 4.5  A sample of the recording table for stitch types (see Appendix 1 for full set).

<table>
<thead>
<tr>
<th>Knot</th>
<th>I (front)</th>
<th>II (back)</th>
<th>Additional</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td><img src="image1" alt="Image" /></td>
<td><img src="image2" alt="Image" /></td>
<td>*6 strings used in binding. Two pass through the centre of the knots.</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td><img src="image3" alt="Image" /></td>
<td><img src="image4" alt="Image" /></td>
<td>*Visible binding in 'V' is twisted sago palm fibre (like the skirt fibres), not strong. *In 'V' the bundles of fibre emerge from the knot with a pronounced twist.</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td><img src="image5" alt="Image" /></td>
<td><img src="image6" alt="Image" /></td>
<td>Front as far 'B'.</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td><img src="image7" alt="Image" /></td>
<td><img src="image8" alt="Image" /></td>
<td>*Fibres exit knot both front and back. From the back the fibres emerge oriented to 4 o'clock.</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td><img src="image9" alt="Image" /></td>
<td><img src="image10" alt="Image" /></td>
<td>Front as far 'B'.</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td><img src="image11" alt="Image" /></td>
<td><img src="image12" alt="Image" /></td>
<td>Like I &amp; II but more rolled over.</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td><img src="image13" alt="Image" /></td>
<td><img src="image14" alt="Image" /></td>
<td>Like I &amp; II but more rolled over.</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td><img src="image15" alt="Image" /></td>
<td><img src="image16" alt="Image" /></td>
<td>*Fibres emerge from knot both front and back.</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td><img src="image17" alt="Image" /></td>
<td><img src="image18" alt="Image" /></td>
<td>*Similar knot to 'I'.</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td><img src="image19" alt="Image" /></td>
<td><img src="image20" alt="Image" /></td>
<td>Kit has free-standing knot as bundle exists waistband.</td>
<td></td>
</tr>
<tr>
<td>K</td>
<td><img src="image21" alt="Image" /></td>
<td><img src="image22" alt="Image" /></td>
<td>Like I &amp; II but more rolled over.</td>
<td></td>
</tr>
<tr>
<td>L</td>
<td><img src="image23" alt="Image" /></td>
<td><img src="image24" alt="Image" /></td>
<td>Two variations: Top- with 1; Bottom- with 5.</td>
<td></td>
</tr>
</tbody>
</table>
**Ethnographic Fieldwork**

In addition to my study of museum skirts, several short fieldtrips provided invaluable insights into the decision that people make in making and wearing skirts since they continue to play an important role in social life in Papua New Guinea. I spent four weeks in Central Province, during September-October 2008, which I followed up with a further two weeks in February 2010. In addition, one of the informants, Dairi Arua, came to Sydney for two weeks as a guest of the Producers and Collectors project team. A longer period of fieldwork would have been useful, but available funds were limited and the time available was also restricted because of the number of international museums targeted. The goal of my short fieldwork was to conduct focussed discussions with cultural experts about fibre skirt production since these were critical to interpretation of the museum collections.

The cultural experts that I consulted while in Central Province are introduced below as well as a little of the content of the respective conversations. I have placed myself within the frame in a deliberate choice to distance myself from the ‘othering’ of traditional social-scientific modes. In a variety of ways I am connected to each of the experts and it seems disrespectful and unnecessary to excise myself, and therefore this connection from the story. To document my interviews, I used a combination of still and video digital photography together with digital voice recordings.

Avia Kivori and Joseph Oa Akauma lead the well known Kivori Cultural Dance Group, as advertised by a sign outside their home in Port Moresby. Other members of their family participate in the group which is registered with the National Cultural Commission. The dance group is hired for commercial events such as performances at hotels for conferences and large public events. In addition to these audiences, they are also engaged by Roro people to participate in significant occasions, such as funerals. At the time of our conversation they were about to leave for Kairuku district to dance at a funeral. Avia is originally from Kivori village, located on the coast, south of Cape Possession in Kairuku-Hiri District of Central Province and Joseph is from a village close by. They are Roro people/speakers and are knowledgeable about Roro cultural practices. Avia’s particular expertise of relevance to this study is in the production of sago fibre skirts, called ‘kiba’ in Roro language.

I met with Avia Kivori and her husband Joseph Oa Akauma in Kilakila Village, NCD on Friday, October 3, 2008. We sat outside, under their family home.
Conversation was conducted with the aid of a translator. Mure Eli Lilje (my mother) translated between the lingua franca of Polis Motu and English. Mary Batai (Avia and Joseph’s daughter) assisted with English spellings of Roro words. Anne Clarke (my supervisor) took notes while I asked questions and took photos.

Figure 4.8 Impromptu performance by Avia Kivori. Kilakila Village, October 3, 2008. Photo: Erna Lilje.

During the interview with Avia we discussed the dyes that are used today and in the past. Avia and Joseph gave a practical demonstration of string-making using fibre from a banana tree. Later Avia got formally dressed and danced in order to give me a better understanding of how skirts are worn and danced in (Figure 4.8). Joseph joined in wearing an enormous feathered headdress. Avia Kivori performed a song and dance that recalls the introduction of chickens by Europeans, and mentions how many chickens you
needed to kill to make a headdress.

I first met my principal consultant, Dairi Arua, at a craft market in Port Moresby where he was selling skirts and other items he had made. Following this brief meeting, I made an appointment to see him so that we would have a formal interview about fibre skirts. I conducted the first interview at his relatives’ home at Waigani, a suburb of Port

\[\text{Figure 4.9} \quad \text{Erna Lilje learning skirt making from Dairi Arua. Waigani Port Moresby 2008. Photo: Anne Clarke.}\]
Moresby, on Sunday, September 28, 2008 (Figure 4.9). The interview was conducted in English. Anne Clarke took notes while I asked questions and took photos.

Dairi was 36 years old at the time of our first conversation. He is a Motu man from Porabada village in the NCD who is greatly interested in what he terms ‘cultural revival’. He makes and sells traditional and tourist craft objects and teaches traditional craft skills to a range of audiences including school children. His expertise, in relation to my study, is the production of sago and nypa fibre skirts. In our first interview, in addition to describing the processes used to make nypa and sago fibre, Dairi demonstrated how to make string from strands of plastic rice sack, and gave me a practical tutorial in constructing a nypa fibre skirt.

Dairi’s grandmother and grandfather played a significant role in teaching him about Motu traditions and history from an early age. He is knowledgeable about both male and female aspects of traditional practices and handcrafts. His craft expertise includes traditionally female activities such as pottery, skirt-making, and tattooing, and traditionally male activities such as armband weaving and boat building. He is registered with the National Cultural Commission as a cultural expert and visits school and overseas institutions to educate and demonstrate traditional crafts. Dairi also makes nypa skirts for what he calls ‘traditional gospel.’ That is he puts gospel messages into compositions which follow the format of traditional songs and dances, and these are performed by church groups.

At the time of our first meeting in Port Moresby, Dairi was preparing to make skirts for the Hiri Moale festival which was to take place in November. People also request skirts from him for the payment of bride-price. He took me through the process of attaching nypa fibres to the waistband and of making string. The skirt he made during our interview was purchased for the Australian Museum as a contemporary example of a nypa fibre skirt. In 2010 Dairi visited Sydney as a guest of the ‘Producers and Collectors’ project. During his stay I had the opportunity to spend time with him in the stores of the Australian Museum examining the various skirts in the historic collections. Through this I learned more about the variety of techniques used to bind fibres to a waistband string in the construction of a skirt.

On my second field trip to Central Province, Dairi was instrumental in arranging a day field trip to Pinu Village, on the Central Province coast to the west of the capital, so that I could observe the process of skirt making first hand. At the village Ara Kere, with the assistance of younger relatives, demonstrated the production of nypa and sago fibre.
Ara is a Gabadi woman (Figure 4.10). She and other women of the village make skirts for special occasions. For example, a couple of years earlier, the village had played host to important church-related visitors. The villagers performed music and danced to welcome them, for which the women made and wore sago-fibre skirts. Ara had also instructed school students in the making of skirts. My conversations with Ara, during which she

Figure 4.10 Ara Kere with a sago skirt she made several years earlier, Pinu Village 2010. Photo: Erna Lilje.
spoke Motu, were conducted with the aid of interpreters, Dairi and again my mother, Mure Eli Lilje.

Another cultural expert was Mr Michael Ame, a senior man from Maipa. I first met Michael Ame when he visited Australia in 2007 as the guest of Mark Mosko, an anthropologist from the Australian National University. Michael has been Mark’s informant over many years of ethnographic research centering on the North Mekeo culture of Maipa village. Michael was invited to visit the Australian Museum stores to look at the collections.

Figure 4.11 Michael Ame, Maipa 2008. Photo: Erna Lilje.
The following year I arranged to visit Michael’s home village of Maipa, on the Biaru River in Central Province, west of the NCD. I spent a couple of days there, in the company of members of my family and research team. During this stay an afternoon was organised to have focused talks about objects (Figure 4.11). As a result on Sunday, October 5, 2008 I had the opportunity to spend time talking to several people about material culture (Figure 4.12). A number of people brought out and arranged for us objects from their homes typical of ‘their culture.’ This allowed us to discuss a wide range of items, such as fibre skirts, shell ornaments, men’s bark cloth kilts, feather headdresses, bags and various decorations. Anne Clarke took notes whilst I asked questions and took photographs.

Figure 4.12 Interviews in Maipa village, 2008. Photo: Robin Torrence.
In this chapter I have documented the sources of the collections which comprise the basis of my study. I have outlined the logistics of researching in museums, highlighting museum practices such as record keeping and the consequences of particular kinds of documentation that affect the quality of the data available.

Secondly, I have described the methodologies I used to find information about, and from, skirts in museum collections. I began my recording basic attributes from skirts through standard documentation practices such as camera, drawing, databases. To enhance my understanding of the attributes I recorded I developed a methodology for working with central province peoples. This combined information gleaned through interviews with Central Province skirt makers and other cultural experts with specific research and training in the manufacture of skirts. Having evaluated the benefits and limitations of data drawn solely from museum collections, this combination of approaches enabled me to gain a deeper insight through hands-on experience and training from Central Province cultural experts.
Chapter 5

FIBRE SKIRT USE AND PRODUCTION

Figure 5.1  Detail of ‘Dance, Waima’ [Maiva] in the Roro region. Photo: Unknown, P.2126.ACH1 CUMAA.

Introducing Skirts

The range of data sources described in Chapter 4 will now be directed toward two objectives that are necessary to achieve my overall aim to understand the roles of fibre skirts in social practice in Central Province. In the first half of the chapter I explore the variability of fibre skirts in Central Province in terms of the range of social contexts in which they played a part. To survey the varieties of forms, uses, and geographical distribution of fibre skirts, I combined data from a variety of sources. These included historical ethnographic accounts, historic photos, museum skirts, fieldwork and interviews with present-day skirt-makers as summarised in Chapter 4. Rather than provide a comprehensive ethnographic account of the numerous peoples of Central Province, I use selected ethnographic examples to illustrate the connections between social dimensions –
such as group identity, social position and historical period – and the physical forms of skirts as seen in variations in fibres, colours, patterns, and dimensions.

I have emphasised pre-colonial and turn of the century historical accounts as the people and their practices of this earlier time are the most distant from us and because our understanding or impression of them is primarily fed by historical sources. It also provides a basis for comparison with later phases. My consideration of the connections between skirt variations and social dimensions was critical to this research because it helped attune me to the social relations that are created and enacted during the production process.

The second objective of this chapter is to describe how fibre skirts are made. This includes detailed account of the various processes used to convert raw materials into the constituents required for a skirt and the methods for constructing the final product. As discussed in Chapter 4, my understanding of the pragmatics as well as contextual ethnographic information about the production, distribution and use of skirts was primarily acquired from conversations and technical demonstrations that occurred during the fieldwork in Papua New Guinea, but was also augmented by my analysis of relevant ethnographic literature and the museum skirts themselves. My research into production processes, especially information I acquired from present-day makers combined with my own experiences of skirt-making, furnished me with a sufficient degree of insight such that I have been able to develop a critical appreciation of the technical aspects of fibre skirts, particularly in terms of knowledge and skill requirements.

Through the experience of fieldwork, to put it colloquially, I ‘got my eye in’. The main outcome of the ethnographic fieldwork was to learn the techniques and principles of skirt production, in such a way that I could identify the key variables relating to inputs of time and energy, especially as these correlate with the multiple moments of negotiation that they imply. I then incorporated the knowledge of production within the concept of chaîne opératoire to form concepts about the kinds of social relations implicated in the production, distribution and use of skirts. The understanding of variations in form relating to social contexts and production described in this chapter will then be applied in Chapter 6 to an analysis of the sample of skirts recorded in museum collections.
Variety of Forms and Uses

Differences in the intended use of a skirt, by whom and for what purpose, account for many of the physical and visual differences within collections. The ‘whom’ encompasses factors such as the cultural group and the age of the wearer; the ‘what’ refers to the occasion or tasks for which a particular skirt must be suited. In Central Province fibre skirts are associated with peoples of the islands and coastal areas and adjacent hinterland, as opposed to groups residing in the mountainous inland regions, and are only worn by women and girls. During the period when indigenous forms of clothing were still commonly worn, the type of fibre skirt a person might wear was affected by factors such as the styles of dress of the wearer’s community, social status/position (e.g., clan; age; un/married; widowed) of the wearer, and the context (e.g., feasts; daily labour) in which the skirt was worn. It is essential to realise that through time styles and materials fell in and out of favour and still continue to change to this day.

Social Identity

A shared style of dress is one of the ways that a people or community creates and manifests a shared social identity. ‘Propriety identities’ as developed by Harrison (Goddard 2011) is a perspective that considers symbolic practices in relationship to social identity, particularly ‘the way that collectivities...define themselves through the display of distinctive consumption practices and tastes, styles of dress, speech habits, religious practices or other forms of symbolism’ (Harrison 2006:4). This is difficult to isolate in the collections, but can be drawn out from other media.

Historic photos can be used to capture a sense of the regional styles in skirts that existed in the past within Central Province. To make good use of historic photos, and appreciate changes over time, one must remain cognisant of geographical location, people, time, and the likely social status of the subject/s. There are difficulties with this approach, however, because the photographic record is heavily biased by where visitors to the region were able to travel safely. For instance, photos of women wearing skirts in Port Moresby are plentiful and even became iconic of the region, but there is a notable absence of photographic data for the south eastern parts of Central Province. For these areas the best data are the few well documented skirts in museum collections.
Reconstructing regional styles of dress is difficult because styles changed through time, presumably as they had always done, as a result of exchange between villages and through the long distance trading systems described in Chapter 3. Despite the poor data available, it is possible to identify a number of regions within which the communities shared broad patterns of skirt wearing. The locations of these are shown in Figure 5.2.

![Figure 5.2 Map indicating broad areas where similar fibres are worn.](image)

In Figure 5.2 Area A includes Mekeo and North Mekeo, where there is a diversity of fibre types in the earliest period until the end of Phase 3 when sago fibre appears to dominate. New patterns were introduced in between Phases 4 and 5, documented as derived from Roro styles. Area B encompasses Roro skirts which were generally sago fibre. Those made by people from the coast, referred to as Waima, are noted by a number of ethnographers as exporting skirts to other areas. Motu Koita Area C includes wearers of sago and nypa skirts. Historic photographs suggest that they also wore skirts with decorative pandanus elements, and illustrate the use of two skirt layers with nypa forming
an underskirt to the sago layer. The Hula in Area D are promiscuous in their use of
stylistic and fibre diversity in skirts. This is also true for the Abau district, Area E, which
is possibly a reflection of their access to diverse fibre and fashion through Hiri and Mailu
coastal trade networks.

Information collected primarily from Michael Ame from Mapia Village in the north
Mekeo region shows that although decorations on skirts could be important social
markers, many designs could be widely worn and were even traded among villages. On
the basis of examining historic skirts housed in the Australian Museum ethnographic
collections, Michael noted that once when North Mekeo people were visiting Roro friends
to attend a dance festival, they saw other patterns that they liked better. He indicated that
the skirt he observed in the Australian Museum collection shown in Figure 5.3 is an
example of this style. Because of the friendship that existed between them, the Roro
pattern owners gave them permission to use these designs. Similar skirts can be seen in
Figure 5.1, which was taken at a Roro village. This case shows that styles were not tightly
restricted to particular social groups and that fashions were regularly changing. This
practice makes it difficult to be completely confident about the exact origin of museum
artefacts that lack good provenience data. In the specific case of Figure 5.3 it would not
be possible to categorically assign the skirt to either Roro or Mekeo speakers.

Figure 5.3 Sago fibre skirt bearing a design common in the Roro region but also shared by
Mekeo speakers. A16040, AM. Photo: Erna Lilje,
When I visited Michael’s village of Maipa in 2008, I saw dyed patterns on sago fibre skirts that I had not observed in museum collections. I was also shown two skirts with multicoloured designs that could only be used by people of specific clans as well as other designs that could be worn by anyone. I was told that the clans can trade designs, but this must be publicly known and agreed. A particular design called *inepa* that is specific to Michael’s clan (Afai) is derived from the ridges on the base of a hornbill’s beak (Figure 5.4). The hornbill is their totem (Interview notes Maipa 5.10.08). The second pattern belongs to Maipamanga, the first clan of Maipa, and is called *angai* or *angai kepo afunga* (literally, fish stone place in Mekeo language) (Figure 5.5). It is derived from the pattern left on algae covered rocks, when they have been nibbled by mullet.
Figure 5.5 Angai pattern on a sago fibre skirt, Maipa, Mekeo, 2008. Photo: Anne Clarke.

During the dancing I observed at Maipa two women (e.g., seen on the right hand side of Figure 5.6a) were wearing the general purpose pattern. All of the other skirts shown in Figure 5.6 have designs associated with clan restrictions with regard to who may wear them. I had the opportunity to take part in the dancing for which I was loaned a sago skirt with a generic pattern that anyone could wear. It was similar to the ones that Dairi Arua, a Motu man, makes for selling at the markets (Figure 5.7), and that Avia Kivori, a Roro woman, uses for dancing (Figure 5.8).

Dairi Arua referred to skirts with these types of designs as ‘products’ because they represent the kind he makes to sell at the craft market. The pattern shown in Figure 5.7 is one of his own designs. He said that he likes to use triangles (not shown), diamonds (not shown) and rectangles in a particular pattern so he can recognise his skirts when they are worn in ceremonies (Dairi Arua personal communication 2010). This raises the issue of whether skirts made for exchange within traditional social networks were also decorated with generic styles or whether the makers tried to create specific patterns tied to their own identity.
Figure 5.6 Dancers at Maipa village, Birau River, North Mekeo, 2008 showing a variety of clan designs on dance skirts. Photos: Erna Lilje.

Figure 5.7 Sago fibre skirt made by Dairi Arua which he called a ‘product’ because it was specifically made for sale at markets, Port Moresby, 2008. Photo: Erna Lilje.
So within the one village of Maipa, people were using restricted patterns and generic/general purpose patterns. While dyed patterns may seem like a good attribute for observing changing social relations, a great deal more ethnographic research would be required to identify the relationship between stylistic patterns and language or social groups in Central Province. One feature skirts from the Maipa region share is a fuscia/purple stripe. A synthetic dye is now used but previously it had a natural source. It is discussed further in the section on materials (below) to illustrate how the types of dyes used may be more revealing than the patterns themselves.

Figure 5.8 Avia Kivori dancing, Port Moresby, 2008. Photo: Erna Lilje.
Production and Exchange

Although it is possible to identify the regions of skirt wearing traditions summarised in Figure 5.2, it is clear that boundaries between these were socially permeable and that skirt styles moved over large regions. In addition there was a great deal of exchange of skirts within Central Province and also between people in Central and other provinces. Some areas along the south coast of New Guinea specialised in the manufacture of skirts. The historic data on production centres for fibre skirts is summarised in Figure 5.9. There is a strong correlation between these areas and the existence of extensive mangrove swamps where palms, particularly sago, are commonly found. Note that Port Moresby is not shown as a major skirt producing region. In fact, people there imported most of their skirts from other areas where the essential raw materials were more plentiful. Historic sources also make it clear that skirts were widely traded. The large flow of trade means that it is not always possible to definitely pinpoint the region where a skirt was made or worn.

For example, in writing about the people of Port Moresby and the surrounding area, Stone (1876:58) observed that Motu and Koitabu women wore two types of dress. Their ordinary dress consisted of a ‘fringe girdle, or *rami*, 15 inches deep, made from the pandanus-leaf, completely encircling the loins’ (Stone 1876:58). The other ‘superior’ type made from sago-palm leaf and principally made outside the area at Gabadi (Stone wrote ‘Kapatsi’) near Manumanu, located to the west of Port Moresby (Stone 1876:58).

Turner (1878:489) too observed that Gabadi (Turner wrote ‘Kapati’) was especially noted for the manufacture of women’s dresses. He observed that Motu women bought their skirts from both the Elema (also known as ‘Toaripi’, Eastern Gulf Province) and from the people of Gabadi, a village up the Manumanu River (Turner 1878:476).
Figure 5.9 Skirt producing areas labelled on part of an original map from Sidney Ray (1894).

These are Areas a and c respectively marked in Figure 5.9. He described the Toaripi skirts as red (Turner 1878:476), which suggests that they were made of sago-fibre. Stone (1886:58) describes the Gabadi skirts as being white, but Turner (1878:476) suggests that they were made of nypa fibre.

Lawes (July 1881) who wrote that Koloko, Queen of the Nara people (Lawes wrote ‘Naala’ tribe) (Area c in Figure 5.9) was keen to trade, offering fine netted bags and women’s petticoats (Figure 5.10). Nara and Gabadi people are near neighbours. Lawes, like Stone, states that sago fibre skirts came from this area.

She is not above accepting tobacco, nor yet doing a little trade on her own account. They make very fine netted bags at Naala, [and] also the women's dresses or petticoats out of the sago palm leaf- Koloko [and] her husband went on board the ‘Harriet’ [and] they did a good stroke of business with the captain [and] crew- We bought a few netted bags too (Lawes 1876-1884: 23rd July 1881).
Haddon (1900:277) observed that the people of Yule Island bought a variety of items from different places, such as Port Moresby villages (nose, arm, and other shell ornaments), Mekeo (feather ornaments, gourds, and forks), Toaripi (large bark belts), and petticoats from Kivori. Seligman (1910:93) also notes that, among other goods, the Hula and Aroma bring ‘petticoats’ to the Port Moresby region to trade with Koita and Motu. Seligman (1910:93) observed that people from Kerepunu also sent ‘petticoats’ and toea to the Motu and Koita, and people from Manumanu (Seligman 1910:93-94) brought a variety of trade products with them, including sago fibre skirts, to trade with the Motu and Koita.

Another important source of skirts for Motu people resident near Port Moresby was the Hiri trade described in Chapter 3. The core purpose of the Hiri voyages was to exchange Motu pots for Gulf sago but other items such as ‘special’ sago fibre skirts were also traded. (Oram 1982:17).

**Changing Fashions**

When comparing the fibre skirts in historic photos with the artefacts in museum collections, it is clear that fashions in skirt wearing have changed in Central
Province even during the early historic period. The flux in fashions shows that fibre skirts represent the survival of dynamic cultural traditions but this also makes it difficult to assign unprovenanced skirts to specific regions or time periods. For example, a comparison of early collections of fibre skirts provenanced to the same region shows that there are major differences in the fibres used and the decorations applied. I illustrate this point with a case study focussed on the Mekeo region of Central Province (Area A in Figure 5.2).

Figure 5.11 Mekeo skirts made using unidentified plant fibres: a) ‘Woman’s petticoat’ Inawaia Z8459, CUMAA; b) ‘Woman’s petticoat’ Veifa Z8460, CUMAA; c) ‘Girl’s petticoat’ Oc1913,0407.192, BM; d) ‘petticoat’ Oc1913,0407.216, BM. A and b collected by Haddon, c and d collected by Williamson. Photos: Erna Lilje.

Among the earlier collected skirts from Mekeo, there are several made out of fibres I have not been able to identify. They were collected from the Mekeo region by Alfred C. Haddon (collection of CUMAA) (Figure 5.11), probably in 1898. In the same region, slightly later, Robert W. Williamson (collection of BM) (Figure 5.12) obtained sago skirts. The unidentified fibres in Fig.5.11 look similar to those shown in the Murray images (Figures 5.13a and b). Although these skirts appear to have been worn in early 1900 in Mekeo they are no longer recognised as propriety identity. In this case one can see how the museum collection retains a physical log of past material practices beyond the memory of a particular community.
When Michael Ame visited the ethnographic collections in the Australian Museum in 2007, he did not mention skirts being made of fibres other than sago. Since the Australian Museum does not hold skirts of this type, he would not have been prompted to mention them. Michael did report that in the past, before his time, North Mekeo people had worn a plainer style of skirt than they do now, with no patterns except for vertical stripes in two colours. He pointed out skirts in the collection like those as shown in Figure 5.14 as examples of this type.
Figure 5.13  (a) ‘A Mekeo Village’, detail from Murray (1912:163) facing page; (b) ‘A family party, Mekeo District’ detail from Murray (1912:165) facing page. Photos: Unknown.

Figure 5.14  Sago fibre skirt identified by Michael Aime as possibly resembling those worn long ago in the Mekeo region, A16033-2, AM. Note the contrast between this 1880s skirt and those collected in 1890s and 1910s by Haddon and Williamson respectively (Figs. 5.11, 5.12). Photos: Erna Lilje.
Certainly some of the differences in the skirts I observed in museum collections must be due to changing fashions, they might also reflect that specific kinds of skirts could be made for certain contexts, or purposes and this might change over time.

**Changes through Lifetime**

Although there are differences and similarities among the practices of the numerous peoples of the Central Province coastal areas, it is possible to generalise about the significant social transitions that a woman will pass through during her lifetime. The ritual events that mark a transition and the consequent change to a person’s roles and responsibilities in their community have corollaries in the realm of dress and bodily decoration. The various peoples of Central Province (those historically documented) paid formal recognition to times of life such as girls entering puberty (beginning to develop breasts), readiness for marriage, marriage, mourning, and widowhood. A girl or woman’s transition into most of these social statuses was marked, in part, by her receipt and/or wearing of a new skirt. One exception was widowhood, as in this case the widow was often responsible for making her own mourning skirt.

When a girl puts on her first skirt does not appear to have been marked by ceremonies, as far as historical observers were able to see. Roro girls would don their first skirt when they are small children at an age that was at their mother’s discretion (Seligman 1910:264). Seligman (1910:264) observed that it was common to see children as young as three wearing skirts. Turner (1878:476) made a similar observation, that little Motu girls would wear skirts as soon as they were able to walk.

During a conversation with Dairi in 2010, I tried to get a better idea about the use of colours and patterns on sago fibre skirts. I asked him if sago fibre skirts were ever left uncoloured. He told me that skirts for young girls could be undyed or plain turmeric yellow (*Curcuma longa*) and that people would know from this that she is just young and not ‘marked’, that is, spoken for. Girls wore multicolour patterned skirts to indicate that they have been spoken for. This skirt would usually have been given them by their uncle, who carried some degree of responsibility in deciding or arranging for the girl’s status (Dairi Arua personal communication). Dairi showed me a yellow skirt that he had made in 1990 which he keeps on hand ready to sell (Figure 5.15).

Similarly to Motu people, undecorated sago skirts are considered appropriate for young girls at Maipa, North Mekeo. Prompted by an examination of a Hurley photograph
(Figure 5.16), Michael Ame said that young girls wear short skirts when they are just getting breasts, but when a girl starts to get serious about boys, she will wear a long one (Appendix 4). Presumably he was referring to past practices because aside from dance events, Mekeo and North Mekeo people now wear Western clothing. This was added to on another occasion when I was told that undecorated sago fibre skirts are appropriate for young girls at Maipa, North Mekeo (Michael Ame personal communication), but unfortunately I did not observe any when I visited Maipa. At that time fibre skirts were only worn for ceremonial dancing.

![Figure 5.15 Sago fibre skirt made by Dairi circa 1990 and photographed at Port Moresby in 2010. The variation in the colour is due to the aging of the turmeric with which it was dyed. Photo: Erna Lilje.](image)
Among Central Province peoples unmarried women were often differentiated from married women by the quantity and flashiness of their bodily decorations and clothing. This can be illustrated with an example from the practices of people at Hood Point. During the early colonial phase, R. E. Guise (1899) observed that married and unmarried Hula women could be distinguished by hair and clothing. An unmarried woman wore ornaments, kept her hair long, and the type and shape of her ‘petticoat’ was different to that of a married woman. An unmarried woman could wear as many layers of skirts as she liked. Guise (1899:208) described the ‘under-petticoats’ as being made ‘by splitting the leaf of a broad-leaved plant into thin strips’ and mentions that on numerous occasions he’d used two or three as a mattress when camped on the floor at someone’s house. These bulky-sounding ‘under-petticoats’ were likely to have been made from leaves of pandanus sp.

Haddon (1898) described the skirts and clothing of the people of Veifa in his diary (cf. his sketch in Figure 5.17). The entry also provides an evocative anecdote of missionaries (Sacred Heart) and Papuans engaged in social negotiations about day-to-day practices.
The people about here wear native clothing almost exclusively it is quite rare to see a man or woman in any European clothing – and a good thing it is too... The women wear short black ‘grass’ petticoats, these are the shortest we have yet seen and I hear that the dress further inland is yet scantier. The missionaries do not lay stress on European clothes, but they expect the women and girls who attend the services to wear calico gowns and it was very amusing before a service to see the women and girls go to the girls’ schoolhouse and bring out their gowns - and throw (?others) theirs in the courtyard – and then put them on in the open – that was right enough but somehow it did not seem quite so proper to see them disrobe afterwards in the courtyard – though, of course, they were decently clothed in their fashion under the garbs of civilisation. As a matter of fact the women were very modest and virtuous as in many other parts of New Guinea (Haddon 17 July 1898:180-181).

![Figure 5.17](image) Haddon’s sketch of Babaka girls dancing P.2015.ACH1, CUMAA.

In present-day North Mekeo women wear skirts, usually two or three at a time with the shorter ones underneath. This creates an appealing swaying movement when dancing as shown in Figure 5.6 (Appendix 4). Avia Kivori (personal communication 2008) also
mentioned that it’s good to put on two skirts when you are dancing. The extra thickness makes them swing better, so that a bit of leg and tattoos will show (Figure 5.8).

An ordinary ‘rami’ was worn over the petticoats for casual day-wear. It was described as an uncoloured skirt made of ‘grass, but covered at intervals of an inch by white broad ribbons of the broad-leaved plant’ (Guise 1899:208). A much more elaborate skirt was worn for feasts and ceremonies. In contrast, the dancing skirt ‘kuli,’ which was worn by unmarried girls, was composed entirely of the broad strips of the broad-leaved plant with alternate ones dyed a deep red, and the skirt length was just above the knee. Guise gives two descriptions of the type of plant used to make the dance skirts. The first was the same broad-leaved plant used for under-petticoats (1899:208); and the second had the leaf of a small plant similar to a prickly pear (1899:215). The right side of the skirt was left partially open to reveal tattoos on the right buttock and thigh. The wearer of the skirt regulated the width of the space, and therefore the degree of exposure, so that ‘quiet modest girls [are] content with one of 3 or 4 inches, while girls of a flighty disposition affect an exhibition only just stopping short of positive indecency (Guise 1899:208). They were also adorned with crescent-shaped pearl-shell around their necks and arm-shells (Guise 1899:208).

Guise (1899) said that once a woman had married, she would no longer wear ornaments such as ear-rings and pearl-shell. She was permitted to wear her dancing skirt for a week or two, which marked her as a new bride. Following this period she would adopt the dress of a married woman. A married woman’s skirt was made of ‘grass’ and had no coloured or broad stripes. It reached to below the knees and, according to Guise (1899:209), had ‘no opening on the right side’. Regarding the latter, it seems likely that the skirt had an opening, in the sense that it had strings to tie, on the right side, but women fastened their skirts in a way that left no skin exposed. As a married woman her head would be kept shaved and she was no longer able to join in the dances, although she might play a role advising girls on dancing matters (Guise 1899:209).

Roro brides are given a new skirt when she goes to live with her in-laws, which she wears for one month so that everyone will know that she is promised (Avia Kivori personal communication 2008). It has a multicoloured pattern, like the one worn by Avia Kivori (Figure 5.8). She said (2008) that among Roro people this type of skirt is also used for dancing, feasts, and as bride-price, as well as marriage.
The next stage of social life is mourning and for a woman, especially becoming a widow (Figure 5.18). Guise (1899) also described the burial and mourning practices of the ‘inland people’ of Hood Point. An element of these practices was the two to three month seclusion of a recently bereaved widow or widower. A woman made her widow’s weeds during this time, which consisted of a long petticoat ‘made of grass’ that reached her ankles. Generally, widows would wear a second skirt draped over her shoulders (Guise 1899:210-11; e.g. Figure 5.19). In the case of a widower, his dead wife’s skirt was made into a square shape, about eight inches wide, onto which any ornaments she possessed were tied. A string was attached to it so that the widower could wear it around his neck, and hanging beneath his right arm (Guise 1899:211). Similarly, in the past, North Mekeo widows wore dark skirts stained with swamp mud (Visit notes AM 2007/8). In contrast, in the Aroma area a black colour was applied to the skin.
In addition to variation caused by the status of the wearer, there are special skirts for specific functions, such as gardening. For example, Motu women would wear a new skirt when it was time to plant their garden and another new one when they want to harvest it (Dairi Arua personal communication). Garden skirts are thicker at the back. A leaf is tucked in at the back to protect the skirt from the rubbing of the string bag and as extra padding.

**Special Properties of Fibre Skirts**

Dairi Arua (personal communication) reported that women have the power to protect against sorcery using skirts. He thinks that the belief that fibre skirts can protect against sorcery is quite widespread in Central Province. Women were able to use fibre skirts to call for a cease fire during an outbreak of fighting, by holding an outstretched skirt up in the air. Guise (1899:213) mentions a similar custom followed by the peoples of Hood
Point. In this region in the aftermath of a battle, if a woman should throw her skirt over a wounded man, he would be protected from further violence being done to him.

Dairi Arua (personal communication) also noted the belief that fibre skirts have the power to protect even in the absence of a woman. For example, currently men wear fibre skirts during some special occasions at church, such as *peroveta* singing (a form of choral singing introduced by Polynesian missionaries). The skirt, borrowed from a close friend or relative, is worn over their clothes and fastened at the front. It protects them against harmful sorcery that may be sent their way. Standing together men and women are strong against these kinds of attacks, but if a man is alone he is vulnerable, and boys especially so. Hanging the skirt above the door in a home protects the people within. It is good to put one directly above a baby’s bed to protect it from malicious sorcery.

**Stages of Skirt Manufacture**

Having reviewed the wide range of social factors that shape the great variety of skirt forms that have been made and used in Central Province, I now turn to an analysis of how the skirts were made since it is within this process that many social relations are formed, sustained or strengthened. It requires the intelligent deployment of a maker’s skill to adapt skirt production to suit the specific raw materials selected and to produce a skirt with the desired features. A variety of raw material resources are used to produce the elements from which a skirt can be constructed. The source and processes used to convert raw materials into those that can be used for the body of the skirt and the waistband string as well as the colourants used are described here. From my fieldwork I gained the impression that serviceability was rated more highly than the specific properties of the different materials used, but for my interpretation of skills and time and energy inputs, it is important to understand the capabilities and limitations of the raw materials used for skirt production.

Among the first historic references on skirt manufacture, Stone (1876:58) described the process of making a sago fibre skirt as consisting of the following stages: (1) tearing the leaf into fine shreds and forming them into small bunches; (2) tying them near the ‘tassel’ or fringe-end; (3) dying yellow and a brownish red; (4) threading a hundred bunches compactly onto a string, and (5) cutting the skirt to the preferred length. These are quite similar to those that I have reconstructed from various sources, but he has omitted the first stage which involves acquiring the raw materials from the forest.
Skirt Body Raw Materials

The most commonly employed plants used for the fibre that comprises the main part of a skirt are sago (*Metroxylon sagu*), nypa (*Nypa fruticans*), and pandanus (*Pandanus sp*.). I will only describe the processes used to make sago and nypa fibre since I did not have the opportunity to observe the production of pandanus fibre for skirts. This omission is not a serious problem because few of skirts in my museum collection sample are made of this material. Sago palm (*Metroxylon sagu*) has a widespread distribution in lowland swamps and along streams in many parts of Papua New Guinea and elsewhere in the Asia-Pacific region. The species varies in form according to how tall the trunks grow (8 to 18 metres), the length of the leaves (up to 7 metres long), and the amount and size of spines on them. The spines are flexible but sharp and can be up to 7.5cm long (Riffle and Craft 2003:388). Many parts of *M. sagu* provide useful raw materials for people in Central Province. The pinnate (feather-like) leaves can be used as thatch; leaf petioles, when split, are employed for weaving house walls and partitions; and the trunks are used for house rafters (Stewart 1994:137). The sago made from the stem starch is also a staple for many communities. The palms that I observed at Pinu Village had numerous, long spines (Figures 5.20, 5.21b).
Figure 5.20  Sago palms, Pinu village, 2010.  Photo: Erna Lilje.

Colloquially known as nypa or mangrove palm, *Nypa fruticans* occurs in clumps 4-9 metres tall, on river estuaries and on soft muddy banks of small waterways in New Guinea and
parts of the Asia-Pacific (Stewart 1994:143). The stems are prostrate or spread underground. The leaf bases are usually covered in mud. The large, slightly twisting, pinnate leaves are around 6m long, including the petiole, which may be a third of the length. The leaflets are c. 90cm long, and are stiff but not rigid. Their colour can range from light or yellowish green, to deep emerald green, depending on soil and water conditions (Riffle and Craft 2003:393).

The species has many uses but its most important role is probably the stabilization of river and coastal soils (Stewart 1994:142). It is used for thatch and for weaving baskets and other utensils. In some places in the Asia-Pacific, the leaflets are used for rolling cigarettes. The dried petioles can be used for the construction of huts, for fuel, and for fishing net floats, because they are filled with tiny air sacs. The young, unfolding leaves may be eaten as a salad (Riffle and Craft 2003:393) and young seeds and the endosperm are also edible (Stewart 1994:142).

Sixty-six species of the genus *Pandanus* occur in Papua New Guinea (Stewart 1994). They grow from sea level to an elevation of 3000m (Powell 1976). The genus is comprised of woody palm-like plants with long sword-like green leaves that have spines on the underside of the midrib and on the margins. The trunks are grey coloured and many species have prop roots (Hyndman 1984:287). Many *Pandanus* species provide food in the form of fruit, seeds, and oil. The aerial roots can be used to make cordage. The flexible parallel-veined leaves lend themselves to the manufacture of various objects, such as thatch, mats and hats in addition to skirts. In contrast to the nypa and sago palm, pandanus leaf material is used in a strip or ribbon-like form.

Making Fibre for the Body of the Skirt

Dairi Arua made arrangements so that I could observe sago and nypa fibres being made. He has a number of connections to Pinu Village, the primary one being an important friendship that he had made through Christian fellowship as a teenager. Dairi also uses raw materials from this place to make sago and nypa fibre for his own skirt-making activities. Pinu Village resident Bubu Vabu (translates to grandmother widow) Ara Kere took charge of my instruction. Her younger relatives Phillip Aro and Naime Kassman assisted her by doing the heavy work of cutting down palm spears (Figures 5.21-23).
As noted above, sago and nypa palms have pinnate (feather-like) leaves. The leaflets (pinnae), which are the individual blades that create the ‘feather’ shape of the pinnate leaf, have a linear shape. They project from the mid-rib (rachis) of each palm leaf. Each leaflet has a ‘rib’ along its central axis. The outermost leaves of the sago and nypa palm trees are the most mature on the plant. Toward the centre of the crown, the leaves are progressively younger. At the very centre is a tall fibrous leaf sheath or ‘spear’ that is comprised of young leaves that have not yet unfurled. The leaflets contained within the spear are the source of sago and nypa fibres.

Some of the earlier steps followed to make sago and nypa fibre are similar, however they diverge in the latter part of the process. The steps common to sago and nypa are as follows:

- Cut down spears;
- Break the spears open and expose the leaflets;
- Remove ribs from leaflets.
The first task is to cut down some spears. Sago palm groves have a very thick leaf litter and the spines of sago palms are a hazard when walking and cutting down palm leaves. Before the spear can be accessed, the mature leaves around it must be cut away using a bush knife (Figure 5.21a). Once exposed, the palm is chopped down close to its base and carried to another area for processing (Figures 5.23 and 5.24). The same process of removing mature leaves is followed to access the central spear of nypa palms, but it is done without the encumbrance of spines. At Pinu the sago spears we harvested ranged in size from 640 to 680 cm long whereas the nypa spears ranged from 250 to 300 cm long.
Figure 5.23a-c Cutting down the central sago spear. Photos: Erna Lilje.
The next task is to split open the spear and extract the immature leaflets within (Figure 5.25). The spear is comprised of immature leaves furled together. It is split open by being flexed in the transverse direction and by bending it along its length. The manner in which this is done differs between individuals, but always involves a sharp hand knife or bush knife. The immature leaves are pulled and worked free until the leaflets are exposed. The leaves and leaflets that had made up the hard outer surface of the spike are discarded.
Immature leaflets are shut like a closed book. The rib, the spine of the book, is removed by making a small tear in the leaflet, close to the rib. A finger or thumb is inserted into the tear and pulled along its length, splitting the rib away from the rest of the leaflet. Ribs can be removed from leaflets in situ, that is, while they are attached to the rachis, or following their removal. Sago leaflets must be kept moist until the fibre is extracted and so it is probably better to remove the leaflets from the spear and keep them in water until they can be further processed.

Figure 5.26  Are Kere splitting open nypa palm stems. Photo: Erna Lilje.
Extracting Nypa Fibre

Two methods for cracking open the nypa growth spike were demonstrated for me in Pinu Village by Are Kere. The first method is to bang the spike against the ground or a tree. This causes it to open up along its weakest lines (Figure 5.25). It can then be twisted and flexed until it opens up (Figures 5.26, 5.27). The second method begins by making a cut with a bush knife. The spine is then twisted and flexed until it can be split open (Figures 5.28 and 5.29).

Figure 5.27 Twisting and flexing the nypa stem to remove the leaflets. Photos: Erna Lilje.
Figure 5.28 A second method demonstrated by Are Kere for removing leaflets using a knife to open up a cut followed by twisting and flexing. Photos: Erna Lilje.

Figure 5.29 Are Kere removing leaflets from a nypa palm stem. Photo: Erna Lilje.

Making Nypa Fibre

From this point onwards some processes used to make sago and nypa fibre differ. De-ribbed nypa leaflets are four to six centimetres wide. They can be left as they are or made into narrower strands by tearing them length-wise (Figure 5.30). The fresher the nypa, the easier it is to de-rib and tear. De-ribbed leaflets are gathered into a bundle. The cut edges of the rachis-end of the leaflets are first made level with each other, and then surplus, rejected ribs are used to tie the bundle in two places close to the leaflets tip ends. The space between the
ties is hooked over a toe whilst the maker is sitting on the ground with legs outstretched. Each leaflet is picked up in turn and kept under tension as it is torn length-wise into narrower strips. The widths of the strips made are at the discretion of the maker, who may choose to make a variety of sizes. The beginning tear made with the fingers will determine the width of the strip, as the tear will continue along the ‘grain’ of the leaflet. Strips torn whilst the material is fresh have clean crisp edges; strips made when the material is drier are more ragged and imperfect.

![Figure 5.30 Are Kere extracting leaflets whilst deribbing a nypa spike. Photo Erna Lilje.](image)

The nypa fibre is almost complete at this stage. The only remaining step is to soften the strands. A bunch of fibres are gripped in both hands. The hands are brought together and the strands are scrunched, flexed and rubbed against each other. This process is repeated until the strands have been fatigued along their entire length. The nypa fibres are unrumpled by flicking the strands through the air several times with a whip-like motion. Finally, they are laid stretched out on low bushes and grasses in sunlight until they are dry.
Nypa fibre is made from the entire flexible part of leaflets, that is, minus the leaflet rib. In contrast, sago fibre is made from only the outer membrane of the flexible part of the leaflet. In this case, de-ribbed leaflets are gathered into a bunch with their tips together (Figure 5.31). The tip end of the bunch is twisted around and held with the toes, whilst the maker is sitting with outstretched legs (Figure 5.32). This enables the maker to apply tension to each leaflet in turn as they carry out the next step. While the sago leaflets are fresh, it is possible to lift up the membrane at the rachis end using only fingers. The membrane is then peeled away from the leaflet along its length. Each leaflet provides two membranes, one from each half of the
leaflet. A knife may be required to lift the rachis-end of a membrane if the leaflets have started to dry out (Figure 5.33). This process must be done very soon after the shoots and leaflets have been harvested or the membrane will not pull away properly.

Figure 5.33 Are Kere removes the rachis end of a membrane with a knife. Photo: Erna Lilje.

At this stage the sago leaflet membranes are approximately one centimetre wide. Membranes of a similar length are tied together close to the rachis end. Held with both hands the strands are scrunched and fatigued along their length. This has the effect of transforming the broad membranes into fine strands (Figure 5.34). The sago fibres are unrumpled by flicking the strands through the air several times with a whip-like motion and untangled by gently combing fingers through them (Figure 5.35). Finally, the fibre bunches are hung up to dry. Once dry, the sago fibres are divided into evenly sized hanks. In Pinu village each hank is knotted in two places near the leaflet tip end. The hanks are then coloured, after which they are ready to be assembled into a skirt.
Figure 5.34 Are Kere converts the sago membranes into fibres. Photos: Erna Lilje.

Figure 5.35 (a) Scrunching the fibres; (b) Flicking the fibres to produce fine strands. Photos: Erna Lilje.

Making String

The string most often used in the construction of fibre skirts is a two-ply yarn. Although materials may vary, for example banana fibre or plastic, the spinning technique used to make two-plied yarn is the same. Anyone who has observed the making of a string bag (*kiapa* in Motu; *billum* in Tok Pisin) will be familiar with the rolling of fibres between palm and lap. Firstly, a small bunch of fibres are aligned with each other and pinched at the centre between
the thumb and finger of one hand. With this grip in place, the bunch is folded in two. The ‘two’ strands thus formed are lain on the skin of one thigh. The palm of the other hand is used to press and roll the fibres against the skin of the thigh. The backwards stroke twists the fibres into two yarns. The forwards or knee-wards stroke combines the two yarns into a two-plied yarn by twisting them in the opposite direction. Fibres are progressively added to the ends of each yarn until the desired length is reached. This method of spinning permits length to be added to the string as it is required, including during the construction of a skirt.

*Musa* species (banana plants) are an herbaceous plant generally grown for their fruit, although they are also cultivated for fibre used in the production of specialist papers and woven cloths. In Papua New Guinea the fibres are sometimes used for making a plied yarn that is suitable for a waistband string of a skirt. The ‘trunk’ of a banana plant, called a pseudostem, is actually composed of a bundle of tightly clasped leaf sheaths, which is the source for the fibres used for making skirt string. I was shown the making of two-ply yarn using two materials, but the identification of the composition of string in collections is not readily done and so it is difficult to identify the most popular sources of material used for waistband strings. The technique used to make the string is the same, regardless of the source of the fibres.

In the following sequence of photos Avia Kivori and her husband Joseph Akauma demonstrate the method of making string from fibre derived from a banana tree at Kilakila village in 2008. First, a segment is cut from the upper part of the outer layer of a banana trunk (pseudostem) (Figure 5.36). The segment is scrunched and stressed and then rolled in two directions to soften it (Figure 5.37). Next the inner surface of the segment is pulled away and this soft part thrown away as rubbish (Figure 5.38).
Figure 5.36  Joseph Akauma cuts a segment from the outer layer of a banana trunk. Photos: Erna Lilje.

Figure 5.37  (a) Avia Kivori scrunches and stresses the trunk segment and (b) Segment is rolled in two directions. Photos: Erna Lilje.
Figure 5.38 The inner surface of the segment is pulled away and the soft part discarded. Photos: Erna Lilje.

The fibre in the remaining outer surface of the trunk is pulled apart into strips of about 5mm wide (Figure 5.39). Pulpy material is scraped from the fibre using a shell that is found in mangroves (Figure 5.40). The shell is dragged along the strands, away from the body. The

Figure 5.39 The segment is divided into strips approximately 5mm wide. Photo: Erna Lilje.
end that is held in the hand is swapped around so that the strand can be scraped along the rest of its length (Figure 5.41) This step is complete when all of the pulpy material is removed and only fibres remain (Figure 5.42).

Figure 5.40 The shells used for scraping banana fibres are found in mangroves. Photo: Erna Lilje.

Figure 5.41 Pulpy material is scraped from the fibre using a shell. Photos: Erna Lilje.
The fresh fibres must be left to dry a minimum of two to three hours on a hot day before being made into string. Using damp fibres, Avia Kivori demonstrated how to spin the fibres into two-ply string by rolling the fibres on the thigh with the palm of the hand (Figure 5.43). The string can be made longer by adding strands in a back and forth rolling motion that
intertwines and then twists the fibres together. It can be lengthened (indefinitely) from the ‘working’ end of the string (Figure 5.44).

![Figure 5.44 The ‘working’ end of two-ply string. Photo: Erna Lilje.](image)

String can also be made from a prepared fibre purchased in bunches from the market place. Dairi referred to this light coloured fibre as ‘bush material.’ Although he knew the kind of plant it came from and how the fibre was extracted, I gather that for urban populations it is simpler just to buy it. He could not provide an English word for the plant, but once pointed them out to me while we were driving. It looked similar to sisal (*Agave sisalana*). In addition to plant fibres, man-made materials in the form of plastics can be used to make string. Through a creative reconstitution of modern refuse, yarn can be spun from plastic fibres pulled from the warp and weft of a plastic rice sack as shown by Dairi in Figure 5.45.
The application of colour is an optional step on the manufacturing process that can occur after the fibres have been prepared and prior to the construction of the skirt itself. Colourants, substances that are used for giving things colour, can be derived from a variety of vegetable, mineral and synthetic sources. They may be applied to any of the fibre types, however, in Central Province colouring occurs in differing degrees for sago, nypa and pandanus skirts. As far as I have observed, sago fibre skirts are always coloured. Although on simple inspection of museum specimens it is not always possible to identify with certainty the source of colours that have been used to decorate the fibre skirts, to interpret the chaîne opératoire, it is important to understand the range of potential raw materials and processes employed. My information was mainly obtained from conversations with cultural experts, but was supplemented in one case by a practical demonstration.

I have seen colour being applied to nypa during fieldwork (Dairi Arua personal communication 2008) but have not been able to accurately discern it in museum collections. In general, pandanus fibres are undyed within the museum collections I observed, with the
exception of one skirt (ETA 641, Macleay Museum). This skirt of mixed materials, acquired by the Chevert Expedition in 1875 (see Figure 4.2), has pandanus fibres in the body of the skirt that have been coloured yellow, red and black. There are also a small number of skirts from Mekeo coloured greenish-black that are made from a material that I have not been able to identify. Local natural dyes are used for yellow and black. From the latter half of the twentieth century onwards newer colours such as green, pink and purple were added to the palette.

Yellow is a colour widely employed in Central Province for traditional garments and body painting. It is derived from the rhizomes of *Curcuma longa*, from which the spice turmeric is made. *C. longa* is a herbaceous perennial that grows in high rainfall tropical climates and prefers well-drained loam (Figure 5.46). Informants told me that in Central Province it can be found easily growing in secondary vegetation around the edges of gardens.

![Figure 5.46](image) A frond of *Curcuma longa*, used for making yellow dye. Maipa, North Mekeo, 2008. Photo: Erna Lilje.

The yellow colouring is obtained by grating the root. Hot water is then added to the pulp. With the addition of coconut milk, the same process is used for face-painting. Fabrics dyed with turmeric soon fade with exposure to light. Sometimes the yellow colouring on older skirts held in museums can only be identified by manipulating the attributes of a digital image of the object. In contrast, skirts that have had little light exposure are warmly vibrant.
Black and grey colours can be achieved by applying a type of mud found in mangroves to skirt fibres. In Pinu village I was told that the mud in which the nypa palms were growing was also used for colouring skirts. Mud can be applied in much the same way as paint. The capacity of this medium to delineate designs on skirt fibres more precisely is reflected in the way it has often been employed to create narrow horizontal bands.

Red dyes derived from natural sources are linked with laborious, multi-stepped, time-consuming production sequences. A red colour can be obtained from both the roots and bark of certain mangrove trees. The colour derived from mangrove roots is laborious to prepare. Preparation of the root involves drying it for two months during a hot period of the year, after which it is pounded and boiled to make a dye (Avia Kivori personal communication 2008). Some mangroves have a red inner bark that can be used to make red dye. The outer bark is cut away to expose the inner bark which is scraped. The scrapings are steeped in water creating a dye bath into which the skirt is immersed.

Store-bought red dyes appear to be used ubiquitously in contemporary-traditional garments not only because of the difficulty of making the dye, but also the removal of mangroves in some areas means the raw material has disappeared. In contrast, the vast majority of red dye represented in museum collections is of natural, plant derived sources. Store dyes, which are easy to obtain and use, produce vivid results that that differ markedly from natural dyes.

Green is a popular store-bought dye. It does not appear to correlate to a local, naturally derived dye and green is not visible on older skirts held by museums, nor is there alternative evidence to suggest that it was used in the historic period. The adoption of green to the palette may coincide with its availability in shops. However, an older informant told me that long ago, before green dye became available in the shops, they used drawing ink to colour things green (Avia Kivori personal communication 2008).

Blue used by North Mekeo people can be derived from a fruit called omeme in the local language. The colour is present in the fruit’s skin and is released by chewing and spitting it out (Appendix 4). Currently people use store-bought dyes for purple and pink. In at least one area, North Mekeo, the use of store purple correlates directly with the existence of a traditional purple. Local informants say that the knowledge of how to make the colour, including which plant to use was lost about two generations ago (Michael Ame Appendix 4), although the colour itself is remembered. The adoption of industrially produced purple and pink dyes attests to the continued, or cultivated, resonance of the hue. Another purple that I know of only anecdotally was the use of carbon copy paper to colour fibres. I have been told that the
disappearance of carbon copy paper from offices was an idiosyncratic local phenomenon at that historical moment. Unfortunately, I have not been able to expand on this information.

Applying Colourants to Fibres

Some colourants, such as store-bought dyes, are applied by boiling the fibres. Curcuma yellow can be applied to sago fibre during the scrunching stage. The curcuma root is grated up and the pulp is squeezed in the hands until they are covered in the juice. This colour is then applied while the fibres are being scrunched into fine strands (Dairi Arua personal communication). The fibres are also still moist and fresh at this time which may affect the results. Dairi’s yellow skirt mentioned above was coloured in this way. Alternatively, Curcuma yellow can be applied to sago fibres after they have dried (Avia Kivori personal communication). Other non-dye colourants described above are painted or dabbed onto the fibres. This can be done before or after the skirt is constructed. Dairi, Are and Avia each said that whenever the fibres are coloured, yellow is the first colour to go on to a sago fibre skirt (Dairi Arua, Avia Kivori, Are Kere personal communications). Are Kere (personal communication 2010) colours sago fibre by first knotting them into hanks. She then stretches them flat out over a board, before dabbing the colour on. Michael Ame (Appendix 4) said that the skirts are painted with a brush after they have been constructed.

Constructing a Fibre Skirt

The first stage in making a fibre skirt is to prepare the unspun fibres by bundling them into hanks. In the case of sago, prior to attaching sago fibre to the waistband string, they are knotted into small hanks. One or two knots are tied into each hank and each of these hanks will in turn be attached to the waistband. If a fringe is being made the following steps will be taken: as hanks are fastened onto the waistband string one knot will be on the fringe side, or outer side and then the next knot on the interior. In this way the fringe is kept full. With string-stitch binding types, the knots that bundle the hanks together are specifically made on the tip end of each fibre. I did not observe the process for skirts of the sago fibre binds waistband type. The making of hanks is not necessary with nypa, which is simply gathered into bunches during the making of the skirt.
Waistbands

Once the fibres have been prepared, they need to be attached to the waistband. In English Dairi uses the word ‘weaving’ to describe the process of binding fibres to a waistband string, and hence constructing a waistband. Earlier in my research I had thought of the process initially as ‘knotting.’ It seemed a good place to start as there already existed a range of established terminologies and illustrative conventions, for example in the context of sailing and rigging that could be used to specify the parts of a rope and give instruction on their execution. However, I found many waistbands in the museum collections on which individual elements, such as hanks of fibre, were interworked with neighbouring elements in ways too linked and complex to be described by this terminology. Even the words ‘knot’ and ‘knotting’ seem to connote discrete actions performed serially, a practice which is suitable for some skirts but not all. I have therefore adopted the term ‘weaving’ to refer to the process followed to construct a waistband by fastening hanks of fibre to the waistband string. It is particularly apt if skirt construction is conceived of in relation to basketry, rather than woven cloth.

As noted in the basic description in Chapter 4, fibre skirts have a single structural element: the waistband (Figures 4.4, 4.5). The waistband is constructed when the fibres of the skirt are fastened to the waistband string. The technique used to create the waistband determines the performance characteristics of the waistband and hence the skirt. The choice of technique is constrained by the type of material being used, the purpose for which the skirt is being made, and, importantly, by the knowledge and expertise of the maker. The quality of its execution reflects the expertise of the maker and is indicative of the care, time and energy invested.

The starting point, common to skirts of all fibre-types, is the waistband string. The technique for making two-ply yarn string was described above. For skirt making the string is used doubled-up, so it must first be folded in half, so that both ends of the string are together and the two strands lay side by side. At the opposite end a knot is tied to create a loop. This string with a loop tied into it is the waistband string.

The string, doubled-up, must be long enough to encircle the hips at least once and have enough additional length so that the skirt can be fastened by tying the string to itself. However it need not have the entire desired length at the outset as the strings can be lengthened later in the process if needed. Many skirts have strings that are long enough to wrap around the body twice. These long strings are useful because they can be used to wrap
around a skirt rolled up for storage. Rolling and wrapping keeps the fibres in good order and minimises the amount of straightening-up that needs to happen when the skirt is next used.

Figure 5.47 Dairi Arua weaving a nypa fibre skirt, Port Moresby, 2008. Photo: Erna Lilje.

Once the string is ready, hanks of fibre are fastened into place while one, or both, strands of the waistband string are held under tension. This is achieved by temporarily tethering one end of a line, such as a rope or a strip of fabric, to the loop in the waistband string. The maker, who is seated on the floor, passes the line behind their back and around one foot or toe, and then tethers it to one or more strands of the waistband string (Figure 5.47). This forms a closed circle around the maker. It can be adjusted to put the waistband string under tension and to reposition the skirt as work progresses. Preparing the waistband string for use is as far as it is possible to go in describing common aspects in construction of fibre skirts. The next actions in the process depend upon the weaving technique that the maker has chosen to use.
Although numerous weaving techniques can be used to construct a fibre skirt, I have found that they fall into two broad categories, or binding types. I have labelled the binding types ‘string stitch’ (Figure 5.48) and ‘fibre binds’ (Figure 5.49). These varieties are characterised by the way a sewing element is used to secure unspun fibres into place. The sewing element can be composed of a strand of the waistband string; additional string/s tied to the waistband string (string stitch); or unspun fibres that are used in the place of string/s (fibre binds). The fibre binds approach is characterised by the way that hanks of unspun fibre are attached and secured into place using the hank itself, that is, without a sewing element.

![An example of a string stitch type of binding. A16034-2, AM. Photo: Erna Lilje.](image)

**Figure 5.48** An example of a string stitch type of binding. A16034-2, AM. Photo: Erna Lilje.
Final Stages

After the weaving is completed, the skirt is hung up so that the fibres can be combed out so that they hang straight and regular (Figure 5.50). To keep them from getting tangled again, they are rolled up lengthwise and stored as shown in Figure 5.49. Before a skirt is worn, it is cut to fit the wearer so that the hem is even all the way around. This creates a distinctive wave in the skirt line that is described more fully in Chapter 6.
Case study in skirt construction

Although the general stages in skirt manufacture have been fully described above, it is useful to recognise that there are a broad number of variations in the weaving and construction techniques. The following visual case study recorded in Port Moresby, 2010 illustrates the techniques involved in one stitch style that Dairi Arua favours, *Autoi aua*, for its performance qualities and aesthetic. Unlike inferior stitches which have a tendency to make the waistband twist and become messy, this style keeps the fringe and the body of the skirt distinct from each other. This aids the preservation of the skirt in storage, and allows the waistband to stay firm against the body when worn.
Figure 5.51  Detail of Dairi’s fibre bind weaving technique, Autoi aua. Photo: Erna Lilje.

Figure 5.52  Dairi ensures a constant tension is maintained on the waistband string as he straightens and neatens the fibres as he progresses. Photo: Erna Lilje.
Figure 5.53 A hank of nypa fibre is straightened and the ends evened off. Photo: Erna Lilje.

Figure 5.54 Feeding the fringe end between the taut waistband strings. Photo: Erna Lilje.
Figure 5.55 Using his left hand as a guide, Dairi determines the amount of fringe needed. Photo: Erna Lilje.

Figure 5.56 Dairi folds the hank under to form the body of the skirt. Photo: Erna Lilje.
Figure 5.57  The hank is fastened in place using strands of nypa that are progressively braided along the length of the waistband.  Photo: Erna Lilje.

Figure 5.58  The next stage is to fasten the hank in place by tightening the stitch.  Photo: Erna Lilje.
Evaluating Key Parameters

I used the observations that I made in the collections and my discussions with cultural experts to determine parameters for quality, additional detailing, relative difficulty and performance characteristics. My ideas regarding the characteristics that might be thought to be indicative of these parameters were initially developed through the artefact analysis that I carried out in museum collections. In addition to the education I received from the various cultural experts, I took the opportunity to see if my ideas had any validity for contemporary makers. This process of moving backwards and forwards between collections and ethnographic data produced the characterisations used in this study. In my analysis reported in Chapter 6, I focus on specific weaving styles that show greater levels of difficulty and demand a high level of skill from the maker.

As part of the process of devising a way to assess time, effort and expertise, I elicited descriptions of different Motu weaving techniques or *aua* (Motu) from Dairi. He also commented on their respective strengths and weaknesses. These data are presented in Table 5.1. Dairi’s examples do not comprise an exhaustive list of all Motu weaving because I identified a number of additional types, as described in Chapter 4 (Table 4.5 and Appendix 2). Through conversing with him about the qualities needed to achieve each different task, I
developed my capacity to make qualitative judgements about waistbands in the collections and to learn to perceive the mode of construction used to produce a waistband.

Table 5.1 Motu weaving types

| Unu unu (A) | Unu unu (A) can be used to bind any fibre to the waistband, however, it is especially useful for making pandanus or silikeu (Motu) skirts. The name refers to the motion of the string being wrapped around the bundles of skirt fibre. Pandanus strips range from 0.5-7 cm in width. A combination of fibres may be used in a skirt with narrow strips of pandanus or sago fibre forming the main volume and wider strips of pandanus used at intervals. Unu unu enables a maker to incorporate the wide pandanus strips into the construction of the waistband alongside the other materials. Dairi also stated that when women dance in a pandanus skirt, it makes a whistling noise that can be heard from a distance. It is an evocative image that underlines the value of speaking with a cultural expert. |
| Autoi aua (B) | Autoi aua (B) can be used for both sago and nypa fibres. It is a relatively simple technique that is fast to do but is still an effective method for constructing a waistband. Dairi employs it from time to time and likes the clearly differentiated fringe that is created. It is fine for dancing because the waistband stays flat against the body. |
| Aulalo and aumuri (C and D) | Aulalo and aumuri (C and D) can be used for both sago and nypa fibres. The techniques are simple and can be completed quickly, however, a skirt made with these will not be very good for dancing as the waistband twists up rather than remaining flat against the body. This also creates a problem when the skirt is rolled up for storage. The twisting of the waistband causes the fibres to be messy, which means that extra time needs to be spent combing fingers through the fibres when the skirt is unrolled. Dairi would not use these techniques and would consider someone using them a ‘weak weaver.’ He thought other skirt makers would agree and that the maker might also be judged to be lazy for having chosen a quick and easy technique. Dairi supposed that a person hearing these criticisms would be unlikely to make the same mistake twice. |
| Aloasi (E) | Aloasi (E) can be used for both sago and nypa fibres. Dairi considers this to be a style for ‘weak weavers’ but not for the same reasons as aulalo and aumuri. The intermingled short and long fibres means that the inside and outside of the skirt are not clearly differentiated from each other. It is worth noting that while Dairi considers this to be an undesirable characteristic, in the collections there are many well made skirts that do not have fringes. In these cases the makers instead favoured stitches with superior... |
Mededae (F) can be used for both sago and nypa fibres. Competent skirt-makers may employ this *aua*. The inside and outside of the skirt can clearly be differentiated because the fringe is clearly separated from the long fibres. It makes a good skirt for dancing because it stays flat on the hips and does not twist up.

Au aua (G) can be used with any material including nypa, sago, or pandanus. Skilful makers may use this *aua*. It is good for dancing. The name *au aua* is also used to describe a zigzag stitch when sewing with cloth and thread.

Atu hatua (H) can be used for sago or nypa. It is relatively simple and fast.

Another way to evaluate the time, effort and skill requirements of skirts is to look at the components used in the weaving. In both waistbands using the string stitch or fibre binds approach unspun fibre can be used in the place of string as the sewing element. Unlike string which can be progressively extended indefinitely, unspun fibres are of a finite length. To complete the waistband, additional fibres must be added to the sewing element further along in the process. This takes skill and experience as the maker is manipulating loosely twisted together fibres rather than 2-ply string, while simultaneously maintaining a consistent thickness and even tension in the sewing element. This procedure increases the difficulty level of the entire waistband making process as the sewing element must be twisted and looped and fed through to create the stitch. Dairi agreed that skirts with this feature can only have been made by expert makers.

Any number of additional strings can be tied to the waistband string to be used as sewing elements. For example, among the stitches demonstrated by Dairi, *Unu unu* (A), *Aloasi* (E) and *Mededae* (F) can be executed with any number of additional strings or sewing elements. While the number of waistband strings affects the appearance of a waistband, working with multiple strings does not greatly increase the difficulty of stitching a skirt. The maker executes the same looping and binding moves whether they are using a single stitching component or a number of stitching components sequentially. If, however, unspun fibres are used as the sewing element, the difficulty increases because this procedure requires greater co-ordination from the maker.

‘Fibre binds’ weaving techniques range from the easy, such as *atu hatua* (H) and simple to the difficult and complex, such as *Au aua* (G). It is highly significant that none of the cultural experts that I met was able to shed much light on the most complex styles that I documented in the collections. Both Dairi (personal communication 2010) and Avia (personal
communication 2008) thought that the details of the most complex styles were probably created by threading hanks of fibre onto a large needle. Dairi (2010) was impressed by the fineness of the examples I showed him in the collection, but the styles were a great deal fiddlier than any he was likely to use in practice. I think that given the importance Dairi places on skirts having a fringe, in order to be able to clearly discern its inside and outside, these styles may not be that useful for him as they are more often found on fringeless skirts.

**Evaluating Practices**

Emerging from the reconstruction of the necessary inputs of time, energy and skill is a range of conclusions that will be used in the analysis of the museum artefacts. Based on my field notes, it is possible to estimate the time required to prepare the fibres needed for skirts. The data presented in Table 5.2 are based on my fieldwork at Pinu village in 2010. It is clear from these estimates that sago skirt making is much more labour intensive and also more dangerous and physically taxing because of the nature of the plant than skirt making using nypa fibres.

**Table 5.2** Number of spears and fibre preparation times for an adult-size skirt

<table>
<thead>
<tr>
<th>Fibre</th>
<th>No. of spears (minimum)</th>
<th>De-rib and extract membranes/spear (mins)</th>
<th>De-rib and extract leaflets/spear (mins)</th>
<th>Make finer strands/spear (mins)</th>
<th>Total time/spear (mins)</th>
<th>Total time/skirt (mins)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sago</td>
<td>25</td>
<td>7.5</td>
<td>4.5*</td>
<td>12</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>Nypa</td>
<td>20</td>
<td>2.3</td>
<td>5.1 **</td>
<td>7.4</td>
<td>148</td>
<td></td>
</tr>
</tbody>
</table>

*Membranes from a couple of spears can be refined simultaneously, reducing the time required.
**This is based on 7.7 strips per leaf, but wider strips take less time.

Although sago skirts appear to require the most effort, the intended use of a fibre skirt is more important in affecting a maker’s choice of materials, weaving techniques, and coloured patterns. These may vary depending upon whom the skirt is made for and the activity for which it is made. ‘Whom’ can encompass individuals that will wear it, give it or receive it as well as those who might acquire it through exchange. ‘Activity’ can encompass occasions to mark changes in status; church events, revived ‘traditional’ festivals, national celebrations, and commercial cultural performances.
Within these parameters, makers can customise weaving techniques in a range of ways. Simple techniques can be quite effective for the purpose but waistbands made with differing weaving techniques perform differently from each other in ways that relate to the manner of their construction. Some techniques are more difficult to achieve than others. My findings about the possible functions of weaving types and their requirements in terms of expertise and effort are used in Chapter 6 to evaluate the social significance of the variations through time that I observed in the fibre skirts in the museum collections.

**Skirt Chaîne opératoire**

As described in Chapter 2, my analysis of social relations created in skirt production, is informed by a reconstruction of the chaîne opératoire of fibre skirt making. As developed by Leroi-Gourhan (Leroi-Gourhan, 1943, Leroi-Gourhan, 1945), this approach involves describing the operational sequences needed to make artefacts including how these are learned in a social context and socially effective. Gosden (1994) developed this approach to highlight the fact that implicit within the production of a particular artefact are dimensions of social connection that both precede its production and, unforeseen by the maker, follow it at later times and places. In order to discern the social connections implicit in their production, it is necessary to understand the actions that were required in the production of fibre skirts. At the broadest level I have identified three required steps. These include (1) Access raw material resources; (2) Convert resources into skirt-making materials; (3) Construct skirt.

The application of colour is an optional fourth step that may precede the construction of the skirt. Based on the library and ethnographic research summarised in this chapter, Table 5.3 summarises the very basic social relations that are required for each stage in the manufacture of a skirt. It is clear that every activity from accessing raw materials to learning the techniques of skirt making require social negotiations of some form.
**Table 5.3** Social relations required to make a fibre skirt.

<table>
<thead>
<tr>
<th>Access raw material resources</th>
<th>Convert resources into materials</th>
<th>Construct skirt</th>
<th>Colour skirt</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the maker does not own the resource, they must seek permission to access it. The permission may be sought from existing social relations (new or old) and may have been formed in a context other than that of skirt making.</td>
<td>The maker must have learned their skills, which requires social relations with other makers.</td>
<td>The maker must have learned some specific techniques and broad principles through social relations with other makers.</td>
<td>Maker must have knowledge of the application of colourants to fibres learned as a result of social relations with other makers.</td>
</tr>
<tr>
<td>The owner may grant access without a stated expectation of payment but a gift may be given anyway.</td>
<td>Fibres (sago and nypa) need to be processed on location, so good relations with the owners of the resources are required.</td>
<td>Maker may adapt what they have been taught. This may be in response to particular circumstances, such as choosing a faster technique or one that uses fewer materials.</td>
<td>The maker’s choices of colour and pattern are informed by the purpose for which the skirt has been made, for example: as bride price; for a young unmarried woman; for use by a specific clan.</td>
</tr>
<tr>
<td>Choice of fibre (sago or nypa) is made with regard to the purpose of the skirt, that is the intended context of its use e.g. <em>hiri moale</em> festival; bride price etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This table was developed from working with experts in Central Province and through discussions with them about the skirts in the ethnographic collections in the Australian Museum in Sydney. The process of organising this knowledge around the concept of *chaîne opératoire* allowed me to see in a very different, and more attuned manner than when I first worked with the skirts in collections. The importance of this knowledge is made clear in the next chapter when I discuss the results of my analyses of the museum skirts.
Chapter 6

SKIRTS IN COLLECTIONS

Figure 6.1 ‘Woman and baby, Paramana, Aroma’ Photo: Kathleen Haddon, P.2068.ACHI, CUMAA
Tracking Social Change

The main aim of this study is to gain a better insight into the lives of Papuans, and especially Papuan women, as they experienced a century of rapid social change. There has been a dearth of knowledge about the perspectives of past Papuans as they negotiated new impositions and pursued new opportunities. This study has brought together a broad range of data obtained from ethnographic and historical sources to find out what the fibre skirts held in collections can reveal about the social contexts in which they were made and worn. These include present-day cultural experts, museum collections, historic photos, and written accounts. My discussion in Chapter 2 of the chaîne opératoire shows that by learning about the sequences of action involved in the production, use, and exchange of artefacts we can perceive the webs of social connection in which they are enmeshed. The contemporary skirt-making principles, learned from cultural experts and reported in Chapter 5, in particular the steps of the production processes and the qualities that characterise well-made skirts, inform my interrogation of the data acquired from fibre skirts held in museum collections.

The historical and ethnographic data I reviewed in Chapter 5 concerning the production and use of skirts provide a preliminary map of skirt variation through time and across space within Central Province. However, a study of the museum fibre skirts themselves can considerably enhance our understanding since they comprise direct material evidence of the activities of Central Province people. Despite small sample sizes for some of the variables, the skirts add significantly to a more nuanced understanding of history than that based on written sources alone.

To understand changes in the material characteristics of skirts, I needed to learn how variations were linked to the expertise and effort invested in them. The education I derived from present-day skirt makers, enhanced by my hands-on experiences, have informed the analyses and how I interpret patterns over time. In this chapter I begin by tracking chronological changes in the particular attributes of the skirt sample I recorded, which was described in Chapter 4. For the purposes of this study, the history of Central Province summarised in Chapter 3 has been broken up into periods of equal length as presented in Table 6.1.
Table 6.1 Historical phases for the analysis of skirts in museum collections from Central Province, Papua New Guinea

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1849-1870</td>
<td>Fleeting encounters (1 skirt)</td>
</tr>
<tr>
<td>1871-1885</td>
<td>Missionary impositions</td>
</tr>
<tr>
<td>1886-1900</td>
<td>Early administration</td>
</tr>
<tr>
<td>1901-1915</td>
<td>Consolidation of administration</td>
</tr>
<tr>
<td>1916-1930</td>
<td>Economic consolidation &amp; development</td>
</tr>
<tr>
<td>1931-1945</td>
<td>Colonial dominance</td>
</tr>
<tr>
<td>1946-1960</td>
<td>Australian development</td>
</tr>
<tr>
<td>1961-1975</td>
<td>Leading to independence</td>
</tr>
</tbody>
</table>

As I argued in Chapter 1 multiple social relations are involved in the production and circulation of fibre skirts. This point was demonstrated in Chapter 5 through the châîne opératoire created from the survey of ethnographic data from Central Province. My analyses of fibre skirts will link aspects of an artefact’s materiality to social change. To reconstruct the significance of the materiality of the objects, one must first gain an understanding of the contexts of raw material procurement, manufacture and use. In addition, first-hand experience guided by cultural experts is necessary to fully comprehend the expertise, and time and energy inputs required to make a skirt.

I will reconstruct social relations by examining changes in key variables. Sets of potential social relations exist at each of the links in the chains of connection between the skirt maker and the museum collection. Putting together the results, I then reconstruct a social history viewed from the perspective of skirt makers and users.

**Chronological Coverage**

The sample of fibre skirts from museum collections, shown in Table 6.2, is unevenly spread over the period of study. Since there is only one skirt for the earliest encounter in 1849, my study puts little emphasis on this time period. The bulk of the skirts were collected between 1871 and 1900 with relatively few skirts acquired in the subsequent decades. This pattern in itself is quite meaningful, as I will discuss later in the chapter, because it reflects changes in the social contexts in which skirts were worn and exchanged.

In order to make the skirt sample sizes more amenable for analysis, I consolidated the four latter intervals into two thirty year intervals: i.e., IV/V (1916-1945) and VI/VII (1945-1975). As well as ensuring reasonable sample sizes, pairing these intervals makes sense.
from a historical perspective. The foreign administration was entrenched in Central Province at the beginning and throughout the period 1916 to 1945 (IV/V). This was a time when the Australian administration was driven by the desire to make the territory profitable.

To this end the Australians set about steadily crafting a framework (e.g. legal, administrative, public service, public utilities) that would invite other westerners to consider the territory as a land of economic opportunities, especially for private enterprise. The majority of these economic activities were mining and cash crop plantations. Tourism also increased with steady numbers of casual visitors either passing through Port Moresby en route to other areas, or ‘taking the sights’ of Central Province. As a consequence, the number of foreigners resident and transient in Central Province markedly increased. Social relations centred on the concept of ‘race’ take on a particular caste during these years, the essence of which can be suggested by commonly used dichotomies such as: master/servant; man/boy; adult/child; clean/dirty. These attitudes were reflected in discriminatory laws, including segregation and censorship, which were brought in with some regularity from 1915 onwards.

Table 6.2 Fibre skirt sample sizes by chronological periods.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Skirt Sample Size</td>
<td>1</td>
<td>68</td>
<td>51</td>
<td>16</td>
<td>7</td>
<td>5</td>
<td>8</td>
<td>6</td>
<td>162</td>
</tr>
<tr>
<td>Percentage</td>
<td>1</td>
<td>42</td>
<td>31</td>
<td>10</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>100</td>
</tr>
</tbody>
</table>

During the period 1946 to 1975 (VI/VII) the Australian administration pursued economic and social development goals in Papua. In contrast to the economically exploitative modus operandi of prior decades (IV/V), the administration expanded the public service and developed infrastructure for education and health. Many Papuan people would have experienced World War II and its effects firsthand because Port Moresby was the base for the Allied Forces and Central Province was an arena of key battles. For many, their wartime circumstances would have led them to travel widely and interact with people, indigenous and foreign, that they would not otherwise have met. Labour laws that restricted peoples’ movements around the country were abolished by the end of the war. Internal migration, especially to Port Moresby, increased during the post-war period. From the 1960s onwards, the development aims of the Australian
administration were re-oriented toward preparing Papua and New Guinea for self-
government and independence.

**Changing Demands**

From the 1870s onwards Central Province was affected by interactions with, and
eventually, the impositions of the British and later the Australians. These changes were
centred upon Port Moresby. The analyses of fibre skirts show that their physical
characteristics have been shaped by the changing contexts in which people have found
themselves. Fibre skirts in museum collections constitute a record of indigenous peoples’
materially-mediated negotiation of these new social landscapes. Their responses were
given direction by the intended use/purpose of the skirts, but they were also constrained by
changes in the access to and availability of basic raw materials and/or experts in the art of
skirt construction.

The intended use of a skirt will determine the choice of raw materials, construction
methods and forms of decoration employed by the producer. As described in Chapter 5, a
skirt made for gardening or other chores will differ from one constructed for a festival.
With the increasing adoption of western clothing from 1945, over time the use of fibre
skirts for everyday wear ceased. Consequently, I predicted that in VI/VII day-wear/non-
festival skirts should disappear from the museum collections. As western clothing became
adopted and the primary use of skirts became oriented toward special occasions and
festivals, we might also expect to see changes in skirt attributes that favoured visual
impact and decreased the relevance of the very finest quality workmanship. For example,
the ratio of work clothing to festive skirts should decrease through time and so
differentiation related to life cycle could be decreased as corporate identity in relation to
other groups as well as Westerners would become the key factor in the fewer settings
where skirts are worn.

The decrease in fibre skirts as normal day-wear might also have had an impact on
general levels of expertise. As fewer skirts were required, the occasions on which
expertise could be developed and specialist knowledge passed on would also have
decreased. It is possible that, related to the shift toward western modes of dress, there
might also have been the concomitant loss of customary practices in which the production
of special or new skirts formed a part of their observance. Examples of this include
making and wearing a new nypa skirt to harvest the garden by Motu women, the wearing
of single colour (undyed or yellow) sago fibre skirts by girls in Mekeo areas who are not yet looking for a boyfriend, and multi-coloured patterned ones by girls who are.

In addition to changes over time in the use or purposes for which skirts were made, one would also expect the constraints within which producers work to have changed. It seems likely that a producer’s ability to access materials as well as the availability of materials and/or knowledge-holders, would have been strongly affected by the particular social and historical processes. These reverberations would have played out at multiple social scales ranging from the sphere of interactions between indigenous groups down to relationships within a single indigenous group. For example at the larger end of the social scale, colonial authority may have inhibited traditional exchange networks or altered the form in which they continued, while at the same time stimulating the development of new trade/exchange possibilities. In other words, some doors closed while others were opened.

At the local end of the social scale, it seems likely that the transmission of expert and special knowledge held by older generations to younger producers would have been impacted by the administration’s practices. For example, the relocation (voluntarily or by compulsion) of people away from home villages would have introduced the impediment of distance from sources of raw materials and a pool of knowledge. The latter appears even more serious if we consider that some aspects of knowledge, especially about material practices, are embedded within particular landscapes. This could mean that the pertinence of some bodies of knowledge would be diminished by the relocation of a knowledge-holder to another place. For example, we can predict that loss of access to natural red or purple dyes would mean changes in the kinds of colourants used for the skirts.

My analyses will examine these predictions by focusing on the major activities surrounding the procurement of raw materials, skirt manufacture, their distribution within and between communities and the contexts of use. To examine these in detail, I will focus on changes in the makeup of raw materials and in the effort and expertise invested in their production. By identifying the skirts that were made for exchange, I will trace chronological variations in social networks. Finally, the production of some skirt types and not others should reveal differences in the social settings in which skirts were worn.

**Key Variables**

As described in Chapter 4, I recorded the fibre skirts held in collections in terms of an array of physical attributes/properties. To develop a description of the variables, and the
parts of a garment to which they relate, I found it useful to imagine a skirt being worn by a standing person. The key attributes are shown in Figure 4.5. The variables used in the study are summarised in Table 6.3 and will be described in more detail in the relevant section below. Variables were recorded for each of the 162 fibre skirts in the sample, unless prevented by physical constraints, such as conservation concerns about the friability of the fibres, particularly in terms of unrolling skirts or skirts mounted on a backing board. For this reason the ‘total’ number of skirts represented in the various tables will vary among the attributes reported below. In the following sections, I present the results in terms of a series of themes relating to use, expertise and exchange.

**Table 6.3** Attributes recorded for fibre skirt analyses.

<table>
<thead>
<tr>
<th>Skirt body fibres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colourants, number</td>
</tr>
<tr>
<td>Colourants, source</td>
</tr>
<tr>
<td>Colourants, type</td>
</tr>
<tr>
<td>Colourants, patterns</td>
</tr>
<tr>
<td>Waistband size</td>
</tr>
<tr>
<td>Skirt length</td>
</tr>
<tr>
<td>Split, presence or absence</td>
</tr>
<tr>
<td>Split size</td>
</tr>
<tr>
<td>Tiers, number</td>
</tr>
<tr>
<td>Fringe, presence or absence</td>
</tr>
<tr>
<td>Hem detail, type</td>
</tr>
<tr>
<td>Hank width</td>
</tr>
<tr>
<td>Binding type</td>
</tr>
<tr>
<td>Binding detail</td>
</tr>
<tr>
<td>Stitch styles</td>
</tr>
<tr>
<td>Fancy stitches</td>
</tr>
</tbody>
</table>

**Raw Materials**

The nature of the raw materials used in the skirts is quite important because it monitors access to particular parts of the environment as well as cultural knowledge. I predict that this would have changed through time as people were dislocated from their local communities either by colonial governments, disruptions of WWII, or through migration into Port Moresby. For example, since sago does not grow in the Port Moresby area, people who wore skirts made from that material would have obtained them through Papuan trade networks that must have been disrupted by changes in colonial governance.
With the persistence of one kind of raw material, such as sago, it could be inferred that Papuans deliberately maintained pathways or countered the disruption to their access by negotiating new ways to acquire the resource. Disruption to social organisation could also have led to loss of knowledge about the use of particular plants to make dyes.

**Skirt Body Fibres**

The body of a fibre skirt is usually composed of unspun fibres and strips derived from a range of sources, predominantly plants. Although more recently plastic is being substituted, none of the skirts in the museum sample from Central Province were made with this material. Among the skirts, I was able to identify the following raw materials, all of which were described at length in Chapter 5: sago; nypa; pandanus; and coconut. As shown in Table 6.4, sago is by far the most common fibre type throughout the entire chronological range. The next most used is nypa with pandanus being quite rare in the collections. There is only one example in which coconut fibres were incorporated and this is in combination with pandanus. The overall pattern is not surprising since sago was widely used along the entire S.E. coast of New Guinea.

The persistence of sago as the most commonly used fibre in the museum collections, however, may reflect people’s desires to maintain or even strengthen existing social connections with Port Moresby or intermediary communities that could channel desired goods or connections. Since sago is not available in the dry environments around Port Moresby, the various cultural groups living in this region obtained sago fibres and completed skirts through exchange with other coastal groups, as, for example, by way of the *hiri* trade network. As discussed in Chapter 4, prior to the colonial period sago skirts were an important element of exchange between groups living near Port Moresby and other coastal groups. As the centre of social and economic power shifted to the new political capital, other people in other regions began looking for ways to have better access to economic opportunities. The growing fashion of wearing sago fibre (versus other raw materials) skirts in Port Moresby and other regions may signal that these groups were re-enforcing their traditional networks to ensure and improve access to new opportunities arising in Port Moresby. An example of this strategy can be observed in the way North Mekeo communities reinforced their connections to coastal trade partners. This led to them dropping materials popular in period III and adopting sago for making fibre skirts. In addition, they acquired new sago fibre skirt decorative motifs from their (coastal) Roro
trading partners, as described by Michael Ame (Appendix 4).

The overwhelming predominance of sago in the museum sample suggests that some cultural groups are not well represented in my sample of collections, since from my analysis of the historic photos, pandanus featured heavily in the region east of Port Moresby, for instance in Rigo and Aroma (Figure 6.1; Figure 5.2, Areas D and E). This pattern indicates that the museum collections may not be a comprehensive sample of all cultural groups in Central Province.

Figure 6.2 ‘String-making, Pt. M.’ Port Moresby 1898 to 1899. They are wearing utilitarian work skirts. This nypa fibre skirt was commonly worn by Motu women and girls at the time. Photo: Cambridge University Anthropological Expedition to the Torres Straits, P.1889.ACH1 CUMAA.

Another important pattern is the disappearance of nypa. It is most often used for day to day clothing and especially for utilitarian activities like gardening. For example, in the iconic photos of potters and women carrying water pots in Port Moresby that have been widely reproduced (e.g., Figures 6.2 and 6.3), the skirts are almost always made from nypa. In the Port Moresby area nypa skirts were also typically worn as petticoats beneath sago skirts on special occasions such as feasts. The use of nypa is especially common in this region probably because sago does not grow in this local region and those skirts had to be obtained through exchange, whereas nypa can easily be accessed from the mouth of the Vanapa River region (Figure 5.2, border of Areas B and C).
Skirts made from nypa are concentrated in period I and rapidly disappear from the collections (Table 6.4). The decrease in nypa skirts could be explained as a change in preferences of collectors. Since nypa skirts were commonly worn until at least the 1920s, it seems more likely that the decrease in these skirts in museum collections reflects a change in the relationships between local people and expatriates and not skirt wearing patterns.

The Motu-Koitabu peoples are, and historically were, the traditional landholders of the territory upon which Port Moresby is sited. Since Port Moresby was the epicentre of social change for the peoples of Central Province from as early as the 1870s, Motu-Koitabu peoples would have faced new opportunities and challenges brought about by the influx of non-indigenous people and power structures in the earliest decades, to a greater

---

**Table 6.4 Skirt body fibre type by chronological period.**

<table>
<thead>
<tr>
<th>Fibre</th>
<th>1849</th>
<th>1871-1885</th>
<th>1886-1900</th>
<th>1901-1915</th>
<th>1916-1945</th>
<th>1946-1975</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sago</td>
<td>51</td>
<td>44</td>
<td>12</td>
<td>10</td>
<td>14</td>
<td>131</td>
<td></td>
</tr>
<tr>
<td>Nypa</td>
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<td>12</td>
<td>1</td>
<td>1</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pandanus*</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nypa &amp; sago</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pandanus &amp; sago</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Coconut &amp; pandanus</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
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<td>3</td>
<td>3</td>
<td>1</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
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<td>68</td>
<td>51</td>
<td>16</td>
<td>14</td>
<td>162</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fibre</th>
<th>1849</th>
<th>1871-1885</th>
<th>1886-1900</th>
<th>1901-1915</th>
<th>1916-1945</th>
<th>1946-1975</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sago</td>
<td>75</td>
<td>86</td>
<td>75</td>
<td>84</td>
<td>100</td>
<td>81</td>
<td></td>
</tr>
<tr>
<td>Nypa</td>
<td>100</td>
<td>18</td>
<td>6</td>
<td>8</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pandanus*</td>
<td>1</td>
<td>6</td>
<td></td>
<td></td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nypa &amp; sago</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td>0.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pandanus &amp; sago</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td>0.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coconut &amp; pandanus</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>0.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>6</td>
<td>19</td>
<td>8</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

* Includes material recorded as ‘possibly pandanus’
extent than other Central Province peoples. We can therefore expect that the majority of the skirts in the collections were obtained from these groups.

Within the museum collections I have not detected a clear signal of a change in the ratio of utilitarian versus dance/special event skirts except in a limited way. In the past Motu peoples have worn both sago and nypa fibre skirts. Sago skirts were for special purposes and occasions, while nypa skirts were for everyday use as seen in the photos of daily tasks in Figures 6.2 and 6.3. It is noteworthy that nypa skirts seldom enter the collections after period I (1870-1885), although historic photos show that Motu women were wearing nypa skirts as their normal daily attire into the 1950s (e.g., Figure 6.4). Motu people especially were the first point of contact for non-indigenous residents (such as missionaries and administrative officers) and visitors (scientists and explorer/collectors). Initially, their geographical and social centrality is reflected in the collections, as several nypa fibre skirts were acquired. I think that the small number of nypa fibre skirts acquired post-1885 reflects a transformation in the social standing of Motu people. By period II, they are perceived as familiar by non-indigenous people, and therefore less interesting. In addition to this, a long exposure to ‘external’ influences experienced by Motu speakers may have been seen as exerting a detrimental effect on their perceived authenticity. The absence of nypa could also be the effect of a deliberate effort by Motu to maintain social relations with sago-producing communities.

![Figure 6.3](image-url)

**Figure 6.3** ‘Woman brushing the pot with a decoration of mangrove bark’ Port Moresby 1898/99. Port Moresby 1898/99. She is wearing a nypa work skirt typical worn by Motu women and girls of this period. Photo: Charles Seligman or Anthony Wilkin. P.1934.ACH1 CUMAA.
Although one might expect that Motu material culture would dominate the museum collections, nonetheless the seeming absence of skirts from Rigo and Aroma (recognisable by the presence of pandanus fibres) is especially puzzling given that there are numerous historic photographs from these regions showing women wearing skirts made with a variety of materials, but featuring the presence of pandanus. The silhouette of these skirts tends to be multi-tiered and quite fulsome. So one possible explanation is that the ‘missing’ skirts within museum collections have been wrongly attributed to Milne Bay where similar shapes have become iconic for that area. In future work it might be useful to thoroughly investigate skirts and associated documentation for those classified to Milne Bay.

Figure 6.4 ‘Boera people, Port Moresby, Papua New Guinea,’ 1953. Photo: Terence and Margaret Spencer, nla.pic-an22703320 NLA.

Colourants

For the purposes of my analysis I limited my study of colourants to skirts made of sago, which as we have seen is the most common fibre type in the museum collections. Since they are made from sago, it is reasonable to assume that most of these skirts were not utilitarian. The number of colourants used in a skirt was examined because
it could indicate the amount of effort invested in production or might reflect regional or chronological variation in styles. Also if there was a shift from primarily utilitarian to ceremonial skirts, as suggested by the majority of sago fibre skirts, then the functional change should be reflected in the use of colourants. One potential difficulty in using this variable, however, is that natural colourants are highly fugitive and fade with age. This means that colours might be difficult to perceive in the older specimens. The data summarised in Table 6.5 does show that multi-coloured skirts were present in each chronological period.

Another way to analyse skirt raw materials is to examine the source of the colourants. ‘Non-natural’ or synthetic colourants have been defined as a category that encompasses store-bought dyes, as well as colourants derived from re-purposed sources. Table 6.5 shows that colourants derived from natural sources are by far the most common among the skirts represented in the collections. It is notable that non-natural colourants enter the collections in periods IV/V, just post World War I. In part this is likely to be explained simply by the fact that colourants derived from alternative, non-natural, sources were not widely available to Pauans in the previous periods.

Table 6.5 Number of colourants visible by chronological period.

<table>
<thead>
<tr>
<th>Number of colours</th>
<th>I (1871-1885)</th>
<th>II (1886-1900)</th>
<th>III (1901-1915)</th>
<th>IV/V (1916-1945)</th>
<th>VI/VII (1946-1975)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>1871-1885</td>
<td>1886-1900</td>
<td>1901-1915</td>
<td>1916-1945</td>
<td>1946-1975</td>
<td></td>
</tr>
<tr>
<td>One</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Two</td>
<td>22</td>
<td>17</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>47</td>
</tr>
<tr>
<td>Three</td>
<td>25</td>
<td>25</td>
<td>7</td>
<td>5</td>
<td>8</td>
<td>70</td>
</tr>
<tr>
<td>Four</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
<td>47</td>
<td>12</td>
<td>11</td>
<td>13</td>
<td>135</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage</th>
<th>I (1871-1885)</th>
<th>II (1886-1900)</th>
<th>III (1901-1915)</th>
<th>IV/V (1916-1945)</th>
<th>VI/VII (1946-1975)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
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<td>6</td>
<td>8</td>
<td>18</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>Two</td>
<td>42</td>
<td>36</td>
<td>25</td>
<td>27</td>
<td>15</td>
<td>35</td>
</tr>
<tr>
<td>Three</td>
<td>48</td>
<td>53</td>
<td>58</td>
<td>45</td>
<td>62</td>
<td>52</td>
</tr>
<tr>
<td>Four</td>
<td>8</td>
<td>4</td>
<td>8</td>
<td>9</td>
<td>8</td>
<td>7</td>
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<tr>
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<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

I always examined the number of different colours applied to sago fibre skirts. In Table 6.6 it is clear that the use of three colours is the most common throughout the entire study period followed by two colours, which also continued to be quite popular. The three colours most commonly used were red, yellow and grey, whereas two colour
skirts are generally red and yellow. In contrast, the use of one or four colours is persistent through time but each is generally less than 10 per cent except for the use of one colour in the most recent periods. Among skirt wearing regions that I have labelled as Mekeo and Motu (Figure 5.2, A and C), the presence of one colour (yellow or undyed sago) is associated with unmarried girls or young women. So the predominance of multi-coloured skirts in collections may suggest that most were made for betrothed or older women. The increase in single dyed skirts may be a function of the small sample sizes, but since skirts from the north western areas are less common in these late collections, the change could also reflect cultural differences.

Table 6.6 Source of colourants by chronological period.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural</td>
<td>52</td>
<td>47</td>
<td>12</td>
<td>9</td>
<td>7</td>
<td>127</td>
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<tr>
<td>Synthetic</td>
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<tr>
<td>Combination</td>
<td></td>
<td></td>
<td>2</td>
<td>5</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
<td>47</td>
<td>12</td>
<td>11</td>
<td>13</td>
<td>135</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>82</td>
<td>54</td>
<td>94</td>
</tr>
<tr>
<td>Synthetic</td>
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<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Combination</td>
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<td>38</td>
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<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

We can now turn to the specific colours that are present on the skirts. The data are summarised in Table 6.7. Throughout the entire period the organic colourants yellow and black were consistently used probably because they are derived from natural sources, i.e. plants and mangrove mud (see description in Chapter 5), and would have been easy to access despite social changes. The persistence of these two colours shows that they carry a great deal of resonance for people in Central Province.

In contrast, natural red that is produced from a mangrove root and/or a bark requires many weeks of preparation, good sunny weather, and a significant contribution of labour. It is therefore interesting to compare the incidence of natural red with synthetic alternatives pink or purple and green. Although there is a decrease in the proportion of the skirts decorated in natural red from 1916 onward (as seen in Table 6.7), red features prominently throughout the late periods. One possible explanation is that the source of the natural red has actually changed away from the mangrove root/bark and has been replaced
by a red berry from *Bixa orellana*, a shrub or small tree that was introduced from tropical Americas (Neich and Pendergast 1997). This new plant required less processing and might have been more widely available. Although informally I noted a shift in the intensity of the red colour from a cool, dark red to a hot, bright red, I did not record this systematically. Changes in the source of the red dye would be an interesting subject for further research.

Finally, green, which is a re-purposed colour, as described in Chapter 5, appears in periods IV/V, whereas pink, which had to be purchased from a store, only occurs in the most recent time period. Purple, which could be either a re-use of a material or a commercial dye, is also restricted to the most recent periods VI/VII.

**Table 6.7** Presence of various colourants used on fibre skirts.

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<th></th>
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<td>Number</td>
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<td></td>
</tr>
<tr>
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<td>5</td>
<td>108</td>
</tr>
<tr>
<td>Pink &amp;/or Purple</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Green</td>
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<td></td>
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<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
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<td>40</td>
<td>11</td>
<td>9</td>
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</thead>
<tbody>
<tr>
<td>Percentage</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
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<td>100</td>
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<td>38</td>
<td>92</td>
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<td>Pink &amp;/or Purple</td>
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<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

The number of colours and source of colourants used on skirts are variables that can provide an indication of the materials available to producers and the changing contexts of fibre skirt use. The collections show that synthetic and new colourants were available and added to producer’s palettes from period V (1931-1945) onwards (Table 6.7). The new colourants made fewer demands on producers relative to some of the traditional colours, although they would have required access to cash, as discussed below.

The number of colours applied and the source of the colourants can be used to gain insights into the various social contexts of which fibre skirts were a part. Colours and patterns continued to be a significant means of representing social identity throughout the study period. It is possible to perceive an ongoing process in which people re-negotiated and innovated with colours, patterns and styles of skirt. Through this process, of
incremental or radical changes, the skirts associated with a particular social identity would transmute over time.

The addition of new types of colourants (synthetic and re-purposed imported products) to the available palette (from period V onwards) and the tweaking and innovations to pattern and colour choices that communities and individuals made over time occurred as a part of traditional practices. The substitutions and addition of new colourants generally made fewer demands on a producer's time and energy. Most of the synthetic colourants would have had to be purchased with cash. The possession of cash implies that the skirt-maker, or skirt-making community, participated in the money economy.

There is anecdotal evidence that two re-purposed products that were used as new colourants were ink and carbon paper. I have been told that one of the inks used in Australian schools during the mid twentieth century was green and made by adding liquid to a crystalline powder. I think it is likely that this is the ink that Avia Kivori mentioned as having been used in the olden times. She could not tell me much about it as it was used before her time and before synthetic colourants became available. I propose that two skirts that have green on them, and were acquired during the 1930s or 1940s from Port Moresby (QM E-16011-0 and E-16012-0), may be examples of this source of colourant. The use of carbon paper is a later phenomenon. There are four examples of skirts that were possibly coloured using carbon paper. The earliest is from Port Moresby and dates from 1966 (QM E-16670-0). The three others were all acquired at Cape Rodney-Marshall Lagoon in 1975 (QM E-18031-0; E-18032-0; E-18033-0). Further evidence is necessary to support my identifications of the source of the colourants, but I think that these two re-purposed materials are a good example of the ways Papuans have creatively engaged with new social contexts, such as school and office work, and how they have pursued the continuation of traditional material culture production using the resources and opportunities available to them.

Colourants also help us understand social connections. Red, for example, is no longer made from mangrove sources and more convenient colourants have been adopted in their place. On the one hand, this signals the loss of long-held knowledge and practices associated with its production. On the other hand, in the context of practice theory, the production of material culture, while contingent upon past practices, can also be understood as a social negotiation. As practices, the production of material culture can be, as in this example, both the medium of tradition and the medium of social change.
Viewed from this perspective, the substitution of natural red with a new synthetic red perfectly encapsulates how material culture practices create historical processes. Despite innovations in the use of colour, the proportion of single colour skirts has steadily increased over time. For a number of Central Province peoples skirts with a single colour were associated with young girls or unmarried teenagers. Their presence in the collections right up to 1975, suggests that although the contexts in which skirts were worn had changed from everyday to festive/ceremonial, the social/marital/age status of wearers may have continued to be acknowledged in customary ways.

Social Context of Skirt Use

Having described changes in the raw materials used in skirts, I now turn to analyses of the properties of completed skirts. Through changes in the sizes, shapes, and styles of the skirts, it is possible to monitor the social contexts of skirt use and changes in fashion that relate to wider social change in Central Province.

Waistband Size

The waistband is that part of the garment that is designed to pass around the waist or hips of the wearer. Its size was obtained by measuring the stitched part of the waistband. It does not include the string that protrudes from either end of the waistband. The size of a waistband provides an indication as to whether a skirt was likely to have been made for adults or young children. I have divided the measurements into classes that relate, as far as possible, to the size of the person for whom it was intended, as shown in Table 6.8. This value was partly informed by present-day commercial clothing dimensions (Australian girl size 8 waist is 59cm) and partly upon groupings I observed in the distribution of the sizes in my sample (Figure 6.5).
I have defined a child-sized waistband as 58cm or less (classes a and b in Table 6.8). This is a conservative delineation of child-size that errs on the side of undercounting the number of children’s skirts. In contrast, adult waistlines are defined as 59cm or greater, but it is more difficult to associate the intermediate sizes in Table 6.8 with a particular age group as they may have been worn by older children, teenagers or small women.

It is important not to interpret waistband measurements as simply equivalent to that of a Western-style cloth skirt because the two types of garment ‘work’ in different ways. Several factors need to be taken into consideration because they affect how the waistband measurements can be understood. Firstly, the flexibility of the raw material is important. Fibre skirts are fastened onto a wearer using string ties and are therefore highly adjustable. Pandanus skirts are less so because they are relatively rigid. In addition to being adjustable, individuals within a community wore (and wear) skirts in a variety of positions. They can be worn high, on the actual waistline of the wearer, low on the hips, or anywhere in between. A second consideration is the number of fibre skirts that are worn at the same time. Layering creates a fuller skirt. Informants reported that the bulkiness is attractive when dancing. The best skirt is worn on top, whereas the underskirts may be old best skirts that are worn-looking (e.g., Avia wears old sago skirts under her newest skirt) or plain utilitarian types of skirt (e.g., nypa worn under sago by Motu). Layering makes the fit of any single skirt, in terms of the waistband measurement, less important.
### Table 6.8 Waistband size by chronological period.

<table>
<thead>
<tr>
<th>Cm</th>
<th>I 1871-1885</th>
<th>II 1886-1900</th>
<th>III 1901-1915</th>
<th>IV/V 1916-1945</th>
<th>VI/VII 1946-1975</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) 34 to 47</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>(b) 48 to 58</td>
<td>10</td>
<td>1</td>
<td>3</td>
<td>14</td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>(c) 59 to 71</td>
<td>17</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>28</td>
</tr>
<tr>
<td>(d) 72 to 84</td>
<td>13</td>
<td>2</td>
<td>8</td>
<td>4</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>(e) 85 to 95</td>
<td>3</td>
<td>7</td>
<td>10</td>
<td>8</td>
<td>8</td>
<td>46</td>
</tr>
<tr>
<td>Total Number</td>
<td>46</td>
<td>7</td>
<td>9</td>
<td>10</td>
<td>8</td>
<td>80</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) 34 to 47</td>
<td>7</td>
<td>14</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>(b) 48 to 58</td>
<td>22</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>38</td>
<td>18</td>
</tr>
<tr>
<td>(c) 59 to 71</td>
<td>37</td>
<td>43</td>
<td>11</td>
<td>50</td>
<td>25</td>
<td>35</td>
</tr>
<tr>
<td>(d) 72 to 84</td>
<td>28</td>
<td>29</td>
<td>89</td>
<td>40</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>(e) 85 to 95</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Total Percentage</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

In the earliest collections there is a broad range of sizes ranging from smallest to very large, but through time the samples become more focused especially beginning with period III. If we accept my definition of children’s sizes, then these are quite rare in the collection especially from period II onward. In addition, size b also decreases markedly from period I. It is possible that these were much less available. Since women often wore multiple layers there were more skirts of these sizes available for trading, or it may relate to inter-cultural factors discussed below.

**Skirt Length**

Skirt length is defined as the distance from the waistband to the hem. When two measurements were taken, I have used the mean. Skirt length, summarised in Table 6.9, is another possible way to track differences in the social position of the wearers since children and unmarried women tended to wear shorter skirts, although married women could wear short skirts when working, particularly in the gardens. As with the waist sizes the broadest distribution is in period I when the sample size is largest. So sample size
effects may be playing a role. The most common lengths through time are b and c and the rarest is e. The proportion of the shortest skirts seems to be relatively stable through time possibly suggesting the presence of unmarried women’s skirts, in contradiction to the pattern seen in the size of the waists. Since there is regional variation in the lengths of skirts for women of all statuses, this variable may not be as useful at tracking changes in the age profile represented as are the waistband sizes.

Table 6.9 Skirt length by chronological period.

<table>
<thead>
<tr>
<th>Skirt Length (cm)</th>
<th>1849</th>
<th>1871-1885</th>
<th>1886-1900</th>
<th>1901-1915</th>
<th>1916-1945</th>
<th>1946-1975</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) 14 to 33</td>
<td>12</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>(b) 34 to 43</td>
<td>33</td>
<td>14</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>(c) 44 to 54</td>
<td>1</td>
<td>32</td>
<td>3</td>
<td>9</td>
<td>4</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>(d) 55 to 65</td>
<td>9</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>(e) 66 to 86</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>8</td>
<td>4</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>90</td>
<td>25</td>
<td>18</td>
<td>15</td>
<td>9</td>
<td>158</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) 14 to 33</td>
<td>0</td>
<td>13</td>
<td>12</td>
<td>22</td>
<td>7</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>(b) 34 to 43</td>
<td>0</td>
<td>37</td>
<td>56</td>
<td>39</td>
<td>20</td>
<td>11</td>
<td>37</td>
</tr>
<tr>
<td>(c) 44 to 54</td>
<td>100</td>
<td>36</td>
<td>12</td>
<td>17</td>
<td>60</td>
<td>44</td>
<td>33</td>
</tr>
<tr>
<td>(d) 55 to 65</td>
<td>0</td>
<td>10</td>
<td>20</td>
<td>11</td>
<td>13</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>(e) 66 to 86</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>11</td>
<td>0</td>
<td>22</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Since skirt length can relate to the wearer’s social status (i.e. unmarried vs married) as well as cultural affiliation, it might be useful to examine lengths of skirts with adult sized waists (about 59 cm). These data presented in Table 6.10 show the same pattern as the total skirt population. There is a broad distribution in the earliest period followed by a narrowing through time. Although sample size may be affecting the patterning, the small skirts drop out of the sample. As these are not made from nypa fibres, they are probably not work skirts.

The overall trend toward longer skirts makes sense if the majority are sourced from the Port Moresby area. As the national capital, representatives from a wide range of
cultural groups were resident there. As Papua New Guinea was moving toward independence, there was an increasing number of opportunities for people to assert local identities in relation to other groups through wearing ‘traditional’ attire: e.g. at official state occasions. In these settings the shorter day skirts may have been replaced by longer dancing skirts that simply reflect a change in fashion.

<table>
<thead>
<tr>
<th>Table 6.10</th>
<th>Chronological change in length of adult-size skirts (waist greater than 59cm).</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number</strong></td>
<td><strong>I</strong></td>
</tr>
<tr>
<td>Adult Skirt Length (cm)</td>
<td>1871-1885</td>
</tr>
<tr>
<td>(a) 14 to 33</td>
<td>3</td>
</tr>
<tr>
<td>(b) 34 to 43</td>
<td>12</td>
</tr>
<tr>
<td>(c) 44 to 54</td>
<td>9</td>
</tr>
<tr>
<td>(d) 55 to 65</td>
<td>1</td>
</tr>
<tr>
<td>(e) 66 to 86</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage</th>
<th><strong>I</strong></th>
<th><strong>II</strong></th>
<th><strong>III</strong></th>
<th><strong>IV/V</strong></th>
<th><strong>VI/VII</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) 14 to 33</td>
<td>12</td>
<td>29</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) 34 to 43</td>
<td>46</td>
<td>25</td>
<td>43</td>
<td>30</td>
<td>17</td>
</tr>
<tr>
<td>(c) 44 to 54</td>
<td>35</td>
<td>50</td>
<td>29</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>(d) 55 to 65</td>
<td>4</td>
<td>25</td>
<td>20</td>
<td>17</td>
<td>11</td>
</tr>
<tr>
<td>(e) 66 to 86</td>
<td>4</td>
<td>10</td>
<td>17</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Split in Skirt Body

Splits are deliberate gaps created among the fibres that make up the body of a skirt, as shown for example in Figure 6.5. These gaps, made to reveal a vertical section of leg, come in a variety of sizes. In addition to presence or absence (Table 6.11), I also measured the size of the split because it provides information on the prominence of the bare leg (Table 6.12). Split size was measured to the nearest 0.5 cm. As noted in Chapter 5, skirts with splits were generally worn by unmarried women in Central Province. Some of the skirts in my sample may in fact derive from traditional trading from the Gulf region where splits appear to have been more commonly worn amongst all females.
**Figure 6.6** Example of a deliberate gap or split in the waistband, A16034, AM. Photo: Erna Lilje.

**Figure 6.7** Comparison of the chronological distribution of skirts with and without splits.
The pressure of LMS missionaries to curb dancing from 1874 onwards had a variety of effects on social practices and skirt production in particular. As Groves (1954:85) was able to observe, many people persisted with dancing despite the threat and imposition of ‘penalties’ by missionaries. These consisted primarily of suspending offenders from holding office, such as the loss of a deaconship for a period of time. In any case the peoples of Central Province received mixed messages over the years with statements from British and Australian administrations often contradicting the desires of the missionaries.

Rev. Lawes opposed Motu dance, describing it as a ‘carnival of licentiousness and sensuality’ (quoted in Groves 1954:84). The missionaries supplied a LMS-approved substitute dance form, probably via the South Sea Island teachers (Groves 1954:76). Although dancing continued, in whatever forms they may have taken over time, the social contexts in which skirts were used changed and inhabited a shrinking domain in terms of daily practical use and expression of social identity.

Consistent with the Christianisation of Central Province peoples (first LMS converts in 1881; see Chapter 3) were the creeping indications of Christian ideas about modesty, especially evident between periods I and III (1870-1915). One variable that supports this interpretation is the proportion of skirts that have splits (Table 6.11).

**Table 6.11** Chronological distribution of splits in fibre skirts.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Split</td>
<td>27</td>
<td>15</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>No split</td>
<td>1</td>
<td>41</td>
<td>36</td>
<td>14</td>
<td>12</td>
<td>115</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1</td>
<td>68</td>
<td>51</td>
<td>16</td>
<td>12</td>
<td>162</td>
</tr>
</tbody>
</table>

|       | Split | 0           | 40           | 29           | 12.5        | 0               | 21    | 29   |
|       | No split | 100        | 60           | 71           | 87.5        | 100             | 79    | 71   |
| Total |       | 100         | 100          | 100          | 100         | 100             | 100   | 100  |

The highest incidence of splits is in period I followed by a sharp decline until they disappear in periods IV/V, after which there is a surprising return in the most recent period (Figure 6.7). I also measured the size of the gaps. The results seen in Table 6.12 also suggest that there may have been a slight increase in the popularity of larger gaps.
Table 6.12 Chronological change in the width of splits in fibre skirts.

<table>
<thead>
<tr>
<th>Width of split (cm)</th>
<th>I 1871-1885</th>
<th>II 1886-1900</th>
<th>III 1901-1915</th>
<th>IV/V 1916-1945</th>
<th>VI/VII 1946-1960</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) 0.5 to 4</td>
<td>15</td>
<td>3</td>
<td></td>
<td>1</td>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>(b) 4.5 to 8</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>(c) 8.5 to 15.5</td>
<td>9</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>(d) 16 to 19</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>12</td>
<td>2</td>
<td>3</td>
<td>44</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) 0.5 to 4</td>
<td>56</td>
<td>25</td>
<td>0</td>
<td>0</td>
<td>33</td>
</tr>
<tr>
<td>(b) 4.5 to 8</td>
<td>11</td>
<td>17</td>
<td>50</td>
<td>0</td>
<td>33</td>
</tr>
<tr>
<td>(c) 8.5 to 15.5</td>
<td>33</td>
<td>42</td>
<td>50</td>
<td>0</td>
<td>33</td>
</tr>
<tr>
<td>(d) 16 to 19</td>
<td>0</td>
<td>17</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>0</td>
<td>100</td>
</tr>
</tbody>
</table>

through time, but the sample size is quite small. The chronological pattern of splits can be explained by a number of factors. In the first case, the loss of splits in skirts coincides with the timing of missionary influence that would have favoured modesty. There is also a strong correlation with racist regulations by the Australian administration, beginning in 1915, that included clothing and various types of segregation. The re-occurrence after WWII may relate to emerging confidence in local heritage and customs as well as an expression of strong national identity in the lead up to Papua New Guinea independence.

Tiers

I use the term tiers to refer to the stepped layering of fibres in the body of some skirts as can be seen most clearly among the pandanus fibres of the skirts shown in Figures 6.8 and 4.2. Additional examples of multi-tiered skirts, mostly in sago and pandanus, are illustrated in Figure 3.1. These decorative details appear to have been limited to specific regions, but within these areas their presence indicates a degree of care and expertise. It is notable that despite the effort required in their detailing, these skirts are still popular, as shown by their use in a recent performance by a Central Province choir at the Australian Museum (Figure 6.8). The use of a combination of fibres in this type of skirt reflects the
collective aesthetic preferences of any cultural group at a particular moment. We can speculate that it may also have been a way to demonstrate, in a material way, the capacity to pull together resources from various areas.

With only four examples of skirts that have tiers in my museum sample, as listed in Table 6.13, it is not possible to use this attribute to track social changes, but it is still interesting that they are restricted to the early time periods, even though this type of skirt is still being worn. The earliest tiered skirt in the collections, shown in Figure 4.2, was acquired during the Chevert Expedition and is held at the Macleay Museum. It is composed of pandanus and coconut fibre and very much gives the impression of having been made to be worn on formal or special occasions.

Table 6.13 List of tiered skirts in the museum sample.

<table>
<thead>
<tr>
<th>Museum</th>
<th>Reg No</th>
<th>Period</th>
<th>Hem Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>MM</td>
<td>ETA.0610</td>
<td>I</td>
<td>multi-layered, coconut &amp; pandanus</td>
</tr>
<tr>
<td>QM</td>
<td>MAC 5996</td>
<td>II</td>
<td>4-tiered skirt, sago &amp; pandanus</td>
</tr>
<tr>
<td>QM</td>
<td>MAC 6001</td>
<td>II</td>
<td>2 tiered, sago</td>
</tr>
<tr>
<td>QM</td>
<td>MAC 5994</td>
<td>II</td>
<td>3 tiered, sago</td>
</tr>
</tbody>
</table>

Figure 6.8 Women from the Canberra Central Province Perovata Choir wearing tiered skirts during a performance at the Australian Museum in 2008. Photo: Robin Torrence.
Given that multi-fibre tiered skirts are well documented in historic photos and that they continue to be worn in the present day, their absence in the collections may indicate that they were largely withheld from trade with Westerners. This would suggest that these skirts were regarded as important and/or highly valued. Another possibility is that their current popularity, like the use of splits, indicates a resurgence in confidence and the desire to assert local identities within Papua New Guinea. Another factor that requires more research is the possibility that skirts with tiers have been wrongly attributed to the Milne Bay area where similar forms have become iconic of that region.

Fringe

The presence of a fringe on the waistband of skirts seems to be most closely linked to fashion or local preferences rather than as a functional feature. Dairi Arua (personal communication), speaking from the perspective of a modern Motu person, reported that the fringe was necessary for the ‘completeness’ of a skirt. If this is indeed an element of fashion, then change in the occurrence of the fringe through time, which is summarised in Table 6.14, could reflect the source of the skirt or simply the history of fashion in Central Province.

<table>
<thead>
<tr>
<th>Fringe</th>
<th>I (1849)</th>
<th>II (1871-1885)</th>
<th>III (1886-1900)</th>
<th>IV/V (1901-1915)</th>
<th>VI/VII (1916-1945)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present</td>
<td>1</td>
<td>14</td>
<td>12</td>
<td>2</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Absent</td>
<td>53</td>
<td>32</td>
<td>9</td>
<td>10</td>
<td>7</td>
<td>111</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>67</td>
<td>44</td>
<td>11</td>
<td>12</td>
<td>149</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage</th>
<th>I (1849)</th>
<th>II (1871-1885)</th>
<th>III (1886-1900)</th>
<th>IV/V (1901-1915)</th>
<th>VI/VII (1916-1945)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present</td>
<td>100</td>
<td>21</td>
<td>27</td>
<td>18</td>
<td>17</td>
<td>50</td>
</tr>
<tr>
<td>Absent</td>
<td>0</td>
<td>79</td>
<td>73</td>
<td>82</td>
<td>83</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

It is very interesting that application of fringes has a similar chronological pattern to splits and tiers. The fringe is relatively common in the sample until period III when it becomes much less popular. We observe its re-appearance in the last periods VI/VII when
it forms fifty percent of the museum skirts, an even higher percentage than in the earliest periods. The change of fashion correlates with the increase in length in the more recent periods. In the shorter skirts the fibres that form the body of the skirt are folded in half. In order to make a longer skirt, nearly the full lengths of the fibres are used in the body of the skirt with around 3 to 15cm of one end folded over. This is what comprises the fringe. This change in manufacturing is therefore linked to the social factors underpinning the history of skirt length.

**Expertise**

I have considered the concept of expertise from two perspectives. In the first I considered expertise in terms of the breadth of knowledge held by Central Province skirt-makers as a whole based on breadth in the variety of stitch styles practiced and this practice relative to the number of skirts. The second examination of expertise focused on the presence and prevalence of highly proficient skirt-makers. For both of these studies I used specific aspects of practice in the way the fibres were bound to the waistband. This is a good measure because it appears to be only minimally related to the function of the skirt and I also observed a great deal of variation in these practices.

I identified skirts made by experts with special knowledge and skills by the presence of stitch styles that are difficult to execute, using data supplied by Dairi. I have called these ‘fancy stitches.’ I use the term ‘stitch styles’ to refer to visually distinguishable weaving patterns on waistbands. The appearance of any specific stitch style is created by the way in which hanks of fibres are serially fastened to a waistband string. As noted in Chapter 5, this construction process can be characterised as a kind of weaving. Weaving, the stitch style codes and the reference sheets where they were recorded were described in Chapter 5. Each stitch style is designated and described by a two-part code. Each code refers to the visual appearance of the waistband viewed from one side. The two-part code encapsulates front and back views of a waistband. I kept a running catalogue of ‘stitch styles’ for the finished garments I observed in collections. These are depicted in Appendix 1.
Stitch Styles

Among the 162 skirts I examined, I distinguished 58 stitch styles. Seven skirts, listed in Table 6.1, had a combination of styles. These seven have been removed from the following discussion of chronological changes.

Table 6.15 Skirts that were constructed using more than one stitch style.

<table>
<thead>
<tr>
<th>Museum</th>
<th>Reg No</th>
<th>Time Period Collected</th>
<th>Fibre</th>
<th>Binding Type</th>
<th>Stitch Style</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM</td>
<td>A016088</td>
<td>I</td>
<td>Nypa</td>
<td>fibre binds</td>
<td>Bi &amp; Li with Kii</td>
</tr>
<tr>
<td>AM</td>
<td>A016072</td>
<td>I</td>
<td>Sago</td>
<td>fibre binds</td>
<td>Gi &amp; Qi with Eii</td>
</tr>
<tr>
<td>AM</td>
<td>A016031-1</td>
<td>I</td>
<td>Sago</td>
<td>fibre binds</td>
<td>TiiKii &amp;XiiBii</td>
</tr>
<tr>
<td>QM</td>
<td>E-08861-0</td>
<td>II</td>
<td>Sago</td>
<td>string stitch</td>
<td>Fi &amp; Ji with Jii &amp; Fii</td>
</tr>
<tr>
<td>QM</td>
<td>MAC 5991</td>
<td>II</td>
<td>Sago</td>
<td>fibre binds</td>
<td>Bi with Eii &amp; Jii</td>
</tr>
<tr>
<td>QM</td>
<td>MAC 6011</td>
<td>II</td>
<td>Sago</td>
<td>fibre binds</td>
<td>Gi &amp; Ni with Eii &amp; Nii</td>
</tr>
<tr>
<td>CUMAA</td>
<td>Z 36627</td>
<td>II</td>
<td>Sago</td>
<td>fibre binds</td>
<td>Bi &amp; QiPii</td>
</tr>
</tbody>
</table>

Table 6.16 Number of stitch styles present in each time period compared to the number of skirts over time.

<table>
<thead>
<tr>
<th></th>
<th>1849 1871-1885</th>
<th>1886-1900</th>
<th>1901-1915</th>
<th>1916-1945</th>
<th>1946-1975</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Stitch styles</td>
<td>1</td>
<td>28</td>
<td>32</td>
<td>11</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>(b) Skirts recorded</td>
<td>1</td>
<td>64</td>
<td>47</td>
<td>16</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>(c) Styles per skirt (a/b)</td>
<td>1</td>
<td>0.4</td>
<td>0.7</td>
<td>0.7</td>
<td>0.8</td>
<td>0.8</td>
</tr>
</tbody>
</table>

The abundance of different stitch styles comprises an important variable for this study because it is one measure of the breadth of knowledge of skirt making within the population as a whole. Table 6.16 shows that the greatest variety of stitch styles (32) occurs during period II. (Note that although there are a total of 58 styles, a style can recur over time. The number 58 in the total column, therefore, does not refer to the sum of that row). Surprisingly, the maximum variety in stitch styles does not coincide with the time when there was the highest number of skirts collected, which occurs during period I (Table 6.16). Consequently, I conclude that stitch diversity is not simply a function of sample size.
To examine sample size effects another way, we can look at the number of styles in relation to the quantity of skirts for each period (Table 6.16, row c, styles per skirt). Using this approach there is a marked increase in diversity after period 1, and then it is relatively stable for the remaining time periods. The stability in diversity can be interpreted as evidence that existing knowledge regarding stitch types was maintained by skirt makers over a long period despite major social changes and the decline in the practice of wearing skirts on a daily basis.

Fancy Stitch Styles

Another aspect of society that can be understood by tracing changes in fibre skirts is the special knowledge required for an individual craft person to make a particular type of stitch. This is important because there is a range of skill required for the various types of stitches. For example, in general the fibre-binds binding type of waistband requires more skill than the string stitch (see Chapter 4 for descriptions of these types). I have identified a special group of stitches that has the appearance of very intricate and complex braiding which I think required particular expertise to execute. I have therefore termed the following as ‘fancy stitches’: BiCii, BiTii, GiTii, NiNii, QiCii, QiTii, TiiKii. Drawings of each of these are provided in Appendix 1. A selection of these fancy stitches is presented in Figure 6.8, where both the front and the back (outside and inside) of the same waistband is illustrated. Dairi Arua confirmed that in his opinion these particular stitches would require considerable skill and practice to execute, although he did not have first hand experience of using them. Each of the fancy stitch styles can be enhanced to create an even more complex construction.
BiTii (A16031-1, AM)
QiTii (MAC6007, QM)

GiTii (MAC6026, QM)
NiNii w.5 (A16046, AM)

TiiKii (A16031-1, AM)
As seen in Figure 6.9 where two forms of BiCii are shown, a stitch can be varied depending on whether four, five, or seven interweaving elements were used. In this case they differ from each other, as one has seven interweaving elements while the other has five.

From Table 6.17 a gradual decline in the incidence of skirts made with fancy stitches can be seen between periods I and III, after which this type of construction disappears altogether from the sample. Since the use of fancy stitches may have social significance in identifying expertise among skirt makers, the decrease in these may be indicative that the way of measuring quality related to a person’s performance shifted.
to other media or arenas of life. That the importance of expertise in skirt making has changed is emphasised by the continuity in the knowledge of skirt making as exemplified by continuity in the breadth of stitch style practice described previously (Table 6.16).

Table 6.17 Chronological change in the incidence of skirts with fancy stitches.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>13</td>
<td>8</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>23</td>
</tr>
<tr>
<td>Percentage</td>
<td>100</td>
<td>19</td>
<td>16</td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>14</td>
</tr>
</tbody>
</table>

Taken together the two trends related to expertise indicate that social relations within producing communities underwent the greatest degree of transformation during the early periods (I-III). The steady decline in the proportion of skirts made by highly proficient makers over the next four decades suggests that expert knowledge was not passed on to younger generations. One cause was likely to be the steadily reduced amount of contact time between older and younger skirt makers because of new activities for the younger generation, such as church and school, which diverted time away from other ‘traditional’ activities. This would have resulted in a reduced number of opportunities for experts to teach and learners to hone their skills.

The curriculum for school and church classes provided unconscious forms of knowledge that inculcated new kinds of dispositions. This led to the social re-negotiation of the production of material culture, such as skirts, in a way that reflected new values and priorities. Consequently, the emphasis moved away from a high degree of proficiency. If the quality of a skirt’s construction was thought to reflect the accomplishment of a woman more generally, as present-day makers have suggested, the trend over four decades indicates that the values and priorities of skirt-makers and their communities underwent a significant transformation. In contrast, since fibre skirts continued to be made and used throughout the period under study, variation in skirt making reflects a change of emphasis rather than a rejection of traditions or identities.
Production Effort

As well as tracing changes in the kinds of practices used in skirt making, it is also important to consider the amount of effort that would have been required. I have already discussed effort in terms of the acquisition of raw materials. I now analyse variables of skirt manufacture that monitor the degrees of effort that would have been required. The use of fancy stitches might indicate effort, but I prefer to restrict that set of practices to the related property of expertise, although I realise that effort and expertise are intimately interconnected. In the following sections I examine the nature of the hanks used together with a number of practices in the waistband binding because these reflect labour inputs.

Hank Width

A hank is a small bunch of fibres that comprises a single unit when incorporated into the skirt making process. The body of a fibre skirt is comprised of hanks that have been fastened together serially along the waistband. An example of a hank being incorporated into the construction of a nypa skirt can be seen in Figures 5.3-5.6. I believe that hank size can be indicative of the amount of effort that has gone into making a skirt because hank size will affect the number of stitches required to make a skirt. That means that the smaller the hank, the more hanks that will be needed to construct a skirt of a given waistband size. Following this reasoning, small hanks can therefore be equated with greater effort and larger hanks with lesser effort.

Since sago, nypa and pandanus fibres have different physical properties, the sizes of the hanks will vary among them. For example, a relatively small hank on a nypa skirt equates to a medium sized hank on a sago skirt. For this reason I analysed the fibre-types separately for hank size. However, there were too few pandanus skirts to make a comparison and the nypa skirts are predominantly represented in period I. As these did not represent a good sample with which to consider change over time, I have only looked at hank size in relation to sago fibre skirts. I found that the best way to measure this attribute was to count the number of hanks that occurred along a 10 cm length of the waistband.
Figure 6.10 Frequency of hank sizes used in sago skirts.

Table 6.18 Chronological change in hank width on sago fibre skirts.

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV/V</th>
<th>VI/VII</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. Hanks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>per 10 cm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1871-1885</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1886-1900</td>
<td>14</td>
<td>15</td>
<td>7</td>
<td>2</td>
<td>7</td>
<td>45</td>
</tr>
<tr>
<td>1901-1915</td>
<td>19</td>
<td>21</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>53</td>
</tr>
<tr>
<td>1916-1945</td>
<td>12</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>1946-1975</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>44</td>
<td>12</td>
<td>10</td>
<td>14</td>
<td>129</td>
</tr>
<tr>
<td>Number</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) 7 to 18</td>
<td>29</td>
<td>34</td>
<td>58</td>
<td>20</td>
<td>50</td>
<td>35</td>
</tr>
<tr>
<td>(b) 19 to 28</td>
<td>39</td>
<td>48</td>
<td>33</td>
<td>50</td>
<td>29</td>
<td>41</td>
</tr>
<tr>
<td>(c) 29 to 38</td>
<td>24</td>
<td>11</td>
<td>0</td>
<td>10</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>(d) 39 to 50</td>
<td>8</td>
<td>7</td>
<td>8</td>
<td>20</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>(e) Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Percentage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) 7 to 18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) 19 to 28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) 29 to 38</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) 39 to 50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e) Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The groupings I chose are based on the frequency distribution shown Figure 6.10. From this I divided hank sizes into the four groups in Table 6.18. Unlike many of the variables I have considered, variation in hank size continues throughout the entire time of the study, rather than just present in the largest sample size of period I. The most common hank size throughout the entire period is size (b). The two largest categories
of hanks represent the coarsest construction. These are most common throughout the entire history, but there is a distinctive peak in period III when they comprise 91 per cent of all skirts. After that they decline somewhat to about three quarters of the skirts, but are always the most common.

Category (d) identifies the very finest workmanship, in terms of hank size, and represents only nine percent of the total sample. We can consider the smallest two groups of hank size, (c) and (d), which represent 24 per cent of the sample, as a good measure of care and effort. For these we observe a decrease from the earliest period and a collapse in numbers during period III, when, as we have seen, the coarse skirts dominate. Later, these fine skirts were again made, but their numbers never reached the high proportion of the earliest periods.

Binding Details

Another possible method for tracking changes in the effort invested in skirt making is to examine some specific types of binding used, although these are relatively rare in the museum collections. I begin with the presence of knots on the waistband, which were used to bind the hank into a unit, so it can be manipulated more easily when

<table>
<thead>
<tr>
<th>Type</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV/V</th>
<th>VI/VII</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knots (only)</td>
<td>0</td>
<td>3</td>
<td>9</td>
<td>1</td>
<td>7</td>
<td>20</td>
</tr>
<tr>
<td>Reinforced core</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Twists or plaits</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV/V</th>
<th>VI/VII</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knots (only)</td>
<td>0</td>
<td>4</td>
<td>18</td>
<td>6</td>
<td>50</td>
<td>12</td>
</tr>
<tr>
<td>Reinforced core</td>
<td>3</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Twists or plaits</td>
<td>6</td>
<td>4</td>
<td>6</td>
<td></td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>
attaching them onto the waistband string. The practice of knotting hanks of fibre prior to attaching them to the waistband string is demonstrated by Dairi Arua in Figures 5.53 to 5.56.

The creation of knots is often used when making a fringe which, we have seen, is related to the production of the newer styles that require longer skirts, but the chronological occurrence of knots presented in Table 6.19 shows that since they were not always required, the presence of knots indicates a willingness to increase the effort invested in the skirt. It is worth noting, however, that all seven skirts dating from periods VI/VII have fringes were made using knots. This may be tracking a significant change in practice due to alternations in the use of skirts for dancing. The presence of knots is uncommon on the museum skirts, but anecdotal evidence from historic photographs and present-day observations suggests that these are currently very popular and that they may enhance the performance of a dancing skirt. The use of the knots keeps the fibres tidy and the fringe and the body of the skirt clearly distinct from each other (Dairi Arua personal communication). The separation of fringe and the body of the skirt can clearly be seen on Avia Kivori’s skirts (Figures 6.11 and 6.12).

Figure 6.11  Knotted binding detail and fringe on a sago fibre skirt made by Avia Kivori, KilaKila village, 2008. Photo: Erna Lilje.
Figure 6.12  Avia Kivori wearing her dancing skirt, which has a fringe and the binding detail of knots, KilaKila village, 2008. Photo: Erna Lilje.

Figure 6.13  Pandanus skirt with reinforced core binding detail, MAC 5998 QM. Photo: Erna Lilje.
Another binding detail that provides important information is the creation of a reinforced core on the waistband. An example is shown in Figure 6.13. In this case the stitches are constructed around a semi-rigid band that may be made of bunched up fibres in addition to the normal waistband string. This type of skirt is only present in the earlier collections dating to period I and II as shown in Table 6.19. Since this type of waistband is associated with the use of pandanus, its presence or absence in my very small sample is possibly best accounted for by the source community where the skirt was made. However, it would be a good variable to pursue in larger collections where pandanus is more commonly represented.

The use of twists and plaits is a detail associated with string stitch binding types. Some examples are shown in Figure 6.14. In addition to using knots to combine the hanks into a unit, the fibres are also plaited or twisted between the two knots. This gesture definitely comprises an additional step. As seen in Table 6.19, this method is only present on skirts dated to periods I and II and, unlike some other traits (e.g. splits, fringes and knots), it does not reappear in the most recent period.

![Figure 6.14 Sago fibre skirt with plaits and knots, Oc1913,0407,218 BM. Photos: Erna Lilje.](image)

Bringing the data together, it is clear that variables that show the investment of extra effort tends to steadily decline from periods I to III, and most traits signifying
large labour inputs permanently disappear from period IV onwards. In addition, new types of colourants (synthetic and re-purposed imported products) appear in the collections from period V onwards (Table 6.6). In general, these types of colourants reduced the amount of time and labour required to make them because they made it easier to apply colours to fibre skirts. As with the levels of skill in the population, it seems the amount of effort invested into skirt manufacture declined through the colonial period and, unlike some variables relating to identity, did not reappear in the period just prior to independence. This pattern fits the expectations I laid out in the early part of the chapter. With changing demands on people’s time and increasing participation in wage labour, there was less investment into skirt production, although knowledge about the methods of manufacture had still persisted.

Papuan Distribution and Exchange

The distribution of fibre skirts from the makers to the users and then into the collections must be considered in terms of the multiple connections I discussed in Chapter 2. Skirt producers have links within their own community and skirts were also exchanged between communities. One possible way to identify the skirts that were manufactured for trade is to focus on those made using similar techniques. Stitch style is particularly useful for identifying variation in skirt production. Of the 58 stitch styles that I had identified, 37 were only identified on a single skirt. I refer to these as ‘unique stitch styles.’ These are listed in Table 6.20. Twenty-one stitch styles were present on two or more skirts (Table 6.21). I refer to these as ‘multi-skirt stitch styles.’ Their frequency within the sample is summarised in Table 6.21 and their distribution through time is shown in Table 6.22 and depicted in Figures 6.15 and 6.16. These data clearly show that a number of multi-skirt stitch styles continue to be used over two or more contiguous intervals of time. I will refer to these as ‘recurrent stitch styles.’
<table>
<thead>
<tr>
<th>Stitch style</th>
<th>FiOii</th>
<th>FiYi</th>
<th>GiBi</th>
<th>Ginv</th>
<th>GiTi</th>
<th>LiLi</th>
<th>NiUi</th>
<th>QiBi</th>
<th>QiCi w.3</th>
<th>QiEi</th>
<th>QiQi</th>
<th>QiWi</th>
<th>RiFi</th>
<th>SiKi</th>
<th>UiWi</th>
<th>ViVi</th>
<th>WiWi</th>
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<tbody>
<tr>
<td>ABiDi</td>
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<tr>
<td>DiiWi</td>
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<tr>
<td>EiiQi</td>
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<tr>
<td>FiJi</td>
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</tr>
</tbody>
</table>
Table 6.21 Frequency of multi-stitch styles.

<table>
<thead>
<tr>
<th>Stitch style</th>
<th>No. of skirts</th>
</tr>
</thead>
<tbody>
<tr>
<td>BiKii</td>
<td>15</td>
</tr>
<tr>
<td>BiBii</td>
<td>10</td>
</tr>
<tr>
<td>BiTii</td>
<td>9</td>
</tr>
<tr>
<td>BiEii</td>
<td>8</td>
</tr>
<tr>
<td>BiUii</td>
<td>8</td>
</tr>
<tr>
<td>ViVii</td>
<td>6</td>
</tr>
<tr>
<td>AiAii</td>
<td>5</td>
</tr>
<tr>
<td>BiCii w.4,5,7</td>
<td>5</td>
</tr>
<tr>
<td>LiLii</td>
<td>5</td>
</tr>
<tr>
<td>NiNii w.3,4,5,6,1</td>
<td>5</td>
</tr>
<tr>
<td>DiiKii</td>
<td>3</td>
</tr>
<tr>
<td>JiFii</td>
<td>3</td>
</tr>
<tr>
<td>LiKii</td>
<td>3</td>
</tr>
<tr>
<td>QiKii</td>
<td>3</td>
</tr>
<tr>
<td>SiSii</td>
<td>3</td>
</tr>
<tr>
<td>YiFii</td>
<td>3</td>
</tr>
<tr>
<td>AAiDi</td>
<td>2</td>
</tr>
<tr>
<td>IiKii</td>
<td>2</td>
</tr>
<tr>
<td>JiJii</td>
<td>2</td>
</tr>
<tr>
<td>OiOii</td>
<td>2</td>
</tr>
<tr>
<td>QiTii</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>104</strong></td>
</tr>
</tbody>
</table>
Figure 6.15 Chronological variation in multi-skirt stitch styles.

Table 6.22 Chronological variation in recurrent stitch styles.

<table>
<thead>
<tr>
<th>Stitch Type</th>
<th>1849</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
<th>VI</th>
<th>VII</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>BiKii</td>
<td></td>
<td>9</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>BiBii</td>
<td></td>
<td>8</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>BiTii</td>
<td></td>
<td>6</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>BiEii</td>
<td></td>
<td>1</td>
<td></td>
<td>2</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>BiUii</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>ViVii</td>
<td></td>
<td>4</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>AiAii</td>
<td></td>
<td>3</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>BiCii w.4,5,7</td>
<td></td>
<td>2</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>LiLii</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>NiNii w.3,4,5,6,1</td>
<td></td>
<td>4</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>QiKii</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
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<tr>
<td>SiSii</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>YiFii</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>JiJii</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>2</td>
</tr>
</tbody>
</table>

For example, recurrent style BiEii was observed in collections dating over four contiguous intervals (I to IV). In contrast, although they were very popular because they appear on a number of skirts, the following only appear in a single
time period: JiFii; AAiDi; OiOi; QiTii. SiSi is unusual because it begins in period V and continues up until Independence. The most common chronological distribution among recurrent stitch styles, represented by BiKii, BiTii, LiLii, YiFi is a presence throughout periods I-III after which they disappear from the museum collections. YiFi is quite unusual because it begins earlier and finishes in period II. In some cases the recurrent stitch styles reappear in the most recent time period, as for example, BiKii and ViVii, demonstrating the continuity of knowledge discussed above and perhaps also of the practice of exchange.

I propose that the recurrent stitch styles that were widespread, as defined by their presence in three or more contiguous periods, indicate the kinds of skirts were exchanged through trade, similar to what Dairi had referred to as a ‘product’ (see Chapter 5). It is notable that these stitch styles are also among those that are most numerous within the samples (Table 6.24). Most of these, whose identifier begins with Bi, are visually quite similar, suggesting a measure of standardisation such as would be expected with something that was widely traded. My hypothesis that these were trade skirts is supported by ethnographic evidence that sago skirts had to be imported into Port Moresby, which is likely to have been the major source for the museum skirts.

Before going further, it is important to examine the sources of the samples of skirts that have been classified as having recurrent stitch types. Museum catalogues show that these styles did not originate from a single collector. In fact each of these styles came from multiple sources. I argue that since they are not the products of single collecting ‘events’, the range of styles in museums are likely to represent a sample of the styles that were circulated as trade items in Central Province.

A breakdown of the type of collectors who acquired these skirts (Table 6.23) shows that scientific explorers and collectors were acquiring skirts throughout the whole period of the sample. Mission-connected acquisitions begin early and then peak in the second interval before ceasing. Government officials acquire one skirt during the first interval, peak during the second, and continue into the third. The continuous presence of all kinds of collector during the earlier period (I, II, III) further supports the idea that the museum collection that I analysed represents a
sample of the styles that were in circulation and are not just the result of collector bias.

Table 6.23 Types of collectors that acquired recurrent stitch styles 1871 to 1915.

<table>
<thead>
<tr>
<th>Type of Collector</th>
<th>1871-1885</th>
<th>1886-1900</th>
<th>1901-1915</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific explorers/collectors</td>
<td>4</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Mission connected</td>
<td>5</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Govt officials</td>
<td>1</td>
<td>15</td>
<td>7</td>
</tr>
</tbody>
</table>

This analysis of the museum collections enables us to monitor the distribution of trade skirts through traditional indigenous exchange networks. As seen in Figure 6.15 and as summarised in Table 6.24, trade was most common during periods I-III, although there was a slight decline during period II. From period IV onward there is a notable decline in the multi-skirt styles. I propose that social changes taking place then may have diverted time and energy away from traditional trading activities.

Cross Cultural Exchange

The insights into Papuan trading networks gained by looking at stitch styles can be expanded to an analysis of trade between local communities and western outsiders. To monitor interaction, we can look both at details in the skirts as well as notable absences in the assemblage as a whole. During the earlier time periods (I to III) Pauans acquired skirts through inter-community social connections possibly through exchange partners, but subsequently some of these skirts might have then been passed on to western collectors. My argument is that skirts acquired by collectors may have been redirected from Papuan social contexts under different circumstances in the various time periods.

To demonstrate this pattern, I look at unique stitch styles. Although they are an indicator of intra-community activities, they also provide an insight into cross-cultural exchange. Figures 6.16 and Table 6.24 show that beginning in period II, the ratio of unique stitch styles to number of skirts increases through time. It is
interesting that in period II the proportion of trade skirts, as measured by the presence of recurrent stitch styles, decreases. The concurrent rise in unique stitch style skirts in museum collections may be a result of Papuans enhancing their trade stocks of skirts in order to make the best of exchange opportunities with foreigners.

Table 6.24 Chronological variations in stitch style popularity as measured by styles per skirt.

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV &amp; V</th>
<th>VI &amp; VII</th>
</tr>
</thead>
<tbody>
<tr>
<td>1849</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) All stitch styles</td>
<td>1</td>
<td>28</td>
<td>32</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>(b) Unique styles</td>
<td>0</td>
<td>10</td>
<td>14</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(c) Multi-skirt styles</td>
<td>1</td>
<td>47</td>
<td>30</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>(d) Total skirts</td>
<td>1</td>
<td>64</td>
<td>47</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>Percentage of total skirts</td>
<td>(a) All stitch styles (a/d)</td>
<td>1</td>
<td>0.4</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(b) Unique styles (b/d)</td>
<td>0</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(c) Multi-skirt styles (c/d)</td>
<td>1</td>
<td>0.7</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Figure 6.16 Chronological changes in various types of stitch styles.
The collections also show that a few categories of skirts were withheld from cross-cultural exchanges: in particular, widow’s dresses, Hood Point initiation skirts, children’s skirts during interval III, and nypa skirts post interval I (with a few exceptions). The absence of the skirt component of widow’s dresses can probably be explained by the documented customary practice of numerous Central Province peoples. As described in Chapter 5, the end of the formal mourning period, which usually included a degree of seclusion for the widow, was marked, amongst other things, by the shedding of mourning clothes made especially for this time of life. Skirts that comprise part of the mourning dress share certain characteristics. They are especially long and undecorated and in some areas mud was smeared over the skin and clothing of the widow (cf. Figures 5.18 and 5.19). When the mourning period was finished, the widow would receive a new skirt and the discarded skirt would be disposed of in some way. Some historical descriptions specify that the skirt would be destroyed (Seligman 1910:165), but other simply state that it was removed and dealt with by the dead man’s relatives (Seligman 1910:277). Neither of these scenarios would provide obvious moments when Papuans might seek to pass the skirt on to a foreigner. Given these practices, it is therefore not surprising that mourning skirts are noticeably absent from museum collections.
A second example involves the girls’ initiation ceremony at Babaka Village, Hood Bay, which was described by several writers (Haddon 1898; Guise 1899). The ceremony took place within the context of a larger celebration of the harvest. Many historic photos exist of the multi-day feast and the ceremony (e.g., Figure 6.17). The observers mention that backless skirts (i.e. those in which the buttocks were uncovered) were worn by the initiates during part of the ceremony. I have not found these skirts in the collections nor have I recognized them in the historic photos that I have sighted. I think that if these skirts were correctly apprehended and described, their absence indicates a choice by local people to withhold them from non-indigenous people. Widows’ skirts and the backless initiation skirts (the latter is more speculative) are examples of certain classes of skirts that were not available to collectors. Both represent material connections to significant transformations in the social status/positions of the wearers. In addition to the
material and ceremonial frameworks, these transformations were strongly linked to bodily practices. It seems likely that this combination made them too intimate for individuals and communities to hand over to outsiders. It seems likely that gender would have been a factor too, as most of the collectors were men.

As discussed previously, children’s skirts dating to period III (1901-1915) are not present in my museum sample of skirts. Most Central Province people wore non-western types of clothing during periods I to III. Young girls would have begun wearing skirts from around the time that they began to walk (cf. Chapter 5). I think that withholding children’s skirts from non-indigenous collectors marks a shift in indigenous peoples’ understandings of the new ‘social order.’ Period III was a time when a degree of mutuality, present in social relations in earlier years, gave way to the imposition of authority over indigenous peoples by Europeans. This period also marks the change from the building and brokering of social connection between equals to the recognition, by Papuans, of an entrenched and dominant centre of authority. In this context the giving or exchange of children’s clothes may have passed into the domain of too-intimate or too-equal or no longer appropriate vehicles with which to broker relationships with the new dominant group.

**Papuan Practices**

The most important finding of the study is that despite a reduction in the number of objects collected by museums, it is possible to observe the persistent importance of fibre skirts in creating social networks between communities within Papuan society throughout recent history. The best evidence of endurance of skirts might be the continuity in the knowledge of how to construct fibre skirts, as seen in the collections. The breadth of stitch styles is an especially powerful measure because one can observe that many of these were used throughout history and some reappeared after some years of absence. The ratio of total stitch styles to number of skirts collected remained high and was also relatively stable through time.

In contrast, the ‘fancy stitches’ and other complex binding details (twist or plaits and re-enforced core) that required a reasonable amount of skill and perhaps effort, declined through time and eventually disappeared. The loss of this highly
expert production can be explained by a number of factors. In the first case, people had different obligations and pursuits such as holding jobs, going to church, etc. Changing social contexts also meant there were fewer opportunities for experts to pass on the most specialised knowledge and for complex techniques to be practiced. Finally, due to changes in social values, the ties between a woman’s character (e.g., ‘industriousness’) and her ability to make fibre skirts of high quality had shifted so that other regimes of life were more highly valued (e.g., role within the church community).

Alongside the loss of the fancy stitches, there are a number of fibre binds termed recurrent stitch types that continued and later reappeared after a period of absence. Since these were used to make the fibre skirts that were traded between communities, we can conclude that efforts had obviously been made to maintain social networks despite a period of less activity. The persistence of sago skirts in the collections, in comparison to the decline and loss of nypa and other fibres, has also been argued as evidence that many Papuan groups made efforts to strengthen and continue inter-community links through trade.

Another example of stability through time is the use of three colours to decorate the skirts. Despite changes in the use of different raw materials, as some people lost access to parts of the environment because they had relocated to the urban areas, it is remarkable that the popularity of red and yellow, in particular, as well as the application of three colourants was highly persistent. What did change was the nature of the designs applied to the skirts. Although I did not undertake a detailed stylistic study, my ethnographic data suggests that people made efforts to acquire new designs partly in order to ally themselves to other groups. Stylistic change, at least within the North Mekeo village that I visited, showed that innovation is also an important part of the history of fibre skirts.

This leads to a discussion of the role of fashion. A good example is the increasing length of the skirts through time and, partly related to this, the use of a fringe on the waistband which relates to the way the fibres were attached. What is especially notable is a major change in the most recent periods when long skirts became particularly popular. As far as I can tell, this change is not due to a different use of skirts, for example as in dancing as opposed to daily wear. Instead, the longer skirts are preferable because they relate to current, fashionable notions
of what looks good.

In opposition to traits that illustrate a persistence of Papuan practices, there are others that closely reflect social change. I have already noted that the investment in maintaining specialised skills, as seen in the incidence of fancy stitches, declined after period III. In addition, there is a major difference in the role of skirts for distinguishing different social positions or stages in the life cycle. It is notable that although young girls’ skirts never comprise a large proportion of the collections, these disappear altogether from the museum collections by 1915. Another key change is the loss of the nypa fibre skirts used for daily and work practices by Motu women and their replacement by imported sago fibre skirts that were used primarily for dancing. As fashions changed, women adopted western cloth which they often made into a specifically Papuan style. However, fibre skirts continued to be used in ceremonial occasions.

Despite what might be expected given Fife’s (2001) account of missionary influence, attitudes about modesty are not well marked in the material record of fibre skirts. The decrease in the incidence of splits that would have revealed the upper leg occurs quite early, but skirt length which might also mark attitudes towards modesty, does not follow a similar pattern.

In contrast to the loss of some types of skill in skirt making and a reduction in the amount of effort invested in their manufacture, during the most recent period that begins just after World War II, the trends in the variables measured indicate an important cultural change. As Papuans were preparing themselves for a new independent Papua New Guinea, they began to place more emphasis on local identities linked to those expressed in periods I and II. This was a time when people belonging to different cultural groups were juggling for positions of power and there were disputes over ownership of land, particularly in Port Moresby. The making and wearing of skirts in arenas involving people from throughout the country, as for example at state occasions, provided an opportunity for people to assert their identity in opposition to other groups, with whom they may have been in direct competition for resources and access to government jobs, etc. The emphasis on identity is seen in the re-appearance of splits in skirts and the use of new decorative motifs, some of which signal clan affiliation. Alongside this pattern, new fashions that emphasised longer skirts for dancing were introduced.
creating the need for the addition of fringes. This latest period in my sample well illustrates the way that a material object like a skirt can inform on changing practices in relation to social factors.

**Skirt Production as Social History**

The analysis of an unusual source of data, fibre skirts held in museum collections, has yielded an intimate examination of social changes viewed from the perspective of a Papuan *châine opératoire*. This approach has provided a unique window onto the negotiations and relationships that are called upon, or created, in the course of their production. In this chapter I have shown the wide range of information that can be elicited from skirts as presented in my analysis of museum collections. Although the simple presence or absence of particular types of skirts is useful, my study has focused more on a series of variables that relate directly to the way skirts were made, decorated and worn.

The emphasis on production in my analysis casts each moment in the manufacturing sequence as providing a potential link to the social relations of which it was a part. For example, the changing use of raw materials provides a picture of how social ties were re-negotiated. The study of expertise, defined both in terms of the breadth of knowledge within the broader community as well as the skill of individual skirt makers together with the effort invested in acquiring raw materials, in learning techniques and in their application, record the values held by a group concerning practices of skirt making and wearing. These results are significant for studies of museum collections because they well demonstrate that cultural practices simultaneously materialise past social relations whilst giving shape to the social negotiations that follow.
Chapter 7
MATERIALITY, PRACTICE AND HISTORY

Figure 7.1 Central Province fibre skirts in the Australian Museum ethnographic collections. Photo: Robin Torrence.

Value of Museum Collections

Ethnographic museum collections can be understood as constituting a kind of material record. It has been important for this study to consider the characteristics of their materiality in detail to develop an approach that can exploit this potentially rich source of data about the people who made, traded and used the objects. Ideas about the meaning of museum collections have changed over time, but some basic attitudes have been retained. In the late nineteenth and early twentieth century they were envisaged as ‘salvage’ collections whose function was to document and mark
the passing of ‘races’ predicted to become ‘extinct,’ and be degraded by their contact with Europeans, or else cease to be authentically themselves (Herle 1998).

Even though this paradigm has long been unpopular, there remains a hangover that has led to the perception of change in indigenous material culture as ‘loss.’ My approach begins with very different assumptions. It embraces creativity as an important component of behaviour when indigenous groups intentionally renegotiated traditional practices during the process of colonialism. It also appreciates the unintended changes in material culture practices as materialising their changing dispositions. Viewed from this perspective, collections cease to be a record of loss and instead embody a record of active and positive changes.

In this case study, I have argued for and tried to show that museum collections can give us insights into the past actions and experiences of people, and especially women, that cannot be accessed through other sources alone. The intimacy of objects, their materiality, lends itself to a new way of writing history. Taking advantage of the material links to individuals through the artefacts they made and used, this thesis has re-imagined the unique records held within museum collections. It demonstrates the value of analysing the commonly used domestic objects that make up the bulk of ethnographic collections and that formed a significant part of peoples’ everyday lives. My study comprises the first detailed description and analysis of fibre skirts from Papua New Guinea with the focus on production as particularly innovative (Figure 7.2). The adoption of an archaeological perspective on long time scales has furnished me with an understanding of how it is possible to span the gamut, from the small details of individual skirts to the broad geographical sweep of Central Province history over the span of a hundred years.

From the outset of this research, I accepted the proposition that we need not waste time asking whether indigenous agency contributed to the formation of ethnographic collections. If instead we take the existence of active makers, users and traders as a given, we can move on to ask how best to uncover their contributions to the historical process. This reasoning follows the conception by Torrence and Clarke (2000b) that ‘negotiation’, with the implicit assumption that both parties are involved, underpinned the social relations between indigenous groups and outsiders. This means that indigenous peoples of the past can be re-
instated as active participants in the cross-cultural negotiations that brought artefacts into collections.

The concept of *chaîne opératoire* has been critical in devising my analyses because it captures the multiple negotiations implicit in the production of material culture. I have deployed it within a practice theory approach to social change. Pauketat has presented the conceptual utility of practice theory with economical phrasing.

Material culture, as a dimension of practice, is itself causal. Its production – while contingent on histories of actions and representations – is an enactment or an embodiment of people’s dispositions – a social negotiation – that brings about changes in meanings, dispositions, identities, and traditions (Pauketat 2001:88).

He has also summarised how negotiation can be conceived within this broader theoretical perspective.

In this larger sense, practices are always ‘negotiations’ to the extent that power, the ability to constrain an outcome, pervades fields of action and representation (Pauketat 2001:80).

understanding history is a matter of understanding the undirected and creative negotiations of people whose dispositions were affected by their experiences (be they political, religious, gendered, technological, etc.) (Pauketat 2001:87).

A couple of aspects of practice theory have made it eminently suitable for my study. ‘Practices,’ are envisaged as specific kinds of enactment or physical form. Practices are also highly situated because they are constituted by past actions and in turn contribute to the constitution of what follows. This formulation embraces change as a normal part of continuity and as an outcome of the process of negotiating past practices into the present.

Based on what I have learned through the application of practice theory to the analysis of Central Province skirts, I have distilled a new framework for thinking
about museum collections. The interrelationships that exist between elements of my methodology have been distilled into a diagram (Figure 7.2). It shows that at any point in time social connections can be inferred from the specific properties of sequences of action (Actions). ‘Actions’ refer to the sequences of actions needed for material practices. The term ‘Properties’ refers to the qualities of actions (expertise; effort; raw materials; exchange; and context). The term ‘Variables’ refers to specific attributes that I measured. By working up from

<table>
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<th>Social Connection - continuity &amp; change in material practices</th>
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<td>Production</td>
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<td>Context or Mode</td>
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- **Expertise**
  - special knowledge & skills:
  - existence of expertise;
  - extent amongst makers training opportunity to hone skills
- **Effort**
  - exertion: -energy &/or time
- **Raw materials**
  - availability & accessibility preference
- **Exchange**
  - local, producer's community traditional indig. exchange networks novel/emergent interactions between:
  - -indig. groups;
  - -indig. & non-indig. groups
- **Context or Mode**
  - traditional: -utilitarian &/or special events new traditional occasions:
  - -religious; or revivalist
  - national occasions commercial performances worn daily or occasionally

**Variables**

- binding type
  - stitch style
  - binding detail
  - hank width
- binding type
  - stitch style
  - binding detail
  - hank width
- main material used colourants, no.
- colourants, source
- main material used
  - waistband size
  - skirt length
  - split, presence
tiers, no.
  - fringe, presence
  - colourants, no.
  - colourants, source
  - hank width
  - stitch style
  - binding type

**Figure 7.2** My framework for thinking about museum collections.
attributes, I constructed an understanding of social change based on my study of fibre skirts from Central Province.

The analyses of fibre skirts from museum collections discussed in Chapters 5 and 6 enable us to write a history of social changes that encompasses the perspectives of Papuans, and especially Papuan women. Writing history is a matter of interpreting the undirected negotiations of people whose dispositions were affected by their experiences (be they political, religious, gendered, technological etc.). Social change can be generated by practices at the local level and in the broader social context (e.g., politics, economics, law), the cumulative effects of which constitute history. The contribution of fibre skirt analyses to the history of Papuan women’s experiences in Central Province is now brought together in the following summary.

**Early Interactions: Periods I and II**

During period I (1871-1885) Papuans were actively engaged in the production, distribution and use of fibre skirts. At this time Central Province communities negotiated and traded with Europeans without the over-arching shadow of the colonial administration. At the same time they were gradually acclimating to the presence of the few European and Polynesian missionaries they encountered. The lifestyles of foreign residents and visitors in Papua were marginal and vulnerable and largely dependent upon the goodwill of locals. Missionaries sought to create social connections with Papuans. In part this was achieved by participating in exchanges for food as well as giving and accepting gifts. Missionaries and other Europeans were also motivated to acquire artefacts and natural history specimens because the land and its people and their material culture were novel and could be exchanged back in Europe for cash needed to support the mission project. At first, the relatively unthreatening, and materially beneficial, presence of missionaries led many Papuans to be accommodating of their presence and activities. Europeans were able to engage in exchange with Papuans but this did not extend to them being integrated into traditional trade networks. Neither is there any evidence that Papuans made skirts specifically for sale to Europeans at this time.

The characteristics of fibre skirt collections made during this time show that
the skirts made for Papuan trade networks, defined in Chapter 5 by the nature of their stitches, comprised the highest proportion of the assemblages compared to all the other time periods. The fancy stitches that I have argued require a high degree of virtuosity in the craft of skirt-making were also at their highest level during this interval. Their popularity can be interpreted as indicative of the continued presence of expert makers in the population and of the continued value placed upon finely made skirts and their skilled makers.

By Period II (1886-1900) social relationships between Europeans and Central Province peoples were well established and characterised by relative familiarity, although there was local variability along the Central Province coast. Port Moresby became the epicentre of changes that would later affect other areas. Large scale practices, such as the establishment of the administration at Port Moresby and the extension of colonial authority and pacification throughout Central Province, began to alter the potential kinds of relationships between Papuans and Europeans. This process is reflected in a decrease in the proportion of skirts made for trade, suggesting an alteration to the normal operation of trade networks. At the same time, the number of stitch styles per skirt actually increased when compared with the previous time period. In tandem these trends suggest that although time and energy were being diverted from long-standing trade networks, Papuans were so keen to take up opportunities to trade with foreigners, that they even traded skirts that were already in use. The wide variety of stitch types in collections shows that, perhaps because of the reduction in Papuan trade, people had to dig deep into their wardrobes in order to find enough products for sale.

Consequences of Regular Interaction: Periods III and IV

Period III (1901-1915) onwards was characterised by increased familiarity between Papuans and Europeans resulting from regular interaction. By 1900 Europeans had established their authority and become entrenched in Papua. Their dependence on local communities simply for survival had greatly diminished, although they increasingly called upon local people as a supply of labour. It is in this period that we witness the greatest changes in the composition of the fibre skirt assemblages.
Based on a number of distinctive characteristics of skirts in collections from period III, we can infer the reactions of Papuans to these changes. Particularly notable are hank sizes and skirt dimensions. During time period III the proportion of skirts made with the coarsest sago hank size is at its highest level, whereas the finest hank sizes (c and d) were most rare. Concurrently, this is the time when the category containing the shortest of the adult skirts were most numerous and the longest adult skirts were least common. In addition, the collections consist of the narrowest range of sizes of all time periods. It is possible that the shorter skirts simply reflect changing tastes among skirt makers and wearers: that is, the fashion of the time. However, I believe it is possible to draw a more profound insight from the constellation of variables.

Taken together, the skirt data indicate that by period III (1900-1915), many Papuans in Central Province had begun to make their way in the colonial society of which they were now active members. Many, especially those resident on the coast and in the vicinity of Port Moresby, were familiar with the foreigners in their midst. This meant that by the 1900s many Papuans were choosing to take up economic and social opportunities, for example as contracted labour and/or positions within the church. One effect of this was the continued decrease in activity of the trade networks between Papuan communities, a trend that had begun previously in period II. This may be accounted for by people re-directing their time and energies toward new opportunities. By controlling the length of labour contracts and the distance from home that Papuans could work, the chief administrator at the time, William Macgregor, sought to ensure that the colonised peoples under his jurisdiction were able to return to home regularly and keep up their family and village obligations (Jinks et al. 1973). However, the new pursuits in which Papuans were increasingly becoming engaged not only reduced the amount of time that they had available to be involved in traditional activities, but may also have altered the significance that they held in the lives. I do not think that long-standing practices involving skirt wearing became less important across the board, but the value placed on some of these may have changed. The flip-side of the adoption and incorporation of colonial life-choices was a decreased emphasis on pre-existing material culture practices. This interpretation is supported by the reduced amount of effort invested in the skirts collected at this time as measured
through the larger hank size of sago fibre skirts and the loss of fancy stitch types.

An alternative interpretation, although perhaps less plausible, can be proposed for the changes in the skirts. In this scenario an emphasis is placed on the recognition by Papuan peoples (and particularly women as the major skirt makers) in Central Province of a changed power dynamic following from the permanence of colonial presence and authority and the capacity of government to impact their lives significantly. The respective negotiating position of each party had altered significantly, such that the Papuan position had weakened and the Australian position had strengthened. Some Central Province people chose to find pathways into the colonial government through adoption of European-styles of education, dress, performance, etc, whereas others may not yet have had the opportunity, and still others may have chosen to limit their contact with the colonisers.

Viewed in this way, the absence of children’s skirts in the collections from 1901 may signal a change in local perspectives. This trend is made more stark when considered in relation to census figures that show that non-Papuan children were in Port Moresby and attending school during this period (12 in 1906 and 36 in 1915) (Oram 1976:35). It is possible that withholding children’s skirts at this time constituted Papuans backing away from a level of intimacy with foreigners. Historical sources record that women in the Port Moresby area wore fibre skirts and were bare-breasted into the 1950s (Oram 1976:134), so the absence of their nypa skirts in particular indicates the act of withholding specifically related to Papuans/foreigner relationships.

In this view, the lesser degree of effort used to make the skirts, as indicated by their larger hank sizes, received by foreigners would be indicative of Papuans’ evaluation of the direction events were taking. Papuans gave foreigners these less finely made skirts, not because the outsiders had become less important in the Papuans’ experience of daily life, but as an assertion of the limits to the relationships that were possible. The practice of withholding may also have embodied an attempt to re-establish social primacy and authority by controlling the quality of material that outsiders could access. The date of this pattern is quite significant since the loss of more finely-made skirts and children’s skirts pre-dates the 1919 Native Regulation that made it an offence for men and women to wear
clothing on the upper part of their bodies. In a sense Papuans beat Europeans to the punch, in terms of marking social boundaries.

**Marking Boundaries: Periods IV and V**

Historical sources show that from 1915 onwards many discriminatory measures, including segregation, were introduced to the Papuan colony. The 1919 Native Regulation, in force until 1939, was rationalised as a health measure by Europeans, but really the law is emblematic of the new political order brought about by a change in the type and number of Europeans in Papua and the attitudes about ‘race’ that they brought with them. By 1919 many Papuans, especially in the communities in Port Moresby, had adopted European practices through participation in church, school, and the money economy. Introducing the law at this time was clearly about keeping, or putting Papuan people, back in their place and maintaining clear lines of distinction between the races. By co-opting an aspect of ‘traditional’ practice, the administration politicised it at an official level.

Periods IV-V represent a time during which the lines between ‘races,’ and between colonisers and colonised become starkly drawn. Australians seeking economic opportunities arrived in the region in larger numbers and become a dominant force among the foreign residents, particularly in Port Moresby. The insecurities about race which they brought with them (especially from Queensland) were accommodated by the administration through the adoption of a variety of racist laws that had impacts upon Papuan people in terms of their movements, where they might choose to reside, the forms of dress they could wear, and where they could spend their money. These kinds of controls were more prevalent in the vicinity of Port Moresby. Although from today’s perspective these laws cast the Australian administration in a particularly unpleasant light, I do not think that these effects are the dominant ones that can be seen in the collections. As I have already shown, the major changes had already occurred in the previous period. Following the perspective of Gosden and Knowles (2000), in this way Papuans were as much a part of the creation of colonial culture as were the British and Australians.

The trends that I have observed in the collections of fibre skirts are characterised by both the continuation of some features and the cessation of others.
The number of colours used on sago skirts remained fairly steady throughout the time studied. The variety of stitch styles per skirt remains was also reasonably constant from period II to the end of my study in periods VI/VII. Fancy stitches disappear from the collections after 1916. Skirts that I have previously described as being made for distribution through Papuan trade networks are no longer observed in the collections post-1915. At the same time the range of skirt sizes represented narrows compared with previous periods.

This constellation of characteristics suggests a number of contemporaneous factors were at work. One thing that they may suggest is that a breadth of knowledge about the craft of making fibre skirts continued to flourish amongst Papuans and that this knowledge was being passed on over the years. I think that continuity in the variety of stitch styles per skirt is indicative of this. At the same time there is stability in terms of the number of colours used on sago skirts, a characteristic that holds for the whole time period that I studied. This consistency may indicate that there are aesthetic qualities for sago fibre skirts and these retained their significance to Papuans throughout the time period studied. This sensibility places value upon the number of colours applied rather than the specific choice of colours used as demonstrated by the fact that green was introduced to the palette at this time.

In parallel to these observations about the retention of characteristics, aesthetics and knowledge are those that ceased to be represented in the collections. I think the narrower range of sizes together with the cessation of fancy stitches may be monitoring the effect of the tourist market on the collections. This interpretation is supported if we consider the sources of the collections in periods IV and V (Table 4.2). The table shows that, unlike previous time periods, most collectors contribute only one or two skirts and are unknown figures, historically speaking. I think that it is more probable that the skirts were not made specifically for the tourist trade, as the opportunities to sell things to tourists were relatively sporadic events and so the skirts were more likely to have been made with dual possibilities, in mind: i.e. local trade or use or sales to tourists.

By the end of the Second World War most Papuans and New Guineans could not have helped but become aware to some extent of the broader world context of which they were a part. During the early post war period (1946-1960) many
Papuans had to concentrate on rebuilding their lives, villages and gardens. Papuans that had received school education began to find paths into civil service roles. This reflected both a change in Australian policy towards indigenous Papuans and a global movement toward the independence of former colonies. By 1961-1975 Papua New Guinea was being prepared for independence.

The collections show a number of things that may not otherwise be apparent in written or oral histories. One of these is that the continued production and use of fibre skirts as indicated by their presence in museum collections right up until the end of the period studied indicates that they retained significance for Central Province people. Had they not, people would have simply stopped making them. The collections also show that this material culture practice remained vital and innovative as reflected in the adoption of new colours to the palette and evidence of the continued breadth of knowledge held by Central Province people in general, as indicated by the steady level of stitch styles per skirt. I also think that a set of emergent characteristics: fringes, knotted binding detail and string stitch are interesting because they presage the (anecdotally observed) popularity of these features in the present day.

The features are popular because they deliver a skirt with good performance characteristics that is relatively quick and easy to construct. As I have learned from present-day skirt makers, knots used in the waist band can play an important role in the construction of a sago fibre skirt because they have the effect of keeping the fibres of the body of the skirt and the fringe distinct from each other. Dairi Arua (personal communication 2010) felt this to be a highly desirable characteristic. Constructing a skirt with a fringe has the added effect of allowing for more of the sago fibre strands to be given over the body of the skirt. This means that it can be longer because the fibre need not be folded in two as it would be if there was no fringe. In addition to being time efficient and not demanding a high degree of difficulty to learn or execute, knots used in combination with string stitch binding types also lead to good performance characteristics to the skirt.

**Asserting Identity: Periods VI and VII**

The continued significance of fibre skirts throughout the post-war period and
in the years leading up to independence (1946-1975) lies primarily in the realm of identity. Although skirt wearing had been linked to local communities in the early periods, as described in Chapter 5, in these recent times it became a positive assertion of both the connectedness and distinctiveness of cultural groups. Growing in importance at this time is the role of skirts and cultural practices in distinguishing between peoples of different groups (i.e. proprietary identities), as opposed to distinguishing social status within a group (e.g., women eligible for marriage, married women, widows, etc). The latter pattern had already largely disappeared from skirt collections during period III. During periods VI and VII the use of fibre skirts for day-to-day work clothing fell into obsolescence. This means that the objects in museum collections dating to this period are solely comprised of skirts made for special occasions, such as those in which dances and performances feature.

Figure 7.3 ‘Hanuabada, National Capital District, Traditional Clothes,’ 5th September 2012, Philatelic Bureau of Papua New Guinea.
Indigenous forms of dress continue to occupy an important place within the national public discourse about identity up to the present day. A further illustration of this point can be seen in the stamps that were issued by the Philatelic Bureau of PNG in 2012 (Figure 7.3). They were united under the theme of traditional clothes. Each of the Provinces and the NCD were represented by a unique image consisting of one or a small number of people in indigenous clothes. The National Capital District stamp featured women from Hanuabada wearing sago fibre skirts (Figure 7.3). In a way this stamp neatly encapsulates the historical picture that I have been describing, in relation to the later years of the study (1961-1975). One way in which it does this is by selecting Hanuabada people to be representative of the NCD. Hanuabada is a prominent Motu village within the urban area of Port Moresby, and therefore by inference Motu people are presented as having a historic and ‘traditional’ primacy within the NCD. The specific choice of Motu women wearing sago fibre skirts is indicative of their resonance as carriers of group identity and their iconic status within the national context.

**Materially-Mediated Negotiations**

As I have argued, fibre skirts held in ethnographic museum collections embody a record of how indigenous people mediated their negotiations within new contexts. In the specific case presented here I have shown that from the 1870s onwards the Central Province area was affected by interactions with, and later, the impositions of Europeans. These ‘new’ contexts constituted the local effects brought on by large scale phenomena such as: the competitive imperialist pursuits of global powers, evangelical missionary zeal, colonial governance, and world wars. The changes wrought by these new contexts were centred upon Port Moresby. Despite the magnitude of the social impacts experienced by local communities, the production and use of fibre skirts continued to have significance for many Central Province peoples, as shown by the fact that they were continually made and worn throughout the time period under study. We can observe change, however, in the way skirts were made, the contexts in which they were worn, and the styles that were preferred. My analyses demonstrate that the physical
characteristics of fibre skirts bear the imprint of the changing social contexts in which Papuans and particularly Papuan women found themselves.

Material culture is a tangible and accessible aspect of practice. I have sought to reconstruct the undirected and creative negotiations of people in Central Province. By focusing on fibre skirts I have ensured that any insights into the perspectives of the Papuans that is derived from this data source is inclusive of, if not predominated by, Papuan women. The skirts have opened up opportunities for constructing a particularly local view of historical processes that would not be possible by using more conventional historical sources alone.

Where to From Here?

One important question typically raised in museum artefact research is whether the effects of external market forces, such as stimulated by tourism upon the choices made by artefact producers can be detected. The importance of commercial enterprise has been well demonstrated by Graburn’s (1976) pioneering work. He observed that the major changes that producers of material culture make in response to the tourist market include ensuring their products have key attributes: dustability, portability, and durability. In a study of Admiralty Island daggers, Torrence (2000) was able to show how alterations in the attributes of this class of artefact could be understood as the result of producers creatively altering their practices similar to those observed and summarised so succinctly by Graburn (1976). As the tourist/indigenous producer relationship is also a cross-cultural one, Torrence was able to connect alterations in the artefacts to changes in cross-cultural relationships due to larger social processes, such as colonialism, of which they were a part. The interpretation of the physical characteristics of collection artefacts in terms of cross-cultural trade is only relevant for some kinds of objects. Torrence and Clarke (2011) in their work on auction catalogues point out that very few tourist objects from Central Province have ended up in museum collections. The emphasis on attribute changes as a consequence of cross-cultural negotiations and consequent changes in production does not have much relevance for my study because Central Province fibre skirts have never been popular tourist objects.

As a type of artefact, skirts are not suited to an interpretation that links
changes in their physical attributes primarily with the specific cross-cultural exchanges that led to their incorporation within museum collections. I suggest that although material culture may have been a part of such exchanges, throughout the period I have studied, the skirts were primarily made for indigenous use. The interpretation of changes in the physical attributes of Papuan fibre skirts held in museum collections must therefore be linked to the spectrum of indigenous relations of which they were a part, and particularly in larger social processes such as colonialism.

My study has confirmed the expectations proposed in Torrence and Clarke (2011) and Clarke and Torrence (2011) that cross-cultural relationships are better studied by approaching the collections as assemblages. These groups can be analysed by investigating if there are changes in the composition of the collections over time and the position of skirts in those patterns. In future work skirt assemblages could be analysed in more detail with regard to the collectors who made them. It would be particularly important to look in more depth at the types of people (missionaries, government officials, traders etc.) who supplied skirts to museums compared to the types of collecting agents who did not include skirts in the material sold or gifted to museums.

I noted in Chapter 5 that skirts with attributes matching those observed in historic photos taken in the Aroma/Mailu region (Figure 5.2) were almost totally missing from the museum collections that I surveyed. It is important to find an explanation for this surprising absence, especially if it relates to cross-cultural relations in this broad region. I suggested that one possibility is that since the skirts resemble those from the Milne Bay region, that some within in museum collections had been incorrectly attributed. It is quite important, then, to look more broadly at collections of fibre skirts from Papua New Guinea to resolve this issue, and if possible, to include this region of Central Province in a broader study.

Another avenue that would benefit from further research is the study of attributes that were difficult for me to access. The incidence of the rump bump (Chapter 2) is an important variable to pursue in further research because it indicates whether a skirt had been worn prior to the transaction that initiated its transfer into a museum collection. This would allow me to do a more rigorous test of whether stitch type is a good indicator for identifying skirts made specifically for
distribution through traditional trade networks. A detailed study of the temporal occurrence of the dyed patterns would also be highly desirable and could help trace skirts more closely to their geographical origins as well as to trace chronological changes in the use of generic or clan designs.

As noted previously, when not in use skirts were rolled up to protect the fibres and keep them from getting tangled. Approximately half the collections I studied were still rolled up and so I could not observe these two key features. In future work it would be desirable if a conservation technique could be found to humidify the brittle skirts so they could be unfurled and closely examined. It would also be useful if a way could be found to bring out the faded painted patterns on the skirts to assist a design analysis. I deliberately did not undertake such a study rather I concentrated on listing the colours themselves.

An important component of my research was the use of variables relating to the waistbands as a way to monitor changes in expertise and effort: e.g., the use of what I called ‘fancy’ stitches. My definition of these types was based on observations by the expert skirt maker, Dairi Arua. He said at the time that if he could unpick the waistband, he would be able to replicate the way they had been made. That would help confirm my use of these as denoting these properties. Since deconstructing museum objects is not a feasible approach, another way to replicate these needs to be found. I think that experimentation in conjunction with a skirt maker would help to define the characteristics of the different waistband types using more concrete data, such as relative differences in the length of time it takes to make them.

Finally, it would be ideal to bring the historical study of skirt making and using up to the present day with a study of skirts dating from 1975-2013. Sourcing collections might be a problem but one would have the advantage of discussions with people who have first hand knowledge and experience of the period. It is also likely that there are many skirts stored away for safe keeping that could be incorporated into the study. A comparison of skirts just prior and just after Papua New Guinea independence would help test my hypothesis about the role of skirts in the creation of identity and track changes in this property as different regions in this new country jostle for political power and control.
Final Thoughts

A motivation for doing this study was to address the dearth of knowledge we have about women in the past. The methodology that I have developed by focusing upon Central Province fibre skirts demonstrates the great potential of ethnographic collections for providing insights into the ways colonised people experienced and negotiated periods of rapid social change. By placing material culture at the centre of the research, we can focus upon one of the few sources of data produced by Papuans in the past. The theoretical key is to view material culture as a tangible aspect of practice. As such, its production can be understood as materialising both a continuation of past practices and a renegotiation of those practices, within a broader historical context. My analysis demonstrates that a modest artefact type, long ignored and hidden away in museum collections, can be reframed as a valuable source of data that can add to our knowledge of the lives of Papuan women in particular and Papuans more generally.
References


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Appendix 1  Stitch Styles: reference sheets used to identify and code stitch styles

<table>
<thead>
<tr>
<th>Knot</th>
<th>I (front)</th>
<th>II (back)</th>
<th>Additional</th>
<th>Notes</th>
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<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
<td>*6 strings used in binding. Two pass through the centre of the knots</td>
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<tr>
<td>B</td>
<td></td>
<td></td>
<td>*Visible binding in I is twisted sago palm fibre (like the sari fibre), not string. In I the binder of fibre emerges from the knot with a pronounced twist.</td>
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<td>C</td>
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<td>*Visible binding in 'I' is twisted sago palm fibre (like the sari fibre), not string.</td>
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<td>D</td>
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<td>*Fibres exit knot both front and back. From the back the fibres emerge oriented to 4 o'clock.</td>
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<tr>
<td>E</td>
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<td>F</td>
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<tr>
<td>G</td>
<td>Back as for 'B'.</td>
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<tr>
<td>H</td>
<td></td>
<td></td>
<td></td>
<td>*Fibres emerge from knot both front and back.</td>
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*Similar knot to 'Y'.

Kil has free-standing knot as bundle exists waistband.

Like I & II but more rolled over.

Two variations: Top - with S, bottom - with S.
<table>
<thead>
<tr>
<th>Column</th>
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<tbody>
<tr>
<td>P</td>
<td>Like Ei</td>
</tr>
<tr>
<td>Q</td>
<td>Like Ei</td>
</tr>
<tr>
<td>R</td>
<td>Like Fii</td>
</tr>
<tr>
<td>S</td>
<td>Like Bii</td>
</tr>
<tr>
<td>T</td>
<td>Like Bii</td>
</tr>
<tr>
<td>U</td>
<td>Like Ni but with Z</td>
</tr>
<tr>
<td>V</td>
<td>Variation of Vii-string binds a single bunch.</td>
</tr>
<tr>
<td>W</td>
<td>Diagonal in W is rope-like.</td>
</tr>
<tr>
<td>X</td>
<td>Top diagonal in Xi is rope-like.</td>
</tr>
<tr>
<td>Y</td>
<td>Yi variation - diagonal binding passes over one bundle.</td>
</tr>
<tr>
<td>Z</td>
<td>Zi diagonal binding is twisted plant fibre of the body of the skirt.</td>
</tr>
<tr>
<td>AA</td>
<td>As for Dii</td>
</tr>
<tr>
<td>AB</td>
<td>As for Dii</td>
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Note: The diagram and descriptions are related to textile binding techniques.
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<th>Foundation Element</th>
<th>Stitch Construction</th>
<th>Stitch Style</th>
<th>Supplemental Stitch Detail</th>
<th>Type of Detail</th>
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## Appendix 3 Complete Data Set for Museum Skirts: Colourants, Dimensions, and Stylistic Details

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<th>Synthetic Purple/ Pink</th>
<th>Natural Red</th>
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<th>Length Difference</th>
<th>Fringe</th>
<th>Hem Detail</th>
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<p>| QM   | MAC 6038  | 1881 | undyed | na   | na   | na   | na   | 49  | nm  | n   | fibres are left joined together at the hem ie unsplit | n   | na   | 83cm |
| QM   | MAC 6010  | 1881 | undyed | na   | na   | na   | na   | 52  | nm  | y   | n   | n   | na   | 74cm |
| QM   | MAC 6063  | 1881 | nat | 3   | n   | n   | y   | 38  | nm  | y   | n   | n   | na   | 70cm |
| BM   | Oc1886,1015.13 | 1881 | undyed | na   | na   | na   | na   | 40  | nm  | nv  | n   | n   | na   | adult |
| QM   | E-08861-0  | 1886 | nat | 3   | na   | na   | y   | 60  | nm  | y   | n   | n   | na   | 60cm |
| QM   | MAC 5998  | 1886 | undyed | na   | na   | na   | na   | 50  | 4   | n   | n   | n   | na   | 95cm |
| QM   | MAC 6028  | 1886 | undyed | na   | na   | na   | na   | 56  | nm  | y   | n   | n   | na   | 82cm |
| QM   | MAC 6210  | 1886 | nat | 3   | n   | n   | y   | 47  | nm  | n   | n   | n   | na   | adult |
| QM   | MAC 6013  | 1886 | nat | 3   | n   | n   | y   | 35  | mm  | n   | y   | 1.5 | adult | trickier stitch |
| QM   | MAC 5991  | 1886 | nat | 2   | n   | n   | y   | 35  | nm  | n   | n   | y   | nm  | adult, small  variable sized stitches |
| QM   | MAC 6019  | 1886 | nat | 3   | n   | n   | y   | 52  | mm  | n   | n   | y   | 14  | adult |
| QM   | MAC 6002  | 1886 | nat | 3   | n   | n   | y   | 56  | mm  | n   | n   | y   | 18  | adult |
| QM   | MAC 6007  | 1886 | nat | 2   | n   | n   | y   | 39  | mm  | n   | n   | n   | na   | adult  trickier stitch |
| QM   | MAC 6027  | 1886 | nat | 3   | n   | n   | y   | 48  | mm  | n   | n   | y   | 11  | adult |
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| QM   | MAC 6026  | 1886 | nat | 3   | n   | n   | y   | 39  | mm  | n   | n   | y   | 1.5 | adult |
| QM   | MAC 6011  | 1886 | nat | 3   | n   | n   | y   | 48  | 3   | n   | n   | n   | na   | adult  trickier stitch |
| QM   | MAC 6041  | 1886 | undyed | na   | na   | na   | na   | 48  | 6   | n   | n   | n   | na   | 85cm |
| QM   | MAC 5989  | 1886 | nat | 3   | n   | n   | y   | 43  | mm  | n   | n   | n   | na   | adult |
| QM   | MAC 5994  | 1886 | nat | 2   | n   | n   | y   | 31  | mm  | n   | 3 tiered | n   | na   | adult, small  even stitches |
| QM   | MAC 5990  | 1886 | nat | 2   | n   | n   | y   | 47  | mm  | n   | n   | n   | na   | adult |
| QM   | MAC 6001  | 1886 | nat | 2   | n   | n   | y   | 31  | mm  | n   | 2 tiered | n   | na   | adult |
| QM   | MAC 6020  | 1886 | nat | 3   | n   | n   | y   | 41  | mm  | n   | n   | n   | na   | adult |
| QM   | MAC 6060  | 1886 | nat | 2   | n   | n   | y   | 50  | mm  | n   | n   | n   | na   | 73cm |
| QM   | MAC 6000  | 1886 | nat | 2   | na   | na   | y   | 50  | mm  | y   | n   | n   | na   | adult |
| QM   | MAC 6016  | 1886 | nat | 3   | n   | n   | y   | 59  | mm  | n   | n   | y   | 12  | adult |
| QM   | MAC 6018  | 1886 | nat | 3   | n   | n   | y   | 51  | mm  | y   | n   | n   | na   | adult |
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<td>56</td>
<td>4</td>
<td>y</td>
<td>n</td>
<td>n</td>
<td>na</td>
<td>81cm</td>
<td>even stitches</td>
</tr>
<tr>
<td>AM E059511</td>
<td>1956</td>
<td>nat</td>
<td>3</td>
<td>n</td>
<td>n</td>
<td>y</td>
<td>75</td>
<td>5</td>
<td>y</td>
<td>fibres knotted in bundles relating to the colour they were dyed</td>
<td>n</td>
<td>na</td>
<td>83cm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AM E077386</td>
<td>1956</td>
<td>nat</td>
<td>2</td>
<td>n</td>
<td>n</td>
<td>y</td>
<td>37</td>
<td>13</td>
<td>n</td>
<td>2 levels</td>
<td>y</td>
<td>15</td>
<td>64cm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AM E060787</td>
<td>1961</td>
<td>nat</td>
<td>3</td>
<td>n</td>
<td>n</td>
<td>y</td>
<td>32</td>
<td>15</td>
<td>n</td>
<td>2 levels</td>
<td>y</td>
<td>15</td>
<td>55cm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QM E-12539-0</td>
<td>1966</td>
<td>nat</td>
<td>1</td>
<td>n</td>
<td>49</td>
<td>mm</td>
<td>n</td>
<td>n</td>
<td>n</td>
<td>na</td>
<td>80cm</td>
<td>even stitches</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QM E-16670-0</td>
<td>1966</td>
<td>syn &amp; nat</td>
<td>2 syn: purple/ light brown</td>
<td>1 nat</td>
<td>n</td>
<td>y</td>
<td>n</td>
<td>81</td>
<td>mm</td>
<td>n</td>
<td>n</td>
<td>n</td>
<td>na</td>
<td>50cm</td>
<td></td>
</tr>
<tr>
<td>QM E-18031-0</td>
<td>1971</td>
<td>syn &amp; nat</td>
<td>2 syn: purple/ pink</td>
<td>1 nat</td>
<td>n</td>
<td>both</td>
<td>n</td>
<td>46</td>
<td>mm</td>
<td>y</td>
<td>n</td>
<td>n</td>
<td>na</td>
<td>adult, small 51 cm</td>
<td>variable sized stitches</td>
</tr>
<tr>
<td>QM E-18033-0</td>
<td>1971</td>
<td>syn &amp; nat</td>
<td>2 syn (purple, pink) &amp; 1 nat</td>
<td>y</td>
<td>both</td>
<td>n</td>
<td>46</td>
<td>mm</td>
<td>y</td>
<td>small section of longer material, 55cm</td>
<td>n</td>
<td>n</td>
<td>adult</td>
<td>waistband repaired with synthetic string</td>
<td></td>
</tr>
<tr>
<td>QM E-18032-0</td>
<td>1971</td>
<td>syn</td>
<td>1 (pink)</td>
<td>n</td>
<td>y</td>
<td>n</td>
<td>50</td>
<td>9</td>
<td>n</td>
<td>2 levels</td>
<td>y</td>
<td>6</td>
<td>60cm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
E276, E278, E277  Headband with the insignia of a ‘sorcerer’s’ office. The insignia consists of layered alternating disks of white shell and star shaped disks made of coconut shell. The stars were cut with pig tusk in the old days. The band is made from a plant called *ngafae* with a fibrous root that travels along the ground. It is prepared by scraping the skin off the roots with a shell and then rolling the fibres to form a yarn. Ameaua’s gesture to demonstrate the rolling of the fibres indicated that it was done on the lap of the leg. The job’s tears called *pipiko* are associated with death but are also worn by ‘sorcerers’. Pipiko grow like rice. The seeds are picked off one by one and then dried. Then a hole is made with a bamboo needle.
Design of turtle shell is used by the Angapu clan. This is Ameau’s wives clan. It is called a *Kafe* (E.L.). The women wear them strung around their waists at the top of their skirts. Men may wear them around their heads. They can be used as a type of bride-wealth. The turtle shell is probably hawksbill.
### E3115
As for E22641. Called *tsiu* (?).

### E8155
Olive shell necklace. From Kabadi or Nara villages i.e. on the way to Port Moresby. For dancing at ceremony and can be worn by sorcerers. The shells are pierced through the base with a bamboo needle and then threaded through. Worn by war chief, sorcerer or war official.

### E3155
War chief, sorcerer or war official would use this. (Can’t find number on database.)

### E3106
Headdress (*Aou*) with Cuscus fur taken from the skin of the testicles.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E3095</td>
<td>Ordinary people can use this.</td>
</tr>
<tr>
<td>E3114</td>
<td>Coconut shell.</td>
</tr>
<tr>
<td>E69583</td>
<td>Coastal people in general (e.g. Roro, Wyma?) make/use it. Made with cut cowrie shell. Anyone can wear it. It may be traded.</td>
</tr>
<tr>
<td>E62500</td>
<td>Worn over the shoulder, across torso.</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>E63538</td>
<td>Is not Central- perhaps is New Guinea.</td>
</tr>
<tr>
<td>B6377</td>
<td>Is called <em>Mopio</em>. Not on Emu- B6376.</td>
</tr>
<tr>
<td>E23430</td>
<td>Probably a Koitapu object.</td>
</tr>
<tr>
<td>E3123</td>
<td><em>Eke</em> are earrings worn by women and girls all along the coast as ordinary day-wear. Made by Roro people.</td>
</tr>
<tr>
<td>E23431</td>
<td>Not a Mekeo object. Made in the mountains.</td>
</tr>
<tr>
<td>B6376</td>
<td>May be from Mekeo and mountains. Made from flying fox canine teeth and cloth. <em>Tsiabu</em> is a word that means both hot and woven cloth. ‘Hot’ is a powerful magic property. Mark Mosco said that the laplaps worn by the first ‘native constables’ were referred to as <em>tsiabu</em> and this may have been how the connection between ‘hot’, in the sense of power, and woven fabric was made.</td>
</tr>
<tr>
<td>E22283</td>
<td>Worn on the ankles for dancing.</td>
</tr>
<tr>
<td>--------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>E70898</td>
<td><em>Fatsi</em> (E.L.) is a necklace and chest ornament/pendant used by Mekeo people. The pearl shell, now separate, sits at the back of the neck.</td>
</tr>
<tr>
<td>E11541, E30689</td>
<td>Not Mekeo. Is worn by widows in mourning. Perhaps used by mountain people between Port Moresby and Mekeo.</td>
</tr>
<tr>
<td>E58767</td>
<td>Mekeo object called <em>kufa</em>. Only the narrow type are called <em>kufa</em>, these are for mourning. The broad type are used for dancing. Ameaua indicated that these would be worn on the arm.</td>
</tr>
<tr>
<td>E91764</td>
<td>Generic use.</td>
</tr>
<tr>
<td>---------</td>
<td>----------------------</td>
</tr>
<tr>
<td>E23431</td>
<td>Mountain ones.</td>
</tr>
<tr>
<td>E71009</td>
<td>Does not know where it’s from but is generic and can be coastal.</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>E87123</td>
<td>Called <em>makwe</em> (E.L.).</td>
</tr>
<tr>
<td>A15735</td>
<td>Ameua has seen mountain people wearing these in Port Moresby.</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>A16005</td>
<td>Cassowary feathers. Perhaps made by mountain people.</td>
</tr>
<tr>
<td>PUN712</td>
<td>New Guinea people.</td>
</tr>
<tr>
<td>E72704, E6205</td>
<td>Does not know anything about them but they are shields used for dancing because they are thin and there is a rattle attached to the handle at the back. Perhaps are from New Guinea.</td>
</tr>
<tr>
<td>Pipes</td>
<td>None of the pipes shown to him were from his area. Mekeo ones are only about</td>
</tr>
<tr>
<td><strong>30cm long.</strong></td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td></td>
</tr>
</tbody>
</table>

| **E23403**  | Stick inside is for cleaning the pipe. Leaf of tree called *wahlopae* (E.L.)… |
| **B2190**   | Style of shield is called *ketchie*. |

| **E36478**  | Mekeo house model. Mark Mosco said it’s from anywhere on the coast. Ameaua said it may have been made as a chief’s platform i.e. for carrying a chief. He said that the first bishop, who was from Mekeo, was carried around on such a thing. The posts are called *kopongo* and are made of kwila wood to signify permanence. Kwila wood is very hard to work and long lasting. |

| **Axe**     | Are called *pahlala* (E.L.). |
**E62889, E61217**  Mekeo style drums have a regular polygonal cross section. Incised hatched lines along the length of the drum were described as *kaykinea* (E.L.). *Kaykinea* meant something like written upon.

**E35288**  Roro.

**A16040**  Mekeo style. Made from the inner/new shoots of sago tree- shredded, dried and then knotted to make the skirt. The inner Mekeo have sago. A fruit called an *omeme* is chewed up and spat out to produce a strong blue. The colour is only present in the skin. Yellow comes from a plant that looks like ginger, perhaps turmeric, called *loufa*. 
Old Mekeo style.

Only women wear skirts usually 2 or 3 worn with short underneath and long over the top. This creates a very appealing swaying movement especially when dancing. Fibres in this skirt are knotted in bundles to make lines. Decoration/trim at top of skirts is appropriate to clan. Skirts are painted after constructions using a brush.
<p>| E3828 | Is a Mekeo bag made from a fibre called <em>che</em>. The design is called <em>Angai kepo afunga</em> (lit. fish stone place) i.e. fish scale pattern. Only a leader of mekeo <em>Maipamanga</em> (first clan of Maipa) would use something with this design. Ameaua joined this clan. The design may also be used on skirts. The weave on the stripy side is unusual and only skilled women could have made it. |
| E3827 | The feathers are <em>kafuka</em>. This is a chief’s bag. Lines may be used by everyone. The name of the weave in squares is <em>anga poa</em>. The string is dyed before weaving. |</p>
<table>
<thead>
<tr>
<th>E3826</th>
<th>Probably not mekeo. Sometimes job’s tears are hanging off but this maker has put a lot of feathers on. Probably a chief’s bag idea.</th>
</tr>
</thead>
<tbody>
<tr>
<td>E3825</td>
<td>Made with <em>che</em>. The pattern name is <em>tsiu</em>. This is an ordinary man’s bag because no decorations are tied on. Plain on one side is called <em>fukay</em>.</td>
</tr>
<tr>
<td>E3824</td>
<td>Made with <em>che</em> fibre. Has tied on decoration but it is just a decorative small bag.</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>E3129</td>
<td>Very small bag that may have been used for carrying bait-berries for mullet or carrying betel nut or a comb etc to be worn around the neck. When fishing, the berries are chewed up to chum the water.</td>
</tr>
<tr>
<td>E429</td>
<td>Made with <em>che</em> fibre. Small bag is called <em>eka namu</em>.</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>E393</td>
<td><em>Kahkah</em> - women’s work bag that can be used for carrying a baby or firewood.</td>
</tr>
<tr>
<td>E392</td>
<td>Angapu clan design called <em>ikuani</em> representing garfish. Made with <em>monga</em> fibre. <em>Aykahkah</em> is a generic name for the size of the bag.</td>
</tr>
</tbody>
</table>

*Note on *Kafukafu* special category of objects with certain rules regarding their use e.g. large crescent pearl shell.*
Probably a mortuary feast. Roof design is called *kaipa* (E.L.). Chief clubhouse is only for men and is called *oofu*. Different clans have different roof designs on their clubhouses. The design is clan specific.

*Kanibo* is the name of the nose piercing or the jewellery worn. The crescent shell on the neck is called *kaka*.

Ameua did not know about these people.

The people are sitting on a platform—it is not a house. This type of platform is called a *baba*. 
| **V4379** | A young girl wears a short skirt when she is just getting breasts. When she’s getting serious about boys she will wear a long skirt. This girl also has on a *penga* or headdress. |
| **V4359** | Yule Island – Bishop’s place. It is the big church on top, where the school is. |
| **V4365 & V4369** | Clan clubhouses are distinguished by the roof design. This roof style is called *emeu fonga* and this is the *autsio* clubhouse of the Angapu clan. |
| V4383 | Kopongo (E.L.) posts with inepe (E.L.) i.e. hornbill design. |
| V4412 | The big pot for collecting water is called an unguwa (E.L.). Originally Mekeo grass skirts had no designs on them. Dark skirts were stained with swamp mud and worn by widows. Other women and girls wore uncoloured skirts. In the last 50 years or so the Mekeo have been given permission, as friends, by the Roro to copy their designs. |
| V4418, 4419, 4420 | Roro villager’s making pots. |