

Technical and Vocational Education and Training:  
Issues, Concerns and Prospects 35

Lindy Joubert *Editor*

# Craft Shaping Society

Educating in the Crafts—The Global  
Experience. Book One

 Springer

# Technical and Vocational Education and Training: Issues, Concerns and Prospects

Volume 35

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The audience includes policy makers, practitioners, administrators, planners, researchers, teachers, teacher educators, students and colleagues in other fields interested in learning about TVET, in both developed and developing countries, countries in transition and countries in a post-conflict situation. The Series complements the International Handbook of Technical and Vocational Education and Training, with the elaboration of specific topics, themes and case studies in greater breadth and depth than is possible in the Handbook. Topics covered include: training for the informal economy in developing countries; education of adolescents and youth for academic and vocational work; financing education for work; lifelong learning in the workplace; women and girls in technical and vocational education and training; effectively harnessing ICT’s in support of TVET; planning of education systems to promote education for the world of work; recognition, evaluation and assessment; education and training of demobilized soldiers in post-conflict situations; TVET research; and, school to work transition.

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Lindy Joubert  
Editor

# Craft Shaping Society

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ISSN 1871-3041

ISSN 2213-221X (electronic)

Technical and Vocational Education and Training: Issues, Concerns and Prospects

ISBN 978-981-16-9471-4

ISBN 978-981-16-9472-1 (eBook)

<https://doi.org/10.1007/978-981-16-9472-1>

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This Springer imprint is published by the registered company Springer Nature Singapore Pte Ltd.

The registered company address is: 152 Beach Road, #21-01/04 Gateway East, Singapore 189721, Singapore

## Series Editor's Introduction

This ground breaking volume, edited by Lindy Joubert, *Craft Shaping Society. Educating in the Crafts – the Global Experience*, is the latest book to be published in the long-standing Springer Book Series 'Technical and Vocational Education and Training' (TVET). It is the 35<sup>th</sup> volume to date in this TVET book series.

Increasingly, it is accepted by governments, policy makers, researchers and civil society, worldwide, that skills development for employability, and thus technical and vocational education and training (TVET), have a crucially important role to play to achieve the United Nations Sustainable Development Goals (SDGs). In fact, a training in TVET addresses fourteen of the seventeen SDGs. I argue that a training within TVET is the Master Key to achieving the SDGs.

Vocational education is education that prepares people to take up employment in a skilled craft or trade as a tradesperson or artisan. This emphasises the importance of the crafts when viewed, for example, as an integral part of the global tourism industry. Craft production plays an important role in the development of cultural understanding and gender equalities, building strong partnerships, recycling and reuse of materials, and building community enterprises through the sale of textiles, jewellery, ceramics, carvings, metal work, hand-made souvenirs and momentos. Traditional crafts are made by hand, using traditional techniques or skills. These techniques are transferable from generation to generation. Such employment is important because it often allows crafts people to be independent business-people and to have ownership of their enterprise.

This important book provides a global overview of the current context of craft making, presenting artisans and craftspeople from many countries. This book of twenty-five chapters examines tools and materials, and form and function in terms of opportunities for employment. The essays comprehensively describe the crafts not only as vehicles for self expression and creativity, but also for the world of work, community and environmental sustainability.

The first three volumes to be published in this TVET series, all edited by Lindy Joubert, are:

*Craft Shaping Society - Book One (27 chapters)*

*Tradition and Invention - Book Two (26 chapters)*

*The Hand of the Creator – Celebration and Revival - Book Three (26 Chapters)*

*Craft Shaping Society* - Book One, explores the various pathways associated with maintaining bounded cultural identities and expressions of difference in an ever-changing, fragmented and fluid world. *Craft Shaping Society* introduces numerous examples to address the challenges and problems for educating in the crafts within the field of TVET.

Lindy Joubert is very well qualified to edit these important and timely books. Not only is she an accomplished artist, but she is also a highly respected and accomplished scholar with regard to practice-based research and writing, with regard to the arts, crafts, and architecture for creating healthy communities. She is particularly concerned with applied research, and with promoting educational innovation for development in the crafts. Lindy Joubert and her team have been involved in groundbreaking research evaluating creative activities for community health and wellbeing, with the key findings documenting the substantial mental health benefits. Outcomes from major research findings validate an education in the crafts as an important part of technical and vocational education and training (TVET), and to increase future employment.

In addition to her substantial academic credentials Lindy Joubert has been fully involved with policy- making, and has hands-on international experience in various regions of the world, with particular reference to Asia-Pacific. She has been a consultant with a variety of international organisations such as UNESCO.

*Craft Shaping Society* reflects on international perspectives and experiences, exemplifying development cooperation in regard to how the crafts have the capacity to shape society, engage communities, build groups and enrich individuals. As a result, there is no doubt that all three books on this important topic will be widely read.

In terms of the Springer TVET Book Series, in which this volume is published, the various topics dealt with are wide ranging and varied in coverage. The emphasis is on cutting edge developments, best practices and education innovations for development. More information about this book series is available at: <https://www.springer.com/series/6969>

We believe this book series (including this particular volume) makes a useful contribution to knowledge sharing about technical and vocational education and training (TVET). Any readers of this or other volumes in the series who have an idea for writing their own book (or editing a book) on any aspect of TVET, are enthusiastically encouraged to directly approach the series editors or Springer to discuss publishing their own volume in the series. Springer and the series editors are

always willing to support prospective authors shape their manuscripts in ways that make them suitable for publication.

8 July 2021

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# Foreword

At a critical moment in Shakespeare's play, Julius Caesar, Brutus shares this wise advice with his companion Cassius:

*There is a tide in the affairs of men  
Which, taken at the flood,  
Leads on to fortune  
And we must take the current when it serves  
Or lose our ventures.*

Now in the wake of a global disaster which has demonstrated the need to radically change our mode of living, of exchanging and of consuming, it is the right moment to advocate the crucial role of craft in societies. This first book in the series of collective works on *Educating in the Crafts—the global experience, Craft Shaping Society*, edited by Lindy Joubert, is therefore most opportune, relevant and useful.

The COVID-19 pandemic as well as an accumulation of ecological challenge have revealed the failures of an excessive globalized system based on material profits at the detriment of human values. The impact of global crisis has accelerated our awareness of the dangers of mass consumption, mass factory production and mass advertisement. If we do not want to lose the benefit of decades of ventures by activists worldwide, it is timely to restate and illustrate how craft can be a vital and everyday part of the social fabric. We have entered a time when humanity can revert back to the things of excellence that are authentic and truly meaningful, to artisanal products that have a key function in local economies and ecosystems.

The re-appraisal of craft is particularly relevant in the current paradigmatic change in contemporary economies, from the emphasis on increasing quantities (of income, production, jobs) to qualities (of work, of goods, of communities). As Richard Sennett reminds us in 'The Craftsman', "Craftsmanship names an enduring, basic human impulse, the desire to do a job well for its own sake". What people now seek is the meaning, the story and history behind a well handmade object, the mode of production in which humanity and integrity are central values. Craft ideally reflects the need today for the philosophy of materialism to take second place to shared ideals such as harmony, justice, beauty and well-being.

As the book illustrates with case studies from diverse geographical regions and cultural context, Craft embodies two characteristics which contribute to its specific influence on society as compared with other sectors of activity such as agriculture, industry or tourism.

The first characteristic is its dual nature, as part of the Cultural Heritage and as a Creative Industry. As such, craft has the potential to produce values that are economic in nature but non-monetary. However, the non-monetary values of craft still need to be recognized beyond the simple demand-supply paradigm in which artisans are considered as ‘factors of production’ whereas their skills and talent are totally neglected. Yet, Craft persons do not simply preserve and safeguard age-old knowledge, skills and cultural practices but also enrich and adapt this heritage to contemporary needs of societies. Contrary to imported industrial products, local handmade craft is a social good sustained through societal relations between the artisan and the consumer and a process of mutual appreciation.

Craft is at the same time considered as a creative industry using individual creativity, skill and talent as primary inputs, with the potential for generating employment and resources. Now, creativity is the only resource which is unlimited and equally distributed around the world, whether in developing/developed countries, among rich/poor or by men/women. However, the inequality lies in the existence or not of a favourable environment to stimulate, develop and promote the creativity of craftspeople. Since my first encounter with craft persons some forty years ago in Africa, I have been struck by the huge gap between their talent and their recognition in society. They are creators of beauty-and of revenue-yet they do not enjoy the social status and protection they deserve; they are at best regarded as persons, very rarely as personalities, in their communities, regions and countries. By contrast, it is striking that in a world of global mass culture and social networks, the “stars” of the day, whether film celebrities, musicians or sports champions, are idolized disproportionately to their creative role in society. One of the merits of this book is to contribute to a better awareness and recognition of craft and of craft persons.

The second characteristic of the crafts sector is its transversal nature and its privileged role in the global priority to sustainable development. On the one hand, craft is intimately linked to various development sectors like education, tourism, employment, trade and commerce and to cross-cutting issues like poverty eradication and gender equality. It is worth recording that it is the only sector that fulfils 11 of the 17 Sustainable Development Goals (SDGs) of the United Nations. On the other hand, craft practices contribute not only to strengthening cultural and human capital and social cohesion but also to environmental sustainability, using local, natural resources without threatening them but in a long-time perspective.

Finally, *Craft Shaping Society* provides a useful and necessary tool for a broad spectrum of actors from artisans to designers, from teachers to researchers, from craft promoters to marketing specialists. In the light of a variety of experiences and innovations, the book offers a set of strategies and approaches to address the challenges and opportunities facing the future development of the craft sector. Above all, emphasis is rightly placed on the need to ensure the smooth transition from tradition

to modernity through vocational education, applied research and new technologies and to establish lasting links between knowledge and know-how.

Some 50 years ago, the creator of the ‘Global Village’ concept, Marshall Mac Luhan, predicted that “In the future, the role of the craftsman will be more important than ever before”. In tune with this prophecy, there are many signs that in the coming years we will witness a growing awareness of craft shaping Society. The very qualities we have hitherto taken for granted in crafts will be in increased demand- qualities of timelessness and permanence, the adaptability of craft persons to changing needs and, above all, the human dimension of crafts.

Paris, France

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# Preface

*Craft Shaping Society* is the first book in a series of books sub-titled, *Educating in the Crafts- the global experience*. These books provide an overview of the current context of craft making, illuminated through the words and images of artisans engaged in a wealth of craft practices and traditions. The aim of the books is to make the vital link between cultural and economic potential, skills, knowledge, education, and employment. The books explore the myriad ways that creativity, crafts, and artisanship are navigated and negotiated for both the individual and craft collectives, between inherited traditions and modern technologies.

*Craft Shaping Society* provides perceptive insight into the lives of many talented people committed to a life working in the crafts. Two hundred highly regarded artisans, academics, technologists, entrepreneurs, businesspeople, curators, and researchers, from over thirty countries, have contributed to this suite of books. The contributing authors express their professional practices and creative pathways with knowledge, experience, and passion. They offer insightful analyses of their traditions and cultural practice in the marketplace, alongside the evolution of technology as it adapts to support their business strategies. They write about the teaching and research which informs their practice; and they explain the importance of their tools and materials to the form and function of their design and craft making. The essays reveal a poignant expression of their successes, disappointments, and opportunities as they define and explore creative production.

The genesis of the books arose from my involvement with UNESCO as a consultant at Paris Headquarters (2000- 2003). This in turn led to the formation of the inaugural UNESCO Observatory in 2005 at The University of Melbourne. From the outset of this initiative, I led a range of community-based arts/crafts, architectural, and cultural projects within a Master's subject I taught in the Faculty of Architecture, Building and Planning. Young student architects designed new infrastructures guided by the eminent architects Greg Burgess and Andreas Bickford who were invited to contribute to the program. During this time, I was also leading collaborative inter-disciplinary research teams, which examined the powerful role that the arts and crafts play in mental health and wellbeing alongside my colleagues, Professors Margaret Kelaher and David Dunt, both leading population health experts. Our

team also included the sociologist, Dr. Naomi Berman; Dr. Violeta Schubert and Simon Malcolm, researchers and anthropologists at The University of Melbourne. We were joined by Professor Helen Herrman who was then the Head, Vulnerable and Disengaged Youth Research, President of the World Psychiatric Association (WPA) 2017-2020 and Director of the World Health Organization (WHO) Collaborating Centre in Mental Health, Melbourne. Together we were able to establish the critical role that craft, and creative practice plays in cultural maintenance activities, which in turn sustain good health and wellbeing in societies.

The UNESCO Observatory initiatives on infrastructure, design, arts, crafts were called Community Cultural Arts and Architecture Projects (CCAP), which evolved into an international Cultural Village Program. Working closely with communities, we raised significant funding of almost two million dollars resulting in the development of concept designs and structures for over twenty arts, crafts, and cultural education centres across sixteen countries. The UNESCO Observatory received the Vice Chancellor's Knowledge Transfer Award with partner Many Hands International for the Lospalos Centre for Traditional and Contemporary Arts and Culture, Timor Leste. Under the patronage of Jose Ramos-Horta, President of the Democratic Republic of Timor-Leste, this project provided powerful evidence that craft plays a key building block in maintaining strong culture.

*Craft Shaping Society* has an increased relevance for readers today. As this series of books was nearing completion, the world was awakened to the news of catastrophic global disasters including the Australian and American bushfire seasons of 2019–2020, and more recently devastating floods in Australia and South Africa. Concurrently, the entire world was immediately impacted by the COVID-19 pandemic. As I write this preface in April 2022, the World Health Organisation reports that the incidence of COVID-19 globally has surpassed half a billion known cases. The number of COVID-19 related deaths exceeds six million people. This pandemic is interrupting the global production and exhibition of craft, which in turn impacts the livelihoods of many artists all over the world. The publishers and the editorial team hope that this series of books will document and raise the profile of the integral position of craft practice in society.

Writing their essays against a backdrop of climate change and a global pandemic has tested the resolve and tenacity of many of the authors contributing to this publication. Many are craft artisans and workers themselves whose families and communities have demonstrated strength and flexibility as they adapt to a difficult future. Despite the obstacles, the future also offers great potential and new possibilities in the marketplace for global crafts.

Significantly, this book provides readers with case studies and examples of how artisans have harnessed both the traditions of the past alongside the latest design technologies to nurture and share essential skills that ensure the continuation of key cultural practices and craft industries. This guarantees not only their personal livelihoods, but also the sustainability of the wider community. *Craft Shaping Society*

provides research, ideas, and examples of how people have found pathways to success, paving the way for viable futures in the crafts.

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# Acknowledgements

I would like to acknowledge the many people in the crafts I have met through my travels over the last few years. In the spirit of adventure and a shared love for all things handmade and crafted, a strong network has been built on friendship and intercultural appreciation. Through UNESCO, the UNESCO Observatory, the World Craft Council Asia Pacific Region, and the Pacific Arts Association, I have experienced many fascinating and intrepid travels far and wide. Participation with cultural industries and craft artisans from Central Asia's Uzbekistan, Kyrgyzstan, and Kazakhstan, to Iran's incredible rock houses of Kandovan to cities and regions of China, Malaysia, Iran, Europe, India, Bhutan, and the Middle East. To Finnish Lapland with the Sami people in Levi to Sarawak and the Rumah Garie Longhouse in Malaysian Borneo with a group led by Craft Master extraordinaire, Edric Ong. From Santa Fe's International Folk Art Market to the Maasai in Kenya and across schools, NGOs and cultural enterprises in Thailand, Australia, South Africa and the South Pacific.

Through this involvement with the crafts sector, I have encountered a wide array of crafts and met the artisans, the educators, the scholars, the entrepreneurs and the businesspeople from more than thirty countries. These experiences are the origin of this suite of books. (*Craft Shaping Society* is the first in the forthcoming series). I wish to thank the experience, the zeal, the research and the life stories of almost two hundred authors demonstrating the power of the crafts, and how their stories in the crafts will contribute to various aspects of technical, vocational education and training TVET.

I am indebted to the Faculty of Architecture, Building and Planning at the University of Melbourne, Australia, for providing their support and encouragement to make the world a better place. The Faculty and the entire University nurtures a global, interdisciplinary outlook in academic pursuits, for supporting creativity and academic excellence. I would like to thank the Faculty for hosting the inaugural UNESCO Observatory, Multi-Disciplinary Research in the Arts and my role as Founding Director.

Sincere thanks to a number of people who have helped me with this volume of books along the way, Lara Nicholls, Ben Sievwright, Dr. Violeta Schubert and

Anne O'Donovan. Particularly, my sincere gratitude to Greta Costello, who generously assisted me in the final compilation of the suite of books. I also wish to thank all my colleagues at the World Craft Council, Asia Pacific Region. I wish to give special thanks to two friends and colleagues from the WCC APR Board, Dr. Surapee Rojanavongse from Thailand and Y. M. Raja Datin Paduka Fuziah Raja Tun Uda from Malaysia, for their dedication to the Crafts in Education agenda, the preservation of crafts, their constant friendship, wise counsel and for the many, memorable craft adventures we shared. Many thanks also to Dr. Richard Engelhardt (Thailand), Honorary Member & Advisor for his long-standing support and advice; the inspirational Mr. Edric Ong (Malaysia) Honorary Member & Advisor; Mrs Dinara Chochunbaeva and her daughter Altynai Chochunbaeva from Kyrgyzstan; the WCC APR President Dr. Adkham Ikramov and Vice President Mr. Aziz Murtazaev (Uzbekistan) and the Board and Secretariat.

With feelings of great sadness, I would like to express my deepest condolences on the tragic passing on 7th April 2021, of Dr. Ghada Hijjawi-Qaddumi, Immediate Past President of WCC-APR and the newly elected WCC International President for 2021–2024. Her energy and life-long dedication to preserving the heritage and future advancement of the crafts, artisans, craft communities, cities and industries will be long remembered along with her wonderful vitality, warmth and generosity.

Finally, I would like to thank the encouraging and inspiring Series Editor, Emeritus Professor Rupert Maclean and the publisher, Springer, for providing the opportunity to publish books of this nature and for their steadfast commitment and patience.

Lindy Joubert



# Brief Summaries of Essays

## Part I. Tradition and Aspiration

Chapter 1. In her sensitive and eloquent essay, *Invisible menders – the convict women who made The Rajah Quilt*, Lara Nicholls claims that craft activities can play an educative, redemptive, and reformist role in society. Such is the case with one the world's most significant colonial textiles - a humble quilt made on board a small convict ship called the Rajah, which had set sail from Woolwich in the United Kingdom for Hobart in 1841. Nicholls reveals that when a curator finally secured this enigmatic quilt for the national collection in Canberra in November 1989, he advised that, 'It is a work of art of great importance to the history and development of Australian textiles and would be a touchstone for the Australian National Gallery collections of Australian textiles and folk art'. According to Nicholls, The Rajah quilt is much more than those words describe, for in each stitch it holds the history of women in colonial Australia and speaks to their vulnerability and tenacity within a discriminatory and hierarchical society, the legacy of which is still experienced by contemporary craft workers today.

Chapter 2. Dinh Quoc Phuong in his essay, *Learning from Craft: Tin-Craft Production, Domestic Space and Street Identities in Hanoi* discusses the challenges facing traditional Asian cities due to rapid changes. Conserving place identities and differences include issues related to traditional craft production. Phuong uses as an example Hanoi's Ancient Quarter, which has been a shopping area since it was founded almost 1000 years ago and the area is characterised by a village system of trade and production with each street being named after a particular product. The practice remains until today and Phuong's research examines the changes to local craft production, revealing a great deal about the past and present and providing essential knowledge for future urban planning and the preservation of specialised craft industries.

Chapter 3. William Ingram as the co-founder of Threads of Life, a fair-trade business based in Bali that has developed a market-based solution for over one thousand Indigenous weavers on twelve islands that helps to maintain endangered Indigenous arts and crafts. Ingram's essay explores the development of Threads of

Life's methods in the field and the marketplace, recognising that the meeting of business culture with the weavers' culture is the meeting of two value systems, and that empowering Indigenous partners requires each member of Threads of Life's field staff to embrace the pedagogic processes of the indigenous culture.

## **Part II. Cross-Cultural Traditions**

Chapter 4. Louise Hamby presents her cross-cultural research, *Macassan Influence on Arnhem Land Material Culture*. Material culture items, she claims, are not created in isolation; they are inspired by the society in which they are produced and by visitors outside their country. The outsiders considered here were composed of a mixture of races from the Malaysian and Indonesian archipelagos, most commonly called Malays or Macassans. The influences on the insiders, Indigenous Australians of Arnhem Land and their material culture can be seen in actual materials brought by the Macassans. Tangible objects were not created without being immersed in the many intangible items including customs, kin relationships, language and designs. This chapter aims to lay the framework for analysis of Arnhem Land material culture influenced by Macassans by identifying the categories of items and places that have not received much attention, particularly beads. Through this research, beads and the things made from them will begin to assume a position not only in trade systems in Southeast Asia but within the culture of Aboriginal people in Arnhem Land.

## **Part III. The Woven**

Chapter 5. Susan Cochrane's essay, *In Her Hands: Bilum Weaving in Papua New Guinea* presents her passion for the versatile, constantly evolving bilum (net bag) which is shared among Papua New Guinea women. Bilum are also treasured by residents and visitors to Papua New Guinea, and lovers of fine weaving everywhere. In the past decade, garments made with bilum stitching technique rapidly became a hot fashion item in Papua New Guinea and beyond. The latest innovation is bilum art, large-scale 2D weavings, extending again the inventive visual language of Papua New Guinean women.

Chapter 6. Elizabeth Oley presents *Weaving Their Way to Self-Sufficiency*. An awareness of the environmental impact caused by local women's reliance on agriculture in a region in Karnataka led one man to offer these women an alternative and sustainable livelihood option. Gandhian ideals of self-sufficiency inspired the choice of handloomed cloth. The initiative began with a small group of women tailoring kurtas (men's shirts) which were marketed at cultural events. Over twenty years later the women's organisation Charaka, named in Gandhi's honour after the spinning wheel, operates in a remote village with an outlet in Bangalore serving the urban market. This project is remarkable in that it has introduced weaving to an area with

no weaving tradition. In this essay Oley argues that the policies underpinning this organisation are an innovative response to a contemporary ecological and social issue. With the objective of giving alternative livelihood skills, the organisation produces eco-friendly handloomed goods through the sustainable use of natural resources and has provided social uplift for many women. The success of this society is why it is deemed a role model for other organisations.

Chapter 7. *The Al-Sadu Textile Research Project was Founded by Dr. Keireine Canavan and Dr. Ali Alnajadah*. The aim of the research was to consider the Bedouin al-Sadu weaving patterns and traditional symbolism at Beit al-Sadu, the National Museum of Kuwait and National Museums Collection Centre Scotland, Edinburgh UK, and other private collections. The Canavan/ Alnajadah research collaboration has continued with a research focus on the curtain (gata, ibjad) or decorative woven panel that divides the men's quarters from the women's in the traditional Bedouin tent Beit al-Shaar. Working closely with Bedouin master weavers, the semiotic meanings within the patterned shajarah were undertaken in Qatar and Oman.

## Part IV. The Carved

Chapter 8. *Learning to Carve Wood in the Trobriand Islands*. Woodcarving is the predominant traditional art form in New Guinea. Harry Beran's essay describes how boys learn to become master woodcarvers in the Trobriand Islands, Milne Bay Province, Papua New Guinea. The main islands of the Trobriands archipelago are Kiriwina (also called Boyowa), Kaileuna, Kitava, and Vakuta. Milne Bay Province coincides approximately with a woodcarving style region referred to as the Massim region in the literature on Oceanic art.

## Part V. The Fired

Chapter 9. *Firing Sculpture and Its Public Interactions*, written by Azam Fallah Azizi and Morteza Mirgholami discusses the making and firing of large-scale contemporary, environmental ceramics. The process uses the 'bake-in-place' method which has been occurring in the world since the 1990s. Public interaction and participation involves baking the firing-sculpture, adding firewood or salt to the furnace, and recording the event. These public interactions cause the art and the ways of working with it to be transferred to the next generations. The significance of the process and the visual excitement help make the creation of the craft form more dynamic in public spaces.

## Part VI. The Educational—Research and Development

Chapter 10. *Contextual Learning: Craft and Design in Technical and Vocational Education*. Pernille Askerud and Barbara Adler, discuss that as technology is introduced into more and more areas of production, and as education and training is extended to almost everyone, there is less and less time and opportunity for the kind of learning associated with vocations and crafts of various kinds. This de-skilling reflects on a decrease in the quality and range of practical knowledge of individuals, organisations, or societies. In this article, they present an international perspective on the potential of craft and craft pedagogy to support the learning objectives as expressed in international policies, arguing that the acquisition of craft skills involves both physical, intellectual, and creative faculties, stimulating emotional development—factors that are important for success at all levels of education, including TVET.

Chapter 11. *Educating in the Crafts: The Role of Research Organisations in Continuing Craft Traditions* by Mitraja Bais and Mansi Sathyanarayan Rao. Their case study examines the challenges and the opportunities for the rural artisan meeting demands due to the rising popularity of traditional crafts in urban and global regions. The essay touches upon the links between creative industries and design education and the authors analyse the potential of sustaining the indigenous craft traditions of India.

Chapter 12. Lauren England in her chapter *Crafting Higher Education in the UK: Tensions Between Policy and Practice* explores tensions between UK policy and craft higher education (HE). Reflecting on recent creative industries (CI) and education policies, and research on craft HE, England presents the implications of growing economic and employability agendas. The chapter begins by discussing the current HE environment, referencing recent policy and government proposals that influence creative HE. From this, contradictions are highlighted in the simultaneous advocacy for the CI as an economic growth sector and devaluation of creative educational pathways. Findings from research conducted at four craft HE providers in England is then used to highlight key tensions between policy and practice from the perspective of educators. The chapter concludes with reflections on how economic arguments could be used pragmatically by the craft sector, and a call for further research into the value of craft and the impact of arts education disinvestment.

Chapter 13. Maurice Galton and Ros McLellan (University of Cambridge) in their essay, *The Impact of Creative Learning on Young People's Wellbeing* offer a broad-based view of creativity and its impacts in education. They look at the principle of perfection in Asia to the emphasis on imagination, wellbeing and self-motivated creativity and the research of Howard Gardner and Sir Ken Robinson. Their paper has great relevance to this book with its emphasis on vocational training being nurtured by a spirit of entrepreneurship and artistic endeavour at a time when manufacturing in the United Kingdom was in serious decline.

Chapter 14. Disaya Chudasri from Chiang Mai University (Thailand) presents her essay – *Learning Crafts through Educational Research Projects: Reflections*

*from Thailand*. This essay addresses research and education as critical platforms for attracting people from multiple generations to engage with craft community enterprises. Chudasri outlines four research projects and discusses an educational project that enabled the 21st Century Skills of undergraduate students in Chiang Mai University. The research was classroom-based, conducted between 2015–2018 in an elective course, entitled: *Modern Life and Animation*. One of the teaching strategies involved a project-based learning by which design and craft activities were incorporated in the process of animation-making.

## Part VII. The Digital

Chapter 15. Paul Loh presents his research in digital advance manufacturing in architecture, robotics and computational design. His essay, *Towards Digital Craft* explores the notion, what it means for Craft to be Digital? Can the machine-made artefacts be a form of craft? He reveals how, in the future, machine learning can begin to emulate particular craft techniques to create new and unique artefacts. Issues of authenticity of the craft arise and he reflects on the nature of making in contemporary craft practice.

Chapter 16. Pradorn Sureephong, Suebpong Chernbumroong and Bence Tolmar discuss Chiang Mai, known as the capital city of handicraft and tourism industry of Thailand. Chiang Mai generates income and employment to the local people but now face new challenges to become more creative and knowledge intensive. Products and services need to become more differentiated, innovative, interesting, and higher value-added. Sureephong, Chernbumroong and Tolmar present their research *Chiang Mai Digital Craft: A Case Study of Craftsmanship's Knowledge Representation Using Digital Content Technology*, aimed at applying the notion of digital content including storytelling, 360-degree images, 3D-modelling and augmented reality to deliver to the customer. The result showed that the developed digital content was able to deliver the craftsmen's knowledge and story of the product, improving the value perception and satisfaction of the customers.

## Part VIII. The Digital and a Dying Art

Chapter 17. Stefan Popenici's essay, *The Fading Art of Handwriting*, discusses that in an era of technology and digital solutions, entire school systems in the world are scrapping handwriting. Popenici's essay supports the notion that the craft of handwriting in general and cursive writing in particular have a positive impact on the human brain. Writing by hand increases idea composition and information retention and cursive writing also increases fine motor skills. Studies show that children who learn cursive score higher on reading and spelling tests and this essay is an important reminder of a valuable craft, being lost to the detriment of all.

## Part IX. Craft, Creativity and Community

Chapter 18. Susie Vickery's essay, *Magic Stitch* examines concerns about global and local inequalities and responses to them through craft. It addresses three themes: the history of garment production and the exploitation of workers in the sweated trades; projects that aim to build capacity for livelihoods, and community engagement with women's health through craft and art. Each of the themes is discussed using examples from Susie's own work. These projects build capacity for income generation from craft production and encourage self-reliance in design, product development and marketing. Community engagement involves co-creation of the craft that responds to the health concerns of women in vulnerable communities in Mumbai through workshops and discussions. The craft works are made from recycled materials sourced from the local recycling industry, and the workshops culminate in exhibitions.

## Part X. The Aesthetic

Chapter 19. Alex Selenitsch. *Matter Mutter: An Antipodean Artist's Report on the Role of Matter in Capturing an Idea*. Selenitsch poses a number of ideas relating to creative work involving subjects, or expression, or demonstration—existential issues somewhat different to the mere fact of matter. Yet in making a creative work, these existential issues have to be made evident through matter. Not all matter is included in the art/craft/design arena. In fact, many disciplines deliberately restrict the kind of matter they deal with, and this is continued through to the transmission of techniques, working styles and distribution systems. These ideas are challenging but Selenitsch deconstructs and clarifies their meaning. For a practical word of advice, he states, there are two actions in pure making that can generate ideas: working with and through mistakes, and in improvisation.

Chapter 20. *Encountering with Fragments*. Rose Woodcock is interested in how fragments create the conditions for the possibility of chance encounters, and how the activity of 'encountering' unfolds to produce the ground rules that shape the practice as well as define its methodology. The overarching theme of Craft—how it might be defined and how those definitions might be articulated, exemplified and defended—is explored through the refractive lens of the encountered fragment rather than in direct dialogue with 'what craft is.' The discussion is a response to the unpredictable interactions among those various factors that exercise the Arts, whether we call them craft, fine art or science: materials, techniques, tools, concepts, methodologies, theories, critiques and contexts. Her overarching theme here is that of 'duologue', a concept developed in relation to the discourses associated with specific disciplinary practices.

Chapter 21. Gabrielle Bates' chapter *Crafting Resistance: Talismanic Memory Maps* presents her practice-based research at a time of rapid transformation in many parts of Sydney. Bates investigates how rituals and hand-crafted objects associated

with Witchcraft might be used to protect neighbourhoods affected by questionable development and gentrification. By creating a speculative place-lore, the core principles of Witchcraft are applied to Sydney suburbs affected by the construction of the controversial WestConnex Motorway. Magical rituals are combined to craft Talismanic Memory Maps and blends the subversive role of the Witch with grass roots activism to challenge disenchanting, modern values that commonly turn everything into commodities.

## Part XI. The Markets

Chapter 22. *Head and the Hands in the Clouds*. The emergence of online trading platforms have created virtual stores for connecting ethical consumers with impecunious craft producers. Kevin Murray's essay compares the corporate and the cooperative models for ethical trade. The aim is to find a place for traditional craft practices otherwise displaced by globalisation and urbanisation looking at the results of the *Sangam Project*—a three-way partnership between craftspersons, designers and consumers.

Chapter 23. *Transferring Traditional Art and Skills Into Contemporary Craft as a Sustainable Business in Nepal*. Chandra Prasad Kachhipati writes of Nepal's rich tradition of craftsmanship, and the new contemporary crafts that emerged in the 1980's. These products are made with locally available raw materials, utilising traditional skills. More than ninety percent of the artisans working in these crafts are women. The emergence of these crafts have helped in sustaining livelihoods and alleviating poverty by creating employment to thousands of women and marginalised producers. Fair Trade Group Nepal members develop and promote their crafts in the national and international market.

Chapter 24. Megan Atkins in her essay, *Exhibiting and Creating a Design Identity for Your Craft*, claims exhibiting or displaying your craft can be both exciting and challenging. Whether in the context of a commercial or gallery setting there are approaches and guidelines that you can use to assist in showing your work to its best advantage. From a craft market to an art fair or gallery, displaying your craft well can be of great benefit to your practice. Creating a design identity for yourself and your work is an important tool in communicating your story to a broad audience and can assist with the promotion and marketing of your work.

## Part XII. Conclusion

Chapter 25. *A Global Dialectic* by Lindy Joubert, editor of the book *Craft Shaping Society*. Authors of the highest calibre have explored and demonstrated the myriad ways that creativity, crafts and artisanship are navigated and negotiated between education, inherited traditions, modern technologies, the world of work and the changing global ecology. The increasing assaults from climatic disasters, the

pandemic COVID-19 are discussed, stressing the need to look for ways to recover from health and economic shocks. The environmental world is in crisis and *Craft Shaping Society* calls on artisans and educators around the globe to heed the call. The clear signal is that the solution lies in taking urgent, ambitious, and coordinated action for sustainable development. Past education systems are currently being challenged and dislodged, opening opportunities for a more relevant training system in the crafts. The chapter proposes TVET is the vehicle to educate through all aspects of the crafts by building skill-sets and preparing people for the cultural and economic potential of society.



# Contents

## Part I Tradition and Aspiration

- 1 **Invisible Menders: The Convict Women Who Made the Rajah Quilt** ..... 3  
Lara Nicholls
- 2 **Learning from Craft: Tin-Craft Production, Domestic Space and Street Identities in Hanoi** ..... 15  
Dinh Quoc Phuong
- 3 **Custodians of Culture in the Global Market: Working with Indonesia’s Indigenous Weavers** ..... 33  
William Ingram

## Part II Cross-Cultural Traditions

- 4 **Macassan Influence on Arnhem Land Material Culture** ..... 51  
Louise Hamby

## Part III The Woven

- 5 **In Her Hands: Bilum Weaving in Papua New Guinea** ..... 77  
Susan Cochrane
- 6 **Craft, Culture and Sustainable Development—Weaving Their Way to Self-sufficiency** ..... 89  
Elizabeth Oley
- 7 **Traditional Bedouin al-Sadu Weaving and New Solutions** ..... 103  
Keireine Canavan

**Part IV The Carved**

**8 Learning to Carve Wood in the Trobriand Islands, Milne Bay Province, Papua New Guinea** ..... 117  
 Harry Beran

**Part V The Fired**

**9 Firing Sculpture and Its Public Interactions** ..... 135  
 Azam Fallah Azizi and Morteza Mirgholami

**Part VI The Educational—Research and Development**

**10 Contextual Learning—Craft and Design in Technical and Vocational Education** ..... 153  
 Pernille Askerud and Barbara Adler

**11 Educating in the Crafts: Role of Research Organisations in Continuing Craft Traditions** ..... 173  
 Mitraja Bais and Mansi Sathyanarayan Rao

**12 Crafting Higher Education in the UK: Tensions Between Policy and Practice** ..... 183  
 Lauren England

**13 The Impact of Creative Learning on Young People’s Wellbeing** .... 195  
 Maurice Galton and Ros McLellan

**14 Learning Crafts Through Educational Research Projects—Reflection from Thailand** ..... 213  
 Disaya Chudasri

**Part VII The Digital**

**15 Towards Digital Craft** ..... 227  
 Paul Loh

**16 Chiang Mai Digital Craft: A Case Study of Craftsmanship’s Knowledge Representation Using Digital Content Technology** ..... 245  
 P. Sureephong, S. Chernbumroong, and B. Tolmar

**Part VIII The Digital and a Dying Art**

**17 The Fading Art of Handwriting: The Choice Between Computer Typing and Handwriting** ..... 263  
 Stefan Popenici

**Part IX Craft, Creativity and Community**

- 18 Magic Stitch** ..... 275  
Susie Vickery

**Part X The Aesthetic**

- 19 MATTER MUTTER: An Antipodean Artist’s Report  
on the Role of Matter in Capturing an Idea** ..... 303  
Alex Selenitsch
- 20 Encountering Fragments** ..... 313  
Rose Woodcock
- 21 Crafting Resistance: Talismanic Memory Maps** ..... 325  
Gabrielle Bates

**Part XI The Markets**

- 22 Head and Hands in the Cloud—Cooperative Models  
for Global Trade to Be Found in Traditional Crafts** ..... 341  
Kevin Murray
- 23 Transferring Traditional Art and Skills into Contemporary  
Craft as a Sustainable Business in Nepal. A Case of Mithila  
Art, Allo Fibre and Dhaka Weaving** ..... 351  
Chandra Prasad Kachhipati
- 24 Exhibiting and Creating a Design Identity for Your Craft** ..... 365  
Megan Atkins

**Part XII Conclusion**

- 25 A Global Dialectic** ..... 375  
Lindy Joubert

- Correction to: Invisible Menders: The Convict Women Who Made  
the Rajah Quilt** ..... C1  
Lara Nicholls

- Index** ..... 389

# Editor and Contributors

## About the Editor

**Lindy Joubert** is Board Member and Advisor to the World Craft Council Asia Pacific Region, WCC APR; Immediate Past Vice-President WCCAPR, South Pacific; Founding Director UNESCO Observatory Multi-Disciplinary Research in the Arts and forty years as an academic in Architecture and Education at The University of Melbourne, Australia. Lindy has facilitated the integration and promotion of the crafts and arts in health, design, education and community projects globally, gathering information and examples of craft in education from more than 30 countries, leading to the forthcoming suite of books, *Educating in the Crafts, the Global Experience*, (*Craft Shaping Society* is Book One). She is editor-in-chief of the UNESCO e-journal *Multi-Disciplinary Research in the Arts* ([www.unescojournal.com](http://www.unescojournal.com)); writes and presents research papers and her edited book, *Educating in the Arts—The Asian Experience*, 24 essays was published by Springer. Leading inter-disciplinary teams she has focused on the arts, crafts and architecture for community health and well-being achieving funding of over two million dollars. Lindy led teams for the Community Arts Development Scheme Evaluation for VicHealth and the Arts Health Strategy for the Australia Council; the Healing Arts project across Children’s Cancer Centres in Victoria and won the tender for the Creative Arts Strategy for the new Royal Children’s Hospital, Melbourne. Lindy held six international conferences in the art/crafts in health, and arts education and has had forty individual and group exhibitions of her paintings, six in New York City.

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**Part I**  
**Tradition and Aspiration**

# Chapter 1

## Invisible Menders: The Convict Women Who Made the Rajah Quilt



Lara Nicholls

Abject circumstances are sometimes the handmaiden of great artistic flourishing. Such is the case with one of the world's most significant colonial textiles, a humble quilt made on board a small convict ship called the *Rajah*, which had set sail from Woolwich in the United Kingdom on 5 April 1841. It was carrying 180 female prisoners and 10 children bound for the penal colony of Hobart in Van Diemen's Land.<sup>1</sup> Perhaps some thanked God for small mercies, for even a prison ship promised greater freedoms and substantially fresher ocean air in comparison to the putrid pestilence inside the Newgate and Milbank Prisons in London, where many of the *Rajah* women had been interred prior to transportation. Names, places, words. These all swish around and change in this story depending upon who is telling it. It makes it hard to get one's bearings.

When British officers staked their claim in Hobart in 1803, they were really in nipaluna.<sup>2</sup> It is all lutruwita Aboriginal land belonging to the Palawa people.<sup>3</sup> For a brief time, the Netherlandish navigator, Abel Tasman named it after Governor

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<sup>1</sup> DONOVAN MD, James, Surgeon Superintendent, *Journal of the Convict Ship Rajah*, General Remarks, 7 July 1842. Transcribed in [www.femaleconvicts.org.au](http://www.femaleconvicts.org.au).

<sup>2</sup> Tasmanian Aboriginal Place Names website: <http://tacinc.com.au/tasmanian-aboriginal-place-names/>.

<sup>3</sup> University of Tasmania Welcome Ceremony Protocols, 2021, <https://www.utas.edu.au/riawunna/welcome-ceremony-protocols>. Lutruwita is the First Nations place name for the island of Tasmania. The First Nations people are known as palawa and their language is called palawa kani. The protocol is to not capitalise proper nouns in First Nations nomenclature and that has been adopted in this essay, except in the instance of the term First Nations.

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The original version of this chapter was revised: Figure 1 has been updated. The correction to this chapter is available at [https://doi.org/10.1007/978-981-16-9472-1\\_26](https://doi.org/10.1007/978-981-16-9472-1_26)

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Anthony van Diemen of the Dutch East India Company. In 1648, a Dutch mapmaker, Johannes Blaeu, could finally fill in a glaring gap on the charts of the Great Southern Ocean with a place name. He was quite late really. The island for which the women convicts were bound in 1841 had already been named by the traditional owners, who had called it lutruwita for millennia. Curiously, the British jailers would soon rename it ‘Tasmania’ in 1853 after the Dutch navigator. Ten years before the convict women were sent to Hobart, the *muwinina* people, who had lived there for over 40,000 years, were exiled to the township of Wybellena on Flinders Island, a place named after another English mariner.<sup>4</sup> In the midst of all those comings and goings, a quilt was made on board the ship named *Rajah* for the self-improvement of women who had stolen things that did not belong to them. This is the untidy context in which an embroidery needle pierced a paisley fabric piece and stitched it to a backing cloth.

To western ears, ‘Rajah’ is an exotic-sounding name for a ship carrying such a destitute quarry of human cargo. It was as though it might instead be carrying leisured ladies who painted in watercolours and did counted thread work to pass the time before dressing for dinner each evening in light muslin and paisley cotton to counter the heavy warm air of the Bay of Bengal. No such pleasantries awaited these women, whose small crimes of survival lead them to a multitude of humiliations while incarcerated and later emancipated, if they were lucky. Most of the women had been convicted of larceny back ‘home’ in England, often the theft of minor articles from their masters such as bedclothes, lace or ‘gown pieces’.<sup>5</sup> Through the attrition of time, the barque has now lent its name to this mysterious and treasured textile made of 3000 hand-cut pieces from 400 different fabrics stitched together in the medallion style by a handful of unidentified convict women on board.<sup>6</sup> *The Rajah quilt* holds its secrets closely, never disclosing which women worked on it, nor the particulars of the missing century of provenance dating from its arrival in Van Diemen’s Land to its acquisition by a Scottish family in the 1920s.

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<sup>4</sup> ‘Palawa’ refers more generally to First Nations people of Tasmania and ‘muwinina’ refers to First Nations people belonging to the land around Nipaluna (Hobart) in particular.

<sup>5</sup> CROWLEY, T and SNOWDEN, D., *Patchwork Prisoners* research Tasmania, 2013, p. 65.

[www.founders-storylines.com](http://www.founders-storylines.com), documents all women prisoners on the *Rajah* including their crimes in the UK and assignment in Van Diemen’s Land.

<sup>6</sup> BELL, Robert, *The Rajah Quilt* National Gallery of Australia, 2015, p. 20.



© National Gallery of Australia, Canberra / Gift of Les Hollings and the Australian Textiles Fund, 1989 / Bridgeman Images

In the nineteenth century, it was not uncommon for women convicts to engage in quilting during the long four-month passage to Australia from England. What is unusual is to find a quilt of such significance as *The Rajah quilt* intact and in such pristine condition. The first thing to understand about this textile is that it is not a quilt per se, but a coverlet that was designed to adorn a bed, covering the mattress completely as it falls to the floor. As such it is unusually large, measuring well over three metres square.<sup>7</sup> Nor is it lined, thus we have a privileged window onto the handwork stitching and, at times, the little drops of blood that fell from the unthimble fingers of the amateur seamstresses partitioned to quilt its many sections. The design is of patchwork with 'Broderie Perse', a French term for Persian embroidery popular in the eighteenth and nineteenth centuries. It involved the appliqué of pretty motifs cut from imported chintz fabrics, then incorporated into a new decorative vignette. The ultimate expression of beauty from thrift. The central panel of *The Rajah quilt* is a perfect example. Appliquéd floral pheasants swoop in the corners around a delicate spray of flowers and smaller birds, their movement contained within 12 borders. On the farthest outer border, the key to understanding the greater purpose of this remarkable coverlet is revealed within an exotic garland of floral chintz sprays. There, stitched in 18 cross-stitches per centimetre in black silk thread, it reads:

---

<sup>7</sup> The coverlet measures 320 × 335 cm.

*TO THE LADIES of the Convict ship committee  
This quilt worked by Convicts of the Ship Rajah  
during their voyage to Van Diemens Land is presented  
as a testimony of the gratitude with which they remember  
their exertions for their welfare while in England and  
during their passage and also as proof that they have  
not neglected the Ladies kind admonition of being industrious  
June 1841*

Industrious. Be industrious, the quilt asks, for as Chaucer extolled in his *Canterbury Tales* of the late fourteenth century, ‘Do some good deeds, so that the Devil, which is our enemy, won’t find you unoccupied’.<sup>8</sup> This philosophy woven into the quilt lies at the heart of its purpose and its origin in the English Quaker Prison reform movement in the early nineteenth century. Arriving centre stage in this story is the great reformer, Mrs Elizabeth Fry, herself so full of busyness and purpose that the devil would be hard-pressed to catch her. Stitching and quilting became the chief ammunition in her armoury, not only to defend against sin but as a conduit for change and the improvement of a woman’s lot in life. A type of ‘doing deeds’-based feminism before that term existed.

Fry was a descendant of the Scottish Quaker, Robert Barclay, who was an early member of The Society of Friends. This egalitarian organisation taught that God resides in everyone and that the light within can be located through good behaviour and deeds when allowed to flourish in the right environment. A visit to the Newgate Prison in London in 1813 opened her eyes to the appalling conditions women prisoners and their children were compelled to endure in that period. Thus, began a life-long social project for Fry, which would extend to include the welfare of convict women transported to Australia.<sup>9</sup> In 1817, Fry had established the ‘Association for the Reformation of the Female Prisoners in Newgate’, which later became ‘The British Ladies Society for the Reformation of Female Prisoners’. The aims of the organisation are closely linked to our quilt:

to provide for the clothing, the instruction, and the employment of these females, to introduce them to knowledge of the holy scriptures, and to form in them as much as lies in our power, those habits of order, sobriety, and industry which may render them docile and perceptible whilst in prison, and respectable when they leave it.<sup>10</sup>

One rule of the Association was ‘that women be engaged in needlework, knitting or any other suitable employment’.<sup>11</sup> Made from off-cuts and fabric scraps, the stitching of patchwork coverlets became a commonplace activity, and the finished goods were often sold outside the prison walls or upon arrival in the Australian colonies, thus providing the women with piecemeal economic relief.

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<sup>8</sup> Chaucer, G. ‘The tale of Melibeus’ in *The Canterbury Tales*, first published in 1387.

<sup>9</sup> RAE, J., *The Quilts of the British Isles*, Deirdre McDonald Books, London, 1987 pp. 110–112.

<sup>10</sup> <https://www.biographyonline.net/humanitarian/elizabeth-fry.html>.

<sup>11</sup> *Ibid.* p. 111.

In 1825, Fry published an influential book, *Observations of the Visiting Superintendence and Government of Female Prisoners*, which provided much detail for improving penal reforms. Fry's unique contribution was her willingness to raise unpopular topics that others would rather leave untouched. Fry immediately applied her philosophy on the therapeutic and reformist potential of handicrafts, particularly quilt making, to women prisoners sent to New South Wales. The passage of the *Rajah* presented Fry with a ripe opportunity to influence the entire women's prison system in the colony of Van Diemen's Land. The yet unstitched quilt thus carried great aspirations and the Society sent bundles of sewing supplies to ensure that it would be completed and eventually presented to the Lieutenant-Governor's wife, Lady Jane Franklin, upon arrival in Hobart as proof of Fry's concept. The laundry list of supplies provided was as follows: Tape, 10 yards of fabric, 4 balls of white cotton sewing thread, a ball each of black, red and blue thread, black wool, 24 hanks of coloured thread, a thimble, 100 needles, threads, pins, scissors and two pounds of patchwork pieces (or 10 m of fabric).<sup>12</sup>

Fry ensured that another key ingredient also accompanied the *Rajah* women. She appointed Miss Kezia Hayter to act as their 'matron' on board the vessel to supervise and instruct them throughout the long passage. Kezia Hayter was directly related to Sir George Hayter, the famous British portraitist who was appointed as Queen Victoria's 'Principal Painter in Ordinary' in the year that the *Rajah* set sail for Van Diemen's Land. Although only 23 years old, she had worked at the General Penitentiary at Millbank. Fry hand-picked her to carry on her work in Tasmania and to assist Lady Jane Franklin in establishing and building the colonial off-shoot of Fry's British Ladies Society—'The Tasmanian Ladies' Society for the Reformation of Female Prisoners'. Quilting was not her only pre-occupation on board the *Rajah* for she soon fell in love with the ship's master, Captain Charles Ferguson and they became engaged on board. Sir George Hayter painted a fine pair of portrait miniatures of the couple in about 1845.

On 19 July 1841, the *Rajah* arrived at Hobart with 179 female convicts and 10 children. Of the 190 women who had originally embarked in Woolwich, ten had been removed at the docks because of violence or 'hysteria' and one, 40-year-old Sarah Parfitt, had died from chronic diarrhoea just out of Hobart. Whether it was Hayter's influence on the women, the therapeutic effects of needlework or the regular evening religious service on deck under the shade of an awning, one will never know, but it seems that the women of the *Rajah* were noted as an exemplary lot. Upon arrival, *The Hobart Courier* reported,

"The female prisoners bought out on this ship appear to be of a much better character than usual; their behaviour during the voyage was very good, doubtless in a great degree the result of the indefatigable care which appears to have been exercised both with reference to their morality and physical comfort. The Lieutenant-Governor most judiciously afforded every facility to the inhabitants who had applied for servants, to obtain them direct from the ship; this is a most desirable arrangement, for even an hour's contamination in that receptacle of wickedness, the Factory, may prove of lasting evil to the unfortunate creatures who once enter it."<sup>13</sup>

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<sup>12</sup> BELL, Robert, 2015, p. 7.

<sup>13</sup> Hobart Courier, Friday 30 July, p. 3.

The 'Factory' referred to by the correspondent is the Cascades Female Factory located west of Hobart in the shadow of Mount Wellington at a disused distillery, which had broken due to a surfeit of distilleries in the colony. It was here that many of the 'unassignable' women convicts would be sent upon arrival to work 12 hour days in either the kitchen, sewing room, school or laundry. Despite the idealism of the reform movement, the outcome for many of these women was a long sentence inside the aptly named 'Factory'. The only way for a woman to bypass its contaminating influence was to be assigned to a pastoralist or business owner upon arrival where she would be utilised as free labour to serve his household. If the woman misbehaved or was 'insubordinate', as was the regular criticism, it was likely that she would be returned to the Factory until 'reformed' and fit for service again. It would remain one of the many causes for the despair of which Lady Franklin would complain during the term of their vice-regal office.

The farthest southern landmass of the Australian colonies, Van Diemen's Land had a most conflicted upbringing. Its newly arrived inhabitants were an uncomfortable amalgam of opportunistic, self-interested free settlers in search of land and pastoral holdings and a large contingent of convicts. Van Diemen's Land was at once both a punitive penal settlement and a private enterprise whose prosperity was greatly enabled by the flow of free convict labour for both public works and commercial and pastoral development. The advancement of the colonist's pastoral interests came at a significant cost to the First Nations people of Tasmanian and the Franklins' arrival coincided with the aftermath of the Tasmanian Black Wars. Now regarded as one of the worst genocides in Australian colonial history, it saw the annihilation of many Indigenous Tasmanians and their dispossession from their lands.<sup>14</sup> Within an international humanitarian context, such outcomes were considered problematic, or as Sir George Murray referred to the atrocities, they left 'an indelible stain upon the character of the British Government'.<sup>15</sup> Furthermore, by the end of 1840, the colony experienced a severe economic depression. Governing in this context was a complex and highly politicised exercise requiring diplomacy on the ground and at the Colonial Office in London. In some respect, Franklin's tenure was doomed before it had begun.

The Arctic explorer, Sir John Franklin was appointed Lieutenant-Governor in 1836 and arrived in January the following year accompanied by his second wife, the indefatigable Lady Jane Franklin. He was related to Matthew Flinders and had served as his midshipman on the *Investigator* during its circumnavigation of New Holland between 1801 and 1804. Franklin held the post until 1843 when he was recalled from duty due to fractious relations with his government agents. As his private secretary, Alexander Maconochie, commented on the deleterious state of relations among government officials, convicts and colonists, 'selfish feelings everywhere predominate; their expression everywhere runs riot; and as everyone, from

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<sup>14</sup> BONYHADY, T., LEHMAN, G. *The National Picture – The Art of Tasmania's Black War*, National Gallery of Australia, 2018, p. 15.

<sup>15</sup> Sir George Murray, British Secretary of State for the Colonies to Lieutenant-Governor George Arthur, 1830.

highest to lowest, appeals directly to the Governor, the turmoil in which he lives is incessant'.<sup>16</sup> Doubtless, it was this maelstrom that provoked Lady Franklin to write to a friend, that in order to survive there, 'people should have hearts of stone and frames of steel'.<sup>17</sup> Nevertheless, they persevered with the project and saw their role as extending well beyond its administrative law and order functions setting about to elevate colonial society through the establishment of the organisations and institutions such as the Royal Society of Tasmania, the building of a natural history museum, and the establishment of Christ's College.

Through the intercessions of Elizabeth Fry and Kezia Hayter, Lady Franklin established 'The Tasmanian Ladies' Society for the Reformation of Female Prisoners'. Fry and Franklin had met in London as early as 1822 when, prior to her marriage to Sir John, Lady Franklin had visited Fry in Newgate Prison and had been impressed by her progress with the women prisoners and their conditions. Before departing for Van Diemen's Land in 1836, she contacted Fry to offer her services to put in place some of the methods and reforms in the new colony. Two weeks after the arrival of the *Rajah* in 1841, Lady Franklin had written a long letter to Fry despairing at the colonial system of transportation, incarceration at The Factory and the assignment of female prisoners. It was as though Lady Franklin saw all of Fry's good works being undone the instant the women arrived in the colony and were subjected to the penal system.

Seen in this context, the quilt represents a moment of light. Created on the open waters in the relative freedom of a well-supervised prison ship overseen by a young matron in love with the ship's master in the presence of the philanthropically minded Reverend Rowland Davies, whose on deck open-air sermons apparently preached hope and reconciliation, it had a promising beginning.<sup>18</sup> However, the reality that awaited the *Rajah* women in Hobart and Launceston was sobering. The quilt itself fell into obscurity, even its presentation to Lady Franklin went undocumented, nor was it recorded in the ship's manifest upon disembarkation. At some point, the quilt was taken back to England where it remained until entering a collection in Edinburgh, Scotland where it was eventually discovered by Janet Rae and included in her 1987 publication, *Quilts of the British Isles*.<sup>19</sup> The women who made the quilt remain anonymous and although we have thorough records of each woman transported on the *Rajah*, whoever was assigned to make the quilt was ultimately left unidentified and unrecognised. We know from convict records that some of the women on board were seamstresses, or 'needlewomen', dressmakers and milliners, thus one could assume it was those women who were selected to make it. However, we must remember that much of the stitching is amateur, perhaps we may even say 'rough and ready', and that this was a reformist gesture, thus any woman would be fair game to work on the coverlet.

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<sup>16</sup> FITZPATRICK, K., Sir John Franklin, *ABD*, volume 1, [www.abd.anu.edu.au](http://www.abd.anu.edu.au).

<sup>17</sup> HUGHES, R., *The Fatal Shore*, Random House, London, 2010 p. 488.

<sup>18</sup> The Reverend Davies was returning to his church at Longford and was a strong opponent of transportation partitioning Queen Victoria for its abolition in 1848.

<sup>19</sup> RAE, J., 1987.

What was the women's fate in Van Diemen's Land post-quilt making? We know that upon arrival in Hobart, 47 women were assigned to service and 54 were sent to the 'Receiving House' (most likely the Cascades Female Factory). The remaining 79 were sent on a government steamer to Launceston where four were placed in the female factory and 73 were assigned to service including properties in the north such as the gracious neo-Georgian homesteads of Woolmers, Brickendon and Panshanger.<sup>20</sup> The latter of these was originally built by Joseph Archer, who had chartered his own vessel to Van Diemen's Land in 1820 with goods and cash including a flock of pure Merino sheep. Many convict women were assigned to Mr Archer and his brother Thomas, who was his neighbour—the women's servitude and free labour contributing to both Archer men's substantial wealth-making enterprises.

Despite its unequivocal status as a cultural artefact today, and the high aspirations for its reform purposes, at the time no one thought to identify the quilt's makers. They remain in collective oblivion. The first hallmark of artistic sovereignty and recognition is the identification of the artist or creator. Yet, these women were denied that basic right as an artist. Instead, we are left guessing among the convict records as to who was assigned to make any section of the quilt. Could it have been, Mary Ann Lee, a 19-year-old needlewoman with a long scar on her throat convicted of stealing bed clothes and who asked to be transported. Perhaps she stitched alongside Elizabeth Western, a needlewoman of 22 years who had lost sight in her right eye, transported for burglary and assigned upon arrival to Mr J A Denham of Launceston. The quilting group may have included Sarah Woodhouse, a dressmaker and seamstress of 53 years, sentenced to seven years transportation for stealing a sheet in a dwelling house, who upon arrival was classified as 'not fit for assignment' and sent to the Cascades Female Factory before later going to a Mr McTavish of Hobart. Sarah would return to the Female Factory on numerous charges laid by her master for drunk and disorderly behaviour. The glaring hypocrisy being that this was a colony whose distilleries would go broke because there were so many of them supplying free settlers who could imbibe hard liquor with impunity. One of the quilters may have been Elizabeth Slater, a needlewoman who had been in and out of prison 11 times before being transported to the colony for stealing a watch, guard and chain. She was sentenced to seven years and became a member of Mr Archer's convict labour force helping him to amass one of the great colonial fortunes of the nineteenth century.

It is imaginable that perhaps the quilters included one of the convict mothers accompanied by her children such as Jane Bowie, a 48-year-old dressmaker from Marylebone convicted of larceny in a dwelling house and for stealing a shawl from her mistress. She was accompanied on board by her daughter, both of whom were sent to Cascades Female Factory. Or Elizabeth Hawkins, a 30-year-old laundress from the Channel Islands convicted once before as an accessory to highway robbery and who was transported for 10 years for stealing money. She was one of the few female convicts who could read and write, but her gaol report notes that she was 'addicted to

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<sup>20</sup> COWLEY, T., SNOWDEN, D., 2013, p. 89. The number recorded in the *Inquiry into Female Prison Discipline 1841 – 1843* adds up to 180 but one convict, Sarah Parfitt had died on board thus making the total number of female prisoners disembarking in Hobart 179.

drinking, prostitute, married 2 children'. The question hovers in the air—what sort of civilised society produces an environment where a literate married woman with children whose only options for survival appear to be prostitution and theft leading her to be transported to the other side of the world? One of the Rajah quilters may have been Maria Musgrove, a dressmaker of 28 years with a two-year-old daughter, transported for stealing blankets and other articles, 'can read and write, assigned to Mr Carter, New Town'. By the end of the year, her reform outcomes were not as Lady Franklin or Elizabeth Fry may have hoped. By 31 December 1841, she was returned to the Female Factory due to drunkenness and insolence where she would return again in 1843 for repeat behaviour.

Through examining the records of these female prisoners, we cannot help but feel dismayed at their plight and their fate. Regardless of the good works of Elizabeth Fry and Kezia Hayter, it seemed impossible to fight the colonial system of governance which relied on free female labour, which offered little but a life of servitude. Many of these women were in and out of Cascades Female Factory and back and forth from service, often charged with 'drunk and disorderly' behaviour. Convict labour became the mainstay of the colonial economy and female convict labour was a key part of the 'populate or perish' doctrine of colonisation in harsh far-flung outposts of the Empire. Being a woman in colonial Tasmania was a difficult plight, a step up from Newgate prison, but a sentence of another type.

It was not only the *Rajah* women who stole things they themselves could not have. Lady Jane Franklin knew how to do that also. The artist Thomas Bock left an exquisite trace of what she thieved. He painted a small girl in a red dress in watercolours one day in 1842. Mathinna, who was also called Mary, looks back at us through silent brown eyes. At the time her portrait was taken those eyes had watched a fugitive world play out before her over a short, but very full six years. Lady Jane Franklin, the Governor's wife visited Wybellena with her husband in 1841 and upon seeing Mary, they selected her for their own and brought her back to Government House. For three years she was raised alongside Sir John Franklin's daughter from his first marriage, Eleanor Isabella. As a knight of the realm, Sir John's taking of the girl was never to be called stealing. Language took care of that problem and Mary was 'adopted' and renamed Mathinna. As the daughter of Towterer, the chief of the Lowreenne tribe of the Port Sorrell region and his wife Wongerneep, she was already a princess to her own people and not able to be given. Yet, when George Augustus Robinson removed the traditional owners of greater Intruwita to Wyballena on Flinders Island, Mathinna's parents among the last to succumb to his plan lost agency to their hunting ground and their Country. In 1837 her father died of consumption and in 1841 Wongerneep passed away. Mathinna was a sitting duck for Robinson to hand over to his Governor who had asked him to find him another First Nations child for his wife to 'Europeanise'.





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The Franklins were quite happy with Mathinna's progress in this experiment. The artist Thomas Bock was summoned to paint her. A man who himself had arrived in Hobart in chains having been transported to Van Diemen's Land for having administered drugs to a woman. In London prior to sentencing, he had been an engraver of repute thus his skills were in demand in the colony, and he was soon pardoned. Thomas Bock could craft a dignified new life in Hobart while his wife and children were left deserted and impoverished in England. Bock would father seven new babies in Tasmania, thus when he came to paint Mathinna he had much to draw upon. When he saw the portrait, the Governor was pleased, writing, 'she is dressed in a scarlet frock with a black leather girdle which sets off her naked black arms and legs to great advantage'.<sup>21</sup> Franklin arranged words in a line that revealed he was describing a possession. He was a man who could not see the grief-stricken orphan through the bars of a gilded cage for which he no doubt felt she should be thankful. Bock painted her for Franklin, yet neither man realised that in time the legacy of that transaction would mean finally her people now may hold her with love. After the portrait was taken in 1842, the Governor lost interest in his wife's prize and Mathinna was sent to the Queens Orphan School in Hobart never to be retrieved as Sir John Franklin was recalled to London in 1843. Mathinna was eight years old by then. She was painted again back at Wybellena in 1845 by another British artist, John Skinner

<sup>21</sup> Alison Alexander, 'Mathinna', People Australia, National Centre of Biography, Australian National University, <https://ia.anu.edu.au/biography/mathinna-29655/text36623>, accessed 15 January 2021.

Prout. This time dressed in a white tunic, still staring out at the world, her gaze fixed at the distance. Mathinna was to be 'civilised', just like the sewing of a quilt for her adoptive mother was supposedly 'civilising' for the convict women who stitched it. All the women in the colony were caught in an impossible net.

The *Rajah* women were not well documented, and their plight did not matter in the end. Oppressed by a colonial system that could not decide if it was a gaol or a free settlement, the women with their children became the collateral damage of a social and economic system in Britain that was heaving under the inability to create justice and equality post the Industrial Revolution. Yet, a thing of great beauty remains. A poignant object, that from within its chintz appliquéd flourishes, becomes a colonial 'document', which asks some very difficult questions about the plight of convict women in society. It was a social constructions and conventions limited a woman's hope of liberation through the reform mechanisms it championed.

When a curator finally secured the quilt for the national collection in Canberra on Ngunnawal and Ngambri Country he wrote in his submission to the Council in November 1989, 'I cannot recommend the purchase of this quilt more highly. It is a work of art of great importance to the history and development of Australian textiles and would be a touchstone for the Australian National Gallery collections of Australian textiles and folk art'.<sup>22</sup> The *Rajah quilt* is much more than those words describe, for in each stitch it holds a history of women and how they have been stereotyped, oppressed, judged, abused, unloved, and forgotten. Yet it is deceptively pretty and delicate, enduring, and mysterious. Like many great cultural artefacts, The Rajah quilt remains an enigma, created from the confounding contradictory forces of humankind, capable at once of destructive injustices and flourishing creativity, denial and expression, repression and passion.

**Lara Nicholls** wrote *Invisible Menders—The Convict Women Who Made the Rajah Quilt* when she was the Curator, 19th-century Australian Art at the National Gallery of Australia. Nicholls was the co-ordinating curator for the *The National Picture: the Art of Tasmania's Black War*. She also curated the NGA travelling exhibition, *Abstraction: Celebrating Australian Abstract Women Artists* and more recently co-curated *When the World Turns Modern: Art Deco from the National Collection*. She has researched and presented on a diverse range of art historical subjects including obscure nineteenth century women artists through to the influence of Duchamp and Malevich on Australian contemporary art. She holds an M.A. in Art History (first class hon) from the University of Melbourne on the Orientalist paintings of the Duc D'Aumale at the Musée Condé, Chantilly and she is currently a Ph.D. candidate in the School of Art History and Art Theory at the Australian National University writing a thesis on *The transnational experience of nineteenth century women artists between Britain and Australia 1885-1910*.

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<sup>22</sup> Image credit: © National Gallery of Australia, Canberra / Gift of Les Hollings and the Australian Textiles Fund, 1989 / Bridgeman Images.

# Chapter 2

## Learning from Craft: Tin-Craft Production, Domestic Space and Street Identities in Hanoi



Dinh Quoc Phuong

### Introduction

Traditional Asian cities face many challenges in making rapid changes towards becoming modern places. While the issue confronts the global homogeneity of urban transformation, it is the local responses and adaptation that should play a key role in identifying and conserving place identities and differences, including issues related to traditional craft production. Hanoi, for example, is increasingly transforming due to rapid urbanization and global exchange. The city has been examined and understood as a place where the built environment is characterized by dynamic transformation: more than 1000 years of Chinese domination, almost 100 years of French colonization, and several decades of post-independence with support and assistance from the former Soviet Union, have created different layers to the built environment of the city. Almost thirty years of *doi moi* (economic reform) and opening up to global market force have led to rapid changes to the built environments that seem to bring another architectural coating to Hanoi.

What make Hanoi's built environment significant are not only the external imprints and the global influences, but also the interesting adaptation of internal traditions, created by a village culture with village-based and craft-based street identities. While most studies on Hanoi have focused on its everyday built form solely under the influence of the external factors, the interaction between the external forces and Hanoi's residents and their culture have not been fully considered.

Hanoi's Ancient Quarter has been a shopping area since it was founded almost 1000 years ago (Logan, 2000; Vinh Phuc, 1994). Also, Hanoi can be seen as the city of villages (Phuong, 2008). The area is characterized by *phuong* or guilds, a village system of trade and production, so that each street is named after a particular product which was once locally made and merchandised in that street. The

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practice remains until today even though many streets have changed their specializations. The street identity is strongly influenced by *nha ong* (tube houses) or shop-houses which normally have front-shops or workshops with narrow façades and prolonged and deep living quarters behind. This area has experienced significant changes spatially, socially and physically as a result of its adaptation to the influences from external forces, including recent globalization. It is important to examine these changes including changes to local craft production as a good understanding of the nature of these changes will reveal a great deal about the past and present, which are essentially important to the future planning of this subject matter.

With the case-study approach, this chapter examines urban transformation of ancient Hanoi streets and buildings. In particular, the paper first reviews the historical formation and transformation of street blocks in Hanoi's Ancient Quarter. It then discusses the influences of traditional craft production on architectural and urban identities via a first-hand study of Hang Thiec (Tin) Street, one of a craft streets in Hanoi's Ancient Quarters, where most shop-house owners have specialized in making and selling tin, zinc and mirror products for generations. This gives some background for a more detailed investigation into spatial characteristics and changes to the interior of shop-houses in the street. While Hang Thiec Street is similar to other streets in Ancient Hanoi, being narrow with long shop-houses on both sides, the tradition of making tin products there gives it a unique character, which is worth exploring. This includes discussion on the street history, tradition and development of tin craft, spatial organization and transformation of tin shops and workshops and more importantly, how they form essential parts of Hanoi's sense of place. The research findings are strengthened by a review of some design reflections from recent field study, which then may lead to some implication for the conservation practices that are concerned with traditional craft and heritage places.

## Hanoi's Ancient Streets

Hanoi's Ancient Quarters in plan is made up of small blocks, which are different in shape and size. A street block is often shaped by three or four streets. Most blocks are triangular and octagonal in plan as they are shaped by short streets that are not always perpendicular and parallel like those in the Hanoi's French Quarters. Rows of narrow shop-houses that maximize the use of shop-fronts for retails are the key feature of street blocks in Hanoi's Ancient Quarters (Fig. 2.1).

The formation and development of the blocks and streets were not the result of formal planning strategies but directly linked to the (re)settlement of villages then the evolution of shop-houses, the most popular type of house in the area. Originally, the blocks were shaped by the intersections of earthen dikes made to protect farms from floods. Temporary houses and market stalls were built on high parcels of land, which were either natural or man-made with earth taken from the digging of lakes. Market stalls and related commercial activities were set up along the dikes. Spaces in the middle of blocks were often small lakes or wet lands (Hoang, 1999).



**Fig. 2.1** Street blocks in ancient quarters (Reproduced after Hanoi's Ancient Quarter map provided by BMCH, by Dinh Quoc Phuong)

The street's identity in Hanoi's Ancient Quarter is influenced by village culture with the village system of guild. Each street was often 'secured' by street gates at two ends. This pattern of the built environment was also popular in traditional villages in Hanoi, where several village gates often marked village territory and identity (Phuong, 2008). Such street gates were later removed by the French in their attempt to widen and clean up the streets. The influences of China on Hanoi's streets could be seen in several blocks near Hang Buom (Sail) and Ma May (Rattan) Streets, which were the centre of Hanoi's Chinatown since the fifteenth Century. This area was characterized by many Chinese-style shops and restaurants, where the French colonists usually hung around. Uan (1993) suggested that these streets could be distinguishable from other streets because Chinese shops and restaurants looked more decorative and busier compared to local ones.

French influences are also evident in Hanoi's ancient streets. Together with the development of the French Quarter, colonial planners 'tidied up' Hanoi's Ancient Quarter. Most roads and footpaths were widened and sealed. Some streets were re-directed after the front parts of some indigenous shop-houses were acquired and demolished. The electricity, sewage and sanitation systems were set up. Trams were installed in the main streets, such as Hang Bong (Cotton) Street and Hang Dao (Silk) Street. Many shop-houses were rebuilt with French-style facade details, but probably the most obvious characteristics reflecting French influences were the shop signs. The well-known writer, Lam (1943), observed that almost 90% of shops in Hanoi's Ancient Quarter had French language shop signs. This became very fashionable, especially with many tailors who were keen on using French words.

Street blocks in Hanoi's Ancient Quarter are significantly marked by private housing constructions, which have flourished after *Doi Moi* since the late 1980s. Having the right to run private businesses and to own private property has enabled Hanoi's residents to improve their life and change the area. Consequently, many people have become wealthier and spent their money buying property and building houses, in particular the tall shop-houses, that perhaps best represent the characteristics of Hanoi's everyday architecture and street-scape in post-*Doi Moi*. The shift of property ownership from government to private has significantly changed Hanoi's street blocks. Many old timber shop-houses, which were previously owned by the government, were sold to wealthy businessmen. The old shop-houses were replaced by much taller ones with five or six levels to be used as shops, small budget hotels, bars, and offices for the increasing number of both Vietnamese and foreign tourists coming to Hanoi.

## **Hang Thiec (Tin) Street in History and Changes**

Hang Thiec Street is one of many streets in Hanoi's Ancient Quarter, where a street name indicates traditional products that most of its residents make and sell. It is about 130 m long and perpendicular to Hang Non (Hat) Street at one end and Bat Dan (Clay Bowl) Street at the other. The street is at the intersection of two small street blocks, which, like most other blocks in the area, had similar urban pattern featured by long and narrow shop-houses. The small block is fully occupied by shop-houses. The bigger block has an un-built space, which owned by a factory, in its centre.

Observations from my recent visits to Hang Thiec Street between 2009 and 2014 support the statement that Hanoi's built environment, even in the seemingly least changeable place like the ancient streets, always opens to constant changes. The building at 38 Hang Thiec Street of Hong Phong Collaborative, which represents the impact of Soviet-style socialist mode of production on everyday life and village-based tin production in the street, was pulled down for the building of a mini hotel called A25 Hotel. Pulling down old shop-houses with two levels for tall houses and mini hotels was a popular phenomenon since 1990s, but this is the first hotel in the street where the presence of village-based craft production is still very strong and

popular. On the same building footprint, the single level building is replaced by the 5-level building. This represents a significant change at the street level. To examine the nature of the changes and its relationship to urban tissues in Hanoi, it is important to look at the history as well as the present-day condition of the street. This includes investigation into the street's traditional productions and everyday life.

### *Tin Street in History*

Most craftsmen in Hang Thiec Street came from Phu Thu village, around 16 km southeast of Hanoi's Ancient Quarter. It therefore was called Rue des Ferblantiers (the street of tinsmiths) during the French colonial period (Vinh Phuc, 2000). A *dinh* (communal house) for the worship of the god of tinsmiths was built at number 42 Hang Non (Hat) Street near the T-junction with Hang Thiec Street. Many tinsmiths also go to the *dinh* in their home village to worship the god of tinsmiths (Fig. 2.2).

Making mirror and glass products is another specialization of Hang Thiec Street, which is generally believed to have begun during the French colonial period. However, according to Mr. Dinh, an old tinsmith living at number 5, the tradition of making mirror and glass products dates from even earlier, during the Later Le Dynasty (eighteenth century). Mirror makers from Kim Co village settled and worked in this



**Fig. 2.2** Shop and tinsmiths in tin street (Photographs by author in 2011)

area (Dinh, 2009). Even though the mirror makers and tinsmiths did not come from the same village, there was a professional link between them, and it could be the reason for them co-habiting in the street today. Mirror makers have to use a very thin layer of tin to make the glass reflective.

During the 1930s, some shop-owners became rich from wholesaling zinc and tin panels and glass. In the late 1930s and early 1940s, mirror and glass workshops flourished in Hang Thiec Street due to the popularity of glass doors and windows in French-style buildings.

### ***Tin Street During French Colonialism***

In my interview with Mr. Dinh, he said that the street used to be very narrow (Dinh, 2009). During the French colonial time the street was widened by cutting back the shop-fronts on the odd-numbered side of the road. Shop-houses at the street corners were also chamfered to create more space. Therefore, these shop-houses are now triangular in plan. The street facades were lined with old two-storey shop-houses with a shop at the ground floor and a mezzanine living area, which are known as shop-houses with a *chong diem* style roof. The shop-houses presented timber structures with inner courtyards inserted in between living rooms and shops.

During the late 1920s, some shop-houses were rebuilt with French-style façades, which indicated an increasing French influence on businesses and architecture in Hanoi. Like many other old streets, Hang Thiec Street also has some French characteristics due to the French-style shop-houses. This ‘colonial imprint’ expressed wealth and modernity as far as local traders and craftsmen of the time were concerned. In plan, a French shop-house has the same characteristics as old local shop-houses: on the first level is a shop with a long and narrow laneway to various living rooms, courtyards and storage rooms, and on the second level are sitting rooms and bedrooms. However, the building’s appearance is different to local Vietnamese shop-houses, due to the use of French architectural details (cast iron details and arched louvre windows) and higher floor levels. The shop-house with French-style façade looks higher than local shop-houses.

In 1946, the shop-houses in Hang Thiec Street were badly damaged during a battle between the Viet Minh (Vietnamese Communists) and the French. Most of the old timber shop-houses collapsed due to the fighting. They were renovated or rebuilt between 1948 and 1954.

Tinsmiths made and sold different types of tin products, such as peanut oil lamps, candle holders, incense burners, tea pots, trays, and small kitchen utensils. Shops were small and also used as sitting rooms and workshops. Charcoal ovens for melting the tin were usually located near the entrances to the shops. The street was often noisy, because the tinsmiths bashed the tin items with hand tools. Some shops in Hang Thiec Street made and sold building fittings. The shop-keepers started by making tin products, such as gutters, then expanded to import toilet and bathroom fittings made of ceramic, which they sold to local builders and house owners (Dinh, 2009).



## ***Tin Street Under Socialism and Doi Moi***

After the French officially left Hanoi in 1954, the Vietnamese government implemented a new housing and economic policy, which encouraged traders, including handicraft workshops, to join *hop tac xa* (HTX) or cooperatives centrally managed by the state (Tri, 1992). There were two handicraft cooperatives, in Hang Thiec Street. HTX Hong Thai at number 38 remains until 2011. Each HTX contained several groups that specialized in making different tin products. According to Mr. Dinh, a former group-leader at HTX Hong Thai, most tinsmiths joined the cooperatives during the late 1950s (Dinh, 2009). Family workshops were part of the cooperatives, since the tinsmiths made tin products from raw materials supplied by the state, which also managed the sales of the products through different state-owned distributors. However, most shops closed down, since private business was not encouraged by the state (Fig. 2.3).

There were not many changes to the street façade as private construction was not allowed by law. But significant changes occurred within the shop-houses in terms of spatial division and allocation. A shop-house, which once owned by a single family, accommodated up to ten families after the 1960s under the socialist housing policy. These houses are often overcrowded and rundown due to lack of maintenance. As private businesses were discouraged the street was less busy and its sense of family-based production and retail was blurring like those in the street paintings by the famous artist Bui Xuan Phai (Phuung and Groves, 2011).

After *Doi Moi* in 1986, private tin workshops reopened and trading resumed, because the government was more open to a free market. The tinsmiths made and sold their own products. The shops in Hang Thiec Street flourished partly because the tinsmiths were sensitive to changes in everyday demand, and many new products were created to meet contemporary domestic needs. For example, many shops make water-tanks for building renovation projects. To get more living space, flat owners in the Soviet-style apartments often demolished the brick water-tanks in their kitchens and set up tin ones in the ceiling space above their bathrooms. Instead of buying expensive imported kitchen range-hoods, house owners now buy locally made ones from Hang Thiec Street at much cheaper prices.

### ***Present-Day Hang Thiec Street<sup>1</sup>***

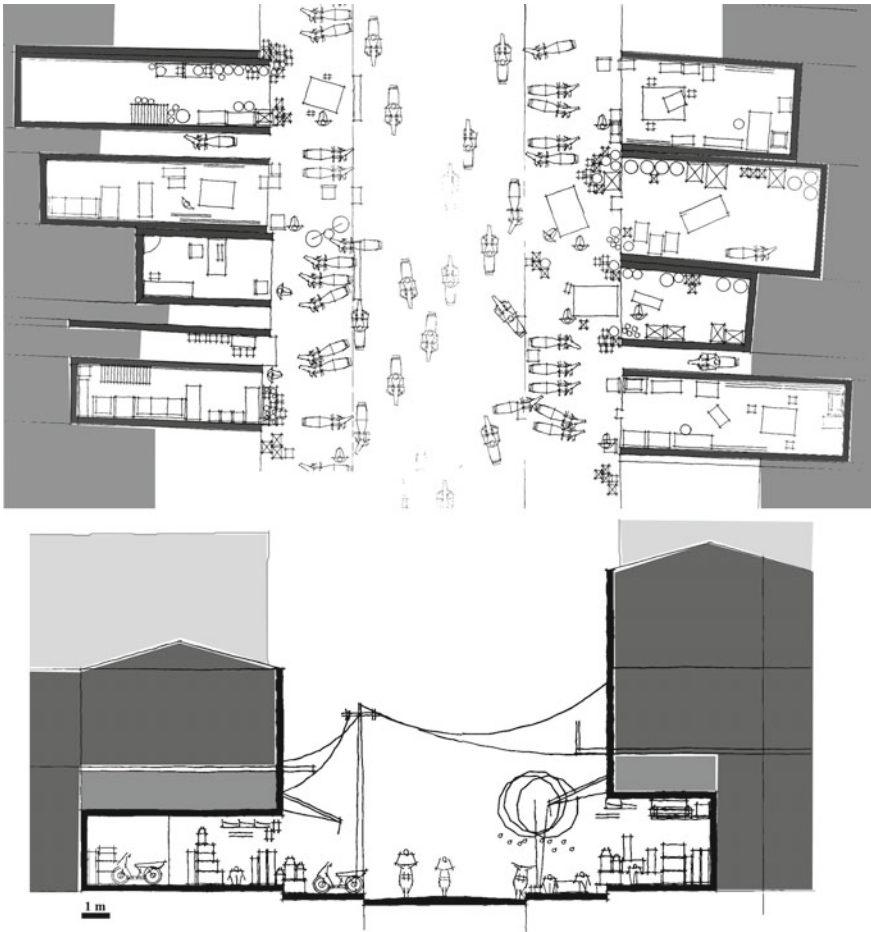
Like many other streets in Hanoi's Ancient Quarter, Hang Thiec Street is only about 6 m wide. The street's sidewalks are also narrow, about 3 m wide. Currently, there are 68 shop-houses in Hang Thiec Street, of which 37 are even numbers and 31 odd numbers (Fig. 2.4).

There are 34 workshops making and selling tin products, and 20 dealing with mirror and glass products. The rest are hardware shops, paint shops, a pharmacy, a restaurant, two coffee shops, a mini hotel, a kindergarten, a tailor shop, and a



**Fig. 2.3** House with French-style facade at 20 Tin Street (Photographs by author in 2007)

CD shop. A shop-house in Hang Thiec Street is often shared by several families. Tinsmiths and mirror makers who do not have shop-fronts, set up their workshops inside the houses to make tin products and to sell to shop-owners. Many residents who live behind the shops are also venders. They often set up their stalls in front of the laneways to their houses or on the footpath. During my field study at the end of 2011, I observed that there were eight venders who seemed to be permanently occupying the footpath in front of numbers 5, 20, 29, 30, 42 51, and 64. All except the vender at number 20 are residents of the street. Other venders walk around the street and only stop when someone wants to buy things. Two-storey shop-houses were rebuilt and renovated to be very tall post-*Doi Moi* shop-houses with three or four levels. There are only three houses dating from French colonial times, which have two levels with French-style facades.



**Fig. 2.4** Street section and floor-plan of shops in eight shop-houses in Tin Street: even numbers 22, 24, 26 and 28; odd numbers 31, 33, 35 and 37 (Drawing by author in 2007)

During the daytime the sidewalks are extensively used for a variety of daily activities, such as making tin products, displaying goods, parking motorcycles, selling food, and even domestic activities like bathing, cleaning and cooking. Shop-keepers, including tinsmiths, also use the sidewalks in front of their shops. This in effect turns the sidewalks into private and domestic spaces. The presence of old tinsmiths sitting on chairs located on the footpath, while looking after the shops, giving professional guidance to younger tinsmiths, or watching over children playing, strengthens the role of human activities in making traditional places that may be almost wiped out by large-scale developments and cars. Some qualities of traditional places are also clearly found in Hang Thiec Street where children playing in front of shops opening on to the footpaths are watched over by adults who are either working or relaxing

at the tea-shops. The sense of home territory is visible at the shop frontages, where children do homework and housework under the watchful eyes of their mothers while looking after the home-businesses at the same time.

Hang Thiec Street has transformed over the years. Once it was full of distributors of both local and French products. Later it was turned into a battle site. Then it became home to socialist cooperatives. However, the traditional products of the tinsmiths and mirror makers seem to have survived these changes. The physical characteristics of the street, such as the old shop-houses with timber structures have gone, while things like craft production and the spiritual link to the home village remain and give the street a strong identity and distinctiveness. Street's characteristics as manifested in daily activities and building appearance and changes are not only characterized by the French, Soviet influences and recent globalization but also the resilient changes of its village-based craft production and internal life of local residents. As mentioned earlier, hiding behind a shop-front in the street is the resilient life of up to ten families and many of them are tinsmiths. The next section will look at the spatial uses and changes in Mr. Noi's workshop hidden behind the shop-front at 51 Han Thiec Street.

### *The Hidden One-Room Workshop*

Mr. Noi at 51 Hang Thiec Street is less lucky than many other tinsmiths, because he does not have shop-fronts. Mr. Noi's workshop and living space are also restricted to a single room. Initially Mr. Noi was not a resident in the street. Before 1954, his parents were employed as tinsmiths in the street, but after 1954, the government took over the shop-house and let the room to his parents. After finishing his military service in 1976, Mr. Noi got married and stayed in the room.

The workshop is on the ground of level, one set of living quarters back from the street. The shop-house is shared by ten families. It was built during the French colonial time, and measures around 4 m wide and 54 m long. It has a long tunnel-like passage along the ground level, to give access to the rooms inside. This shop-house has two levels, with the traditional planning pattern of integrated living quarters and courtyards. The entrance to the tunnel is usually 'guarded' by a tea vendor, an old lady who also lives in the house (Fig. 2.5).

Mr. Noi's workshop, which is only about 10 square metres, accommodates a family of four persons: himself and his wife and their two children. Almost all domestic and production activities except cooking occur inside this room while the family kitchen is in the courtyard in front of the room. Furniture is arranged around the walls of the room. In the daytime its central space is used for tin production and eating meals. At night it is used for motorcycle parking and sleeping for Mr. and Mrs. Noi. A mezzanine was built above to provide sleeping and studying spaces for Mr. Noi's children.



Fig. 2.5 Inside Mr. Noi's workshop (Photographs by author in 2007)

Mr. Noi specializes in making tin gutters, water containers, tin moulds for cakes, and big pots for cooking used in restaurants. Since Mr. Noi does not have a shop-front, most of his orders come from personal contacts. Some shop-keepers do not have enough space for production, so they subcontract work to him.

Mr. Noi said that he has a difficult life as a result of not having a shop. His family's income is not stable because it mainly relies on subcontract work, which is also seasonal. During the off season he often has no jobs. However, sometimes he has to work overnight to finish jobs that unexpectedly come from his neighbours who cannot get them done on time.

Mr. Noi's family was struggling to make a living before *Doi Moi*, when tinsmiths were not allowed to run their home-workshops and had to join state-owned cooperatives. To earn extra income, many of them secretly made tin products after hours at home. Mr. Noi made keys for some locksmiths. However, the local police warned him for illegally keeping raw materials and also stopped him from delivering the keys. Since raw materials for production were not easy to find, Mr. Noi recycled tin and bronze containers and even bullets. Due to his life experience, Mr. Noi is negative about his profession and hopes that his children will not become tinsmiths.<sup>2</sup>

Like most other tinsmiths with similar life situation, Mr. Noi is hesitant about allowing photos to be taken of their one-room workshops. This is mainly because they feel embarrassed about their low-standard of living and working conditions. According to them, it would be a shame if people who know them, particularly their relatives in their home village, saw them. The stories of Mr. Noi's tin workshops further illustrate the tinsmiths' bond with their home. Even though the tinsmiths

have occupied Hang Thiec Street for several generations, they still see themselves as being part of the village community.

Hanoi's everyday built environment is not only characterized by long shop-houses with narrow facades and related activities carried out on the pavement in front of them, but also by the internal life and experiences packed into the one-room family workshops behind them. Even though most daily domestic activities take place in these compact 'worlds', the use and division of space inside the one-room dwellings is flexible and resilient. This provides both opportunities and challenges for future planning and design works to maintain the street identities while improving the living condition for local craftsmen. The next section discusses some works by students who studied Hanoi's streets then attempted to transfer their first hand understanding of local context into design projects.

### *Design Learning from Tin-Craft<sup>3</sup>*

The history, tradition and present-day changes to the life and craft production in Tin Street inspired design students and faculty who was working on field research and design studio in Hanoi in 2015 and 2016. Groups of undergraduate students from the School of Design, Swinburne University, went on a study trip to Hanoi as part of their travelling studios in Vietnam. Together with local architectural students from Hanoi University of Business and Technology (HUBT), the groups explored urban setting and architectural characteristics of Hanoi via site visits to different parts of the city including Hanoi's Ancient craft streets, Hanoi's French Quarters, inner-city craft villages and new residential areas. The students were particularly interested in craft streets in Hanoi's Ancient Quarters. They conducted in-depth research on the streets via means of on-site observation and sketching, talking to local craftsmen and residents living and working in the streets. The students investigated local opportunities and challenges then used them as a mean to further the design skill and learning outcomes (Fig. 2.6).

Several groups of students focused on craft workshops in Tin Street for their field study and subsequent design projects. Each group was asked to buy a small craft product made in the street to get inspiration for their projects. They discussed the products with the tinsmiths while observing them making the products on the street sidewalks and in the workshops. Students also observed and had direct experiences with the everyday life on the streets, which were then recorded in the forms of photographs, hand sketches and field notes. After two week intensive working on the site student group came up with design schemes that reflect their learning and experiences with life, craft production on streets.

For example, one design group was inspired by the seemingly chaotic scene created by the making and selling of tin products in the street. Group members acted as pedestrian shoppers walking around the street, observing and talking to people in tin workshops, and 'sneaking' into the hidden laneways and workshops behind the street frontages. They paid particular attentions to the more disadvantages people



Fig. 2.6 Student group on site observation in Tin Street (Photographs by author in 2014)

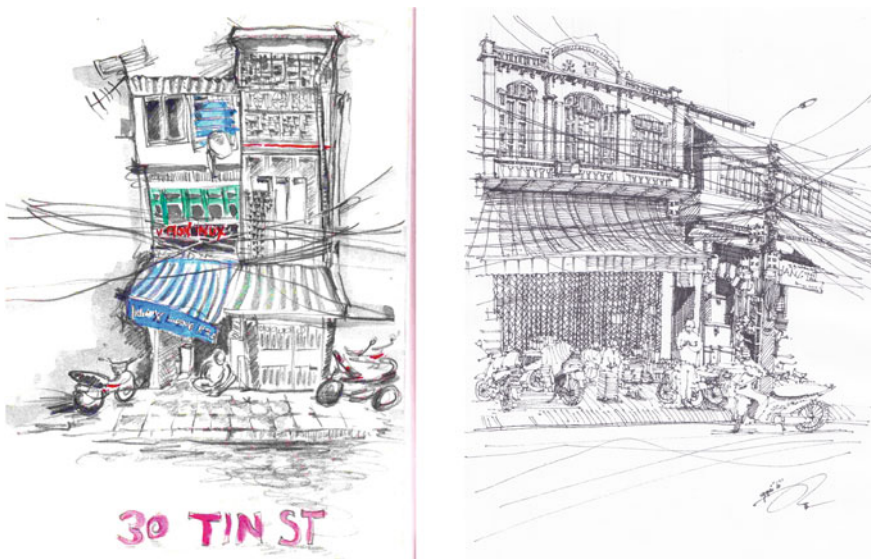


Fig. 2.7 Two shop-houses in Tin Street sketched by students, Fiona Lowland (left) and Huyen Bi (2015)

working and living in the street, such as tinsmiths who do not have shops like Mr. Noi, street vendors and homeless kids. The group proposed designing a community craft space to be built on a local site formerly used as a stated owned workshop in the street. The space is open and welcome to everyone. It is also adaptable to different functions. There is a space for temporary children day-care for local tinsmiths. There are also short-term tin workshops where vendors and tinsmiths like Mr. Noi can use to make and sell their products. The group proposed resting spaces and temporary

shelters for street kids and vendors who need break from long working days. Children can also learn craft skills from the tinsmiths who work in the site.

Architecturally, the building is single level giving a good contrast and break to surrounding buildings, which are mostly three to five levels. The rectangular shape site is characterized by secluded roof pavilions with different shapes in plan to represent large sheets of tin being cut on the street sidewalk by local craftsmen. The chaotic scene of roof-scape in Hanoi's Ancient Quarters is suggested via grouping of the randomly angled and elevated roofs. The seemingly separated roofs of the pavilions, which are supported by sculptural-like metal trees, are tailored by multi-coloured canopy of irregular shapes glass panels.

A proposal by another group also focuses on Tin Street but presents a different design approach. Their design scheme was inspired by the understanding of internal life and every day difficulties facing by the local craftsmen in the context of fast growing Hanoi with increasing local population. The group proposes a new living place with craft workshops for two families of tinsmiths who are twin sisters currently living in a shop-house in the street. As mentioned earlier, Hanoi's Ancient Quarters and Tin Street in particular are overcrowded. Most shop-houses are packed with extended families of 3–4 generations. Due to the limitation of space, the division and use of domestic spaces are one of the major issues that cause internal domestic conflict between families living in the shop-houses, including the one owned by the twin sisters.

The group proposes a design scheme with new division of space to help with the situation. The spatial division is inspired by the Asian idea of *yin* and *yang*, or positive and negative, the two opposite elements, which are believed to be symbolically embedded in all aspects of life and a balance of *yin* and *yang* is expected to bring in a good life. The group believes that due to the co-ownership nature of the site there should be a balance organization of space between shared spaces and more private spaces, or between built-up spaces and open space or between noisy spaces and quiet spaces particularly in the context that tin workshops are always noisy when they are active.

As a result, the new scheme is featured by a group of box-like spaces that are located at alternate angles both horizontally and vertically. The boxes look isolated physically but they are connected by a system of open pathways combined with small courtyards that significantly improve natural light and air circulation in the site. This also helps to improve privacy for each family while reinforcing the sense of family tradition of tin-crafts via a shared workshop. The building form created by the small boxes is also a contemporary representation of Hanoi's urban grain of traditional shop-houses with small roofs integrated into inner-courtyards. The site consists of two identical units represent the twins. The units share a single level workshop space, which represents the shared family tradition of tin craft, located near the street front on the ground level. Kitchens and bathrooms are located in two other single level boxes at the rear of the site. Two separated units of three levels each are located back-to-back in the middle of the site. The units provide living rooms and bedrooms to the families of each sister.



At the end of the studio, the student presented their designs to local academics, architects and students. While they were only student design projects, the presented design approach and outcomes did raise people's awareness of local craft production and the use of spaces, and the importance of looking at these issues in detail and then taking them into account for planning and design projects. The issue of Mr. Noi's workshop is not unique in Hanoi's streets and situations like this should be taken into consideration when conserving shop-houses and Hanoi's architectural identities. Architects and urban planners should consider the issues drawn from stories like those of Mr. Noi, the twin sisters and the street vendors in order to achieve an effective design of domestic spaces in the long-term plans for maintaining the characteristics Hanoi's craft streets. An initial action is to directly observe and record the spatial and physical characteristics of such dwellings and be open to their owners' everyday concerns and difficulties. Any design and plan to maintain Hanoi's sense of place should be centred on these grass-roots understandings.

Clearly, it is not an easy task for designers and architects to offer a solution to complicated issues like home ownership and shortage of spaces in Hanoi, because it involves many dimensions, including property and heritage laws and other civil laws, such as inheritance laws. However, one major step towards a solution is that architects and designers can help explain how local craft production and shop-houses are significant to making Hanoi's sense of place. This includes identifying grass-roots daily difficulties, such as the shortage of living spaces and ownership issues that might influence the process of maintaining this significance. I believe that detailed investigation into the streets and craft workshop like those that have been described in this chapter is necessary as it helps explain the above issues. The students design projects show that while first hand understanding of local craft streets and workshops is significant to the making and maintaining Hanoi's domestic spaces, student design learning was also enriched by the historical, cultural and social insights brought by craft-related aspects.

To put Hanoi's craft in a broader context of art production, Hanoi's traditional crafts, as one form of traditional art, have been resilient to changes caused by external influences. Commenting on Asian art in general, author Joubert (2008) suggests that:

Asian art continues to be part of life, custom and belief and an expression of identity, place and spirituality. The cultivation of Asian art forms have been symbiotically fused as vital traditions across all sectors of society in spite of the impact of Westernization and colonization on Asian arts practices and education.

The current study of Tin Street in Hanoi is another example that elucidates this comment as craft production and their constant adaptation are a significant part of Hanoi's everyday life and urban identities given the influences from French colonialism, Soviet socialism and recent globalization.

## Notes

1. Information for this section was collected by the author during fieldworks in 2011, 2013 and 2017.
2. Interview with Mr. Noi at 51 Hang Thiec Street in 2011.



**Fig. 2.8** Shop-house in Tin Street designed by students Curphey and Bakker (2014)

- Information for this section was collected as part of the Swinburne University's Design-Centred Vietnam Study Tours done in 2015 and 2016.

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# Chapter 3

## Custodians of Culture in the Global Market: Working with Indonesia's Indigenous Weavers



**William Ingram**

We are told by the government, by development organizations and by the media that we are backwards and primitive for holding on to our culture and identity, and that we need to let go of these in order to join the modern world and partake in the global economy. Why do we have to choose between identity and prosperity? How can we have both?

Concluding Statement by participants of the 2006 Nusantara Weavers Festival held in Timor, Indonesia.



With most of the world's indigenous arts and crafts in danger of being marginalized and abandoned (UNESCO, 2003a), many projects have been initiated to help maintain these traditions. This article explores the work of Threads of Life, an enterprise of which I am a co-founder and co-director, which has developed a market-based solution for indigenous weavers in Indonesia. Our marketing is focused on honoring traditional form and design by learning about, aligning with and communicating the values, aspirations, and cosmology expressed through the archipelago's textile traditions.

In terms of the subject matter of this book, education in the crafts, questions that will guide this discussion are concerned with who is being educated and what is being taught. The mainstream point of view is that the traditional craft producers are being educated and that they are being taught how to make products with appeal in the global marketplace: employ the skills, harness the creativity, and direct the work

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toward the market. The overall success of this approach in raising living standards is unquestionable, and while we work with the realities of the market to thrive as a business, our point of departure has always been that the weavers are already masters, that we are the students, and that it is the weavers' culture as expressed through their arts and crafts that we are learning about. In terms of practice, these two approaches produce very different results.

Threads of Life was started in 1998 by my wife Jean Howe, myself, and a Balinese man, I Made Maduarta. Our aim was to revitalize the disappearing textile traditions of Indonesia's indigenous peoples. As was noted by Philippe de Montebello (Holmgren & Spertus, 1989), Director of the Metropolitan Museum, New York, in reference to an exhibition of Indonesian textiles in 1989, "With the rapid erosion of Indonesia's traditional cultures, its fragile legacy of textiles is not being renewed." Traveling throughout the Nusa Tenggara islands of southeast Indonesia during the 1990s, we saw both that traditional textile production was indeed eroding and that there were a number of master weavers and dyers who quietly but passionately maintained their traditions. Our initial observation was that the art was failing for economic reasons: as communities transitioned from barter to cash economies, few weavers could still afford to take the one to two years necessary to make the most culturally important natural-dyed customary textiles.

The Southeast Asian economic crisis of 1997 saw a sea change for these makers and their communities. What cash crops people had been growing become worthless as the Indonesian economy contracted by as much as 15% and inflation rose to above 80% (WTO, 1998). All this was compounded by the failure of subsistence livelihoods during one of the severest El Nino-induced droughts in living memory (Sherlock, 1998). When we visited weavers who had once proudly shown us their heirloom clothing, then returned them to storage for the next ceremonial occasion, we were confronted by women desperate to sell their treasures. "We have school fees to pay," "Hospital bills are due," and "How else do I pay for the wedding?" were common and understandable justifications. When we asked, "What happens next time you have a ceremony?" people shrugged; their immediate needs were the most pressing. So we watched as a cultural, humanitarian, and economic crisis unfolded before us, and decided to do something.

With the most immediate needs being financial, our initial solution was market-based: we sought out master weavers and dyers, started buying and commissioning their textiles, and sold their work to an international market. Our personal interests had focused on the cultures the textile arts expressed and it became our enthusiasm to share what we were learning. As de Montebello also noted, "Rarely does a society invest textiles with intense religious significance, and yet accord them primary importance as indicators of temporal wealth and status... Far beyond their customary utilitarian roles—as clothing, for example, or furnishings—textiles have been employed by the peoples of Indonesia in potent emblematic and sacred contexts." Cultural integrity became the central value around which we developed a niche market, and sharing what we were learning about textile cultures become key to our marketing. We could have sought to modify the textiles to follow market trends and worked to educate the makers about the demands of the market. Instead, when weavers asked

us what we wanted them to make, we turned the question around, asking, “What did your mother make? What did your grandmothers make?”.

When we opened a gallery in Ubud, Bali, in 2001 we started buying basketry and woodcarving, too. Jean would look for an array of products from a community to make for interesting displays and to broaden its appeal. The experience in the gallery taught us that whenever we could establish a personal connection between the maker and the potential customer, this emotional contact boosted sales. We started telling the weavers’ personal stories, avoiding cynical exploitation of their poverty, and instead focusing on their pride in their culture and identity, their depth of knowledge, and their technical mastery.

It can be seen from this brief history that our methodology developed over time rather than being conceived at the outset, but that it was guided throughout by our interests in the cultures with which we were interacting. We were fortunate in that we started this work in Bali, and that Made and other of our Balinese colleagues (we currently employ 35 staff) found the communities we were visiting to be as fascinating as we did. One of their early insights was to recognize a shared cultural and religious heritage of indigenous animism and ancestor worship underlying their Balinese Hinduism and the customary practices of the Catholic, Protestant, or Muslim weavers. We would spend hours talking with weavers about the finer points of local ceremonial practice, learning about rituals that sounded very different from what we saw in Bali, and have Made conclude the discussion by saying, “We have exactly the same ritual in Bali.” His point being not that the form was the same, but that he performed the ceremony with the same intention. This discovery of a shared traditional identity and the conspicuous validation of the weavers’ local custom became the cornerstone of our collaborative enterprise and led us further and further into an exploration of intangible culture.

In our marketing, we have always referred to the textiles as “art” and present the works on the walls of the gallery with cultural texts and makers’ biographical information to mirror the artists’ statements and title plaques with which fine art is displayed. Where textiles are usually defined as craft in the West, the intention is to inspire the viewer to see the pieces differently. Art commands better prices and has a better status than craft within our culture, and this reflects the status of textiles within their cultures of origin. We have been critiqued for this designation, but usually in terms of describing what the weavers make as being well-crafted reproductions of what was once authentically creative.

In truth, both our references to art and our critics’ claims to craft and historic authenticity are problematic within the context of the makers’ cultures, since the debate revolves around the maker’s freedom to innovate. Neither position involves the intangible culture, as it is expressed through the making and use of the textiles, that are “transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity” (UNESCO, 2003b). Within this space, both authenticity and the maker’s freedom to innovate take on a whole new meaning, and it is with examples from across the archipelago that this will be explored.

**Fig. 3.1** Master weaver Katarine Paba of Bajawa, Flores



Creativity within the tradition of Bali's sacred textiles is tightly circumscribed. Ida Ayu Ngurah Puniari is an authority on the island's ceremonial textiles, which are collectively referred to as *Bebali* (Puniari, 2012). She notes that historically most women were weavers, making cloth for personal dress and ritual purposes. She also notes that few would have had the time or skills to decorate cloth with refined resist-dye or weaving techniques, concluding that Bali's most sacred clothing is, therefore, the most simple. Puniari's work has focused on these *Bebali*, which are predominantly decorated with stripes or checks (Fig. 3.3).

Looking at just her research on black and white *bebali*, she writes, "If a weaver wishes to make a *Raine Wengi*, she must be able to visualize and understand the name *Raine Wengi* [literally, day and night] and the colors and motifs that are signified by this name. The cloth will be created so that these elements of design are arranged in a way that makes the cloth seem to come alive with creative energy. When the cloth is then seen, the name emerges without a question." This seems like hyperbole for a cloth that is divided into two warp stripes, one black and one white, but throughout her writing, she compounds name and meaning. In her book, originally written for a Balinese audience, Dayu Puniari does not even bother to explain the symbolism of the *Raine Wengi*, so obvious is it to her intended audience that the textile references the concept of duality ("rwa bhineda") in the material world. Puniari says, "The cloth

**Fig. 3.2** A beaded Lawo Butu textile made by Katarina Paba



is used for a baby’s touching the ground ceremony, to acknowledge that the child is old enough to start experiencing the difference between night and day.”

The Uyah Sere cloth is another black and white textile used as an offering in ceremonies to the animistic spirits. Puniari writes, “Uyah (salt) is white and Sere (shrimp paste) is black or brown. The motif should remind the viewer of salt and shrimp paste mixed together.” How the composition reminds the cloth’s viewer of the mixed ingredients is up to the weaver, but the intent is to evoke their intense salty bitter taste: “In life we have to deal with unpalatable things and learn to overcome them. The cloth is used as a reminder of this unavoidable process.” Implicit in her explanation is the understanding that the animistic spirits play a central role both in the arising of these unpalatable experiences and their resolution.

This cosmology is more directly articulated in the black and white checked Poleng, which is often seen wrapping the shrine to the protective deity of a place, or draped



**Fig. 3.3** Ibu Sarim weaving a Poleng cloth in east Bali



around the trunk of a tree considered to be inhabited by a powerful spirit. Puniari says, “The white is like daytime, when we can see where we are going. The black is like nighttime, so dark that you get lost. If we pay our respects and make our offerings to the spirit world, we will experience harmony, health, good fortune, lightness, and will find our way. If we ignore our responsibilities, we will get the opposite. The cloth is a reminder of the consequences of our choices.” We see that an individual weaver’s creativity comes through the traditional form of the cloth but depends less on her mastery of technique and more on her understanding of the values and cosmology of her tradition. In the Lawo Butu textiles of the Ngada people of Flores, we see a further expression of these ideas (Figs. 3.1 and 3.2).

Katharina Paba is one of the few master weavers in Ngada who can make a Lawo Butu, an indigo blue tubular sarong with a beaded ancestral ship on an ikat resist-dyed field of elephants. When we get the chance to buy a piece from Katharina, she does a ceremony in her clan house. We sit together in the windowless inner chamber of the wooden building, sitting around the fire pit. A chicken is sacrificed and Katharina reads its entrails for signs that the ancestors are pleased with her work. If the signs are good, a drop of the chicken’s blood is smeared onto the fringe of the cloth. The ritual continues and the chicken goes onto the fire, burning off its feathers prior to it going into the cooking pot, and filling the room with tear-inducing acrid smoke.

To determine whether the finished cloth can be sold, Katharina spins a coconut on the floor to divine the will of the ancestors. I have watched this over and over, and whichever way the coconut points when it stops, Katharina says, "They say yes." I am not sure how the coconut could indicate "no," but I realize the point is simply to give the ancestors the opportunity to speak. Or put another way, the point is to acknowledge the ancestors' gifts and the weaver's responsibility to those gifts as a custodian of culture.

The depth of this custodianship is a prime factor indicating who is a master weaver. In the 1990s Katharina had a series of dreams in which she was told to make a Lawo Butu by an ancestor. As a result of this, she performed the rite to open the baskets of the clan house treasury and look at the ceremonial Lawo Butu enshrined there. She found the textile in rags, eaten by cockroaches, and decayed by mold. Before resealing the storehouse, she took a handful of beads from the damaged cloth and used them to decorate the Lawo Butu she then made. Several months later, she fell ill, and for years went to modern and traditional doctors seeking a cure but without success. Then a medium told her that she needed to give the Lawo Butu she had made to her ancestors. This meant the whole clan had to perform a complex ceremony to install the textile among the sacred relics in the clan house. Within a few days of the ritual, Katharina recovered completely.

It could be argued that this process of receiving a calling through a dream, of finding the dream confirmed thorough inspection of the old Lawo Butu, of resisting and finally surrendering to that calling to offer her new Lawo Butu to the ancestors, is typical of the initiatory journey. In part, the narrative of this inner journey led to Katharina's work being recognized as worthy by her peers, but the core of the recognition came from the woven cloth itself. The Lawo Butu is technically a very simple textile, one of the crudest expressions of ikat found across the Nusa Tenggara islands, allowing minimal room for creativity in its design or production, but Katharina's version of the Lawo Butu was felt to have emotional power. It tapped into something that her peers recognized as articulating the feeling of their devotional practices and therefore measured the depth of Katharina's own practice. It is interesting to note how one of Katharina's Lawo Butu, hanging on the wall in the Threads of Life gallery in Bali, surrounded by works of significant technical mastery and aesthetic charm, somehow commands the attention of visitors. Even before people hear the story of the object and its maker, or look at its price, they experience its potency. The New Oxford American Dictionary defines craft as "an activity involving skill in making things by hand" and art as "the expression or application of human creative skill and imagination... producing works to be appreciated primarily for their beauty or emotional power." These initial examples from Bali and Flores are comparatively simple in terms of craft but carry the emotional power of what the dictionary terms art. In a book about craft, I have picked examples where a high degree of technical craft mastery is neither a prerequisite for acknowledged customary worth or achieved market price precisely so that the intangible value of an object might be exposed. As Shelly Errington observes, "What happens when cult objects... meet the category of Western art? The brief answer is that objects that conform to many of the deep schemata that help constitute the definition of art will

be selected for the art market as ‘art.’ Others will be left behind, regardless of their cult value or transcendent qualities... transcendence and cult value are not sufficient to transform an object into art. It must have exhibition value” (Errington, 1998). For the Threads of Life gallery, an object must indeed have this exhibition value. Someone must be able to imagine it in their home or collection for it to be sellable. The real question, and one that gets to the core of what Threads of Life seeks to do, is about selling the exhibitable objects without elevating their position in the local hierarchy of objects or devaluing the objects that get “left behind”, in the eyes of their custodians. As all medical students learn, the first law of intervention should be to “do no harm,” and to fulfill this aspiration we must first gain some understanding of the body social, the body cultural, and the body spiritual of a community.

A typical example of what we do comes from work we did with weavers in the Belu region of Indonesian Timor, which identified four main types of traditional woman’s textile that are still made and used. The following table was generated during a workshop we facilitated to bring together Belu weavers and their peers from communities across the border in Timor-Leste. Each group of weavers was given the column headings but drafted their own table, and many participants were surprised to see the richness of their traditions expressed in their own hands. A common comment was, “We knew all of this, but had never thought we could explain it before.”

Textile type (Example inventory code)	Rank	Gender	Structure and color	Function	Age or rank of weaver	Rituals during production
Tais Keut Bati	1	Woman’s Sarong	Ikat in centerfield, solid wide bands of red on head and foot	Worn by a woman of high rank	Master weaver post-menopause	Ceremony in a traditional house before and after
Tais Keut Bati Rarote	2	Woman’s Sarong	Same as above but the foot has supplementary warp wrap (buna)	Worn by a woman of high rank	Master weaver post-menopause	Ceremony in a traditional house before and after
Tais Marobos	3	Woman’s Sarong	Small stripes of ikat in centerfield with ikat bands above and below and solid red bands at head and foot	Any woman can wear	Any weaver	

(continued)

(continued)

Textile type (Example inventory code)	Rank	Gender	Structure and color	Function	Age or rank of weaver	Rituals during production
Tais Maruka	4	Woman's Sarong	Solid stripes in centerfield with small ikat bands above and below and supplementary warp patterning (sotis) above and below ikat bands. Solid bands of red at head and foot	Any woman can wear	A new weaver will begin by making this textile	

In Belu, the rank of the weaver is a function of her matrilineal lineage and the social status of her bloodline, her skill level in the making of the natural red dye, her ability to perform the ikat tying for the symbolically potent motifs employed in the center fields of high-ranking textiles, and her ability to perform ceremonies in the clan house (Figs. 3.4, 3.5, 3.6 and 3.7).

Our experience in the gallery with Belu textiles is that the fourth-ranking women's textiles sell far more than the high-ranked clothing. Though less potent culturally, the aesthetic of these pieces appeals more to a Western audience looking for homewares that will fit into their living spaces. Were we therefore to buy more of the lower ranking pieces, it would likely undermine the traditional rank order of the textiles. The economic impact of this could disrupt the social hierarchy among the weavers and would erode the intangible culture. Despite it making apparently poor business sense, we make a point of buying all the textiles equally, maintaining a price differential between textiles at their point of purchase according to their rank. We then often resell the highest-ranking pieces with lower margins.

Achieving this level of sensitivity requires an immersion in the intangible culture akin to the processes of narrative ethnography. "In the observation of participation, ethnographers both experience and observe their own and others' co-participation within the ethnographic encounter" (Tedlock, 1991). The felt experience becomes the real point of entry. From collecting information about a culture, we learn to function within the culture and experience acculturation. Once we start to experience what it is like to live as part of the culture, the felt experience comes to the fore. The result is an experience of being bi-cultural. "Becoming bi-cultural is more than learning the culture. Bicultural is a person who chooses to use both cultures, appreciating the new as much as the original, and certainly one who is inspired to the same degree by both cultures" (Gjoci, 2013).

My personal journey into this bicultural experience began with the building of a house in Bali in 1993. Once the house was complete, Made expected Jean and I to

**Fig. 3.4** A Tais Keut Bati top ranking textile from Belu, Timor



**Fig. 3.5** A Tais Keut Bati Rarote second ranking textile from Belu, Timor



**Fig. 3.6** A Tais Marobos third ranking textile from Belu, Timor



perform the round of offerings with which the Balinese maintain a balance between the physical world and the world of the spirit. My initial motivations for performing Balinese offerings were as much about conformation with local cultural expectations as they were about cross-cultural curiosity. But over time, and given the work we were engaged in with weaving communities across the archipelago, the curiosity came to the fore and both Jean and I came to recognize, as my Balinese colleagues did, that our practice created a bond of shared experience with the weavers we worked with. The recognition of this bond went unstated but was acknowledged in subtle ways. The Bliran Sina weavers cooperative, as well known on the tourist trail across Flores for its cultural dance and music performances as it is for its textiles, performs a simple rite for the ancestors before every group of visitors arrives, though we only found this out once they started waiting until after we were there to make their offerings so that we could participate. We had a similar experience, also in Flores, with the Bou Sama

**Fig. 3.7** A Tais Maruka  
lowest ranking textile from  
Belu, Timor



Sama weavers cooperative near Ende. During a weeklong workshop that was held on the old site of the village researching natural dye traditions, among the ancestral graves, each of us in the Threads of Life team felt compelled to make an offering each morning before work began. Without the incense used by the Balinese, all we could find was cigarettes. “You’ve got to light it without drawing on it,” said Made as we all struggled to achieve this surprisingly difficult task before laying the smoking cigarettes on an old grave. “We can’t have consumed any of it before we give it in offering,” Made explained. As a result of being seen to show genuine respect for the ancestors, the depth of information shared with us that week was unparalleled.

As Threads of Life field staff, each of us enters this bicultural space in different ways. Made’s access has been through culturally important plants and natural dye processes, reinventing himself as an ethnobotanist. Jean has a passion for all aspects of material culture in the communities where we work. Working closely with all the textiles, baskets, and pottery that come through the office from the field on their way to the gallery, she has seen and handled tens of thousands of these objects, an immersion that has awakened a powerful intuition. “It’s not just me,” says Jean. “Iluh and Komang are in the room with me and have the same experience. We see dozens of variations of each type of textile and each motif, and this builds up subliminally into a body of knowledge. The physical contact and sensory experience imprints on us. I am very strict that anyone handling a textile, both in the office or the field, must unfold and fold it with extreme reverence, in just the way the weaver would relate to

it. It can never become just an object. This keeps open a channel to the maker and the land from which it came; the context isn't lost."

Nina Gjoci writes, "Cross-cultural adaptation is a two-direction process... [and] will happen only when the host culture 'let's you in.'... That's why making friends is what makes the process complete. When true friendships develop, the real connection with the new culture occurs" (Gjoci, 2013).

Jean, again. "If we were only focused on business, we might arrive for the first time in a village and straight away want to see all their heirloom objects to see what could be made again. But we don't this. We have to wait until it is appropriate, which can take years. It's about relationships. The longer we knew people, the deeper we can go."

This is how our process picks up the "left behind" objects Errington writes of. The meeting of our business culture with the weavers' culture is about the meeting of two value systems, and it's best to be as conscious as possible of the values held on both sides if you are to do no harm. When we buy something, we convey that we value it, and this valuation rubs off on the way an object is valued in its original cultural context. Equally, when we ask sensitive questions that go beyond the textile arts, and our questions over time show a deeper and deeper appreciation for the objects under discussion, this also conveys value. If done correctly, this second way can be more powerful than the first because it aligns with and reinforces the makers' existing value system. Relationship psychologist Hedy Schleifer talks about "crossing the bridge" to engage with others. She says, "It is listening with our whole being. It is not only opening our hearts but also our guts. It is a widened and heightened state of attention, in which new realities enter the horizon, and come into being. We feel as if we are connected to, and operating from a widening surrounding sphere. It is the zone of the 'encounter'" (Schleifer, 2014) (Fig. 3.8).

In 2005 and 2006, we were sponsored by the World Bank to hold two weavers festivals, one in Lembata and another in Timor. These weeklong events, held in a traditional community, were each attended by over a hundred weavers from across the communities where we work. We kept away tourists and collectors and persuaded the donors to attend as inconspicuously as possible. The weeks were for the women (and some men) to talk among themselves about the issues they felt were important. We provided some structure and facilitation: the mornings were for dialogue, often initiated with people filling in tables such as we did later in Belu, Timor; and the afternoons were for sharing plant dye knowledge. The statement of shared intent that came out of the festivals was written in the form of the question that opens this article: "We are told... that we are backwards and primitive for holding on to our culture and identity, and that we need to let go of these in order to... partake in the global economy. Why do we have to choose between identity and prosperity? How can we have both?"

This is the statement of an empowered group of ladies and brings us back to our initial question: who is being educated and what is being taught? The weavers' frequent experiences of being the unwilling recipients of imposed development projects deeply influenced our approach to answering the question posed at the weavers' festivals. An attempt to participate in a shared and mutual development





**Fig. 3.8** A likurai drum performance in Belu, Timor

process was yet another factor directing us down the path to biculturation, though we never articulated it as such at the time. The way of working we have developed was largely a matter of trial-and-error and learning-by-doing, and it would be misleading to imply anything other than that the conceptualization I am sharing here emerged largely in hindsight.

Returning to our original comparison between two broad pedagogical approaches, one based upon teaching the maker to access the market and the other upon studying with the maker about their culture, we can characterize the first as a process of acculturation, though mostly of the maker to the market, and the second as a process of biculturation, though mostly of the marketer to the makers' culture. In practice, of course, we have blended both approaches. We do teach weavers about the needs of the market, and can only buy what we can resell. Some weavers do achieve a level of understanding of the market that is bicultural, and these women often become the champions of their culture and leaders of their weaving communities.

None of this is to say that business fundamentals are unimportant. If *Threads of Life* was not profitable and well-run, it would not have survived in a volatile market since 1998. Equally, were we exploitative of our community partners, we would not have maintained the long-term relationships we have developed with weavers across the country, these weavers would not save their second-best pieces to sell to us when we visit, and they would not be still keeping their very best pieces for themselves (Fig. 3.9).

**Fig. 3.9** Distributing reading glasses to weavers in Belu, Timor



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**William Ingram** is co-founder of Threads of Life, a fair trade business based in Bali that has worked with over 1000 traditional weavers and their families in 50 communities on 12 Indonesian islands since 1997. As co-CEO of the Bebali Foundation since 2002 he has led the organization's support for sustainable use of natural dyes and other non-timber forest products by these same community groups. Through his work he seeks to demonstrate how profitable businesses can have a social mission, how community businesses can be profitable, and how both can be sensitive to the values of indigenous culture. Born in the UK and trained as a mathematician, he has lived most of his life in Japan and Indonesia. He is author of "A Little Bit One O'clock: Living with a Balinese family", and is author or co-author of articles published in the journals *Textile*, *TAASA Review*, *Economic Botany*, and *Australian Forestry*.

**Part II**  
**Cross-Cultural Traditions**

# Chapter 4

## Macassan Influence on Arnhem Land Material Culture



Louise Hamby

Material culture items are not created in isolation; they are inspired by the society in which they are produced and by visitors outside their country. The outsiders considered here were composed of a mixture of races from the Malaysian and Indonesian archipelagos, most commonly called Malays or Macassans. Aboriginal people from Arnhem Land are the insiders. The influences on Arnhem Land material culture from Macassans can be seen in actual materials brought by the Macassans and the form of the created objects. Tangible objects were not created without being immersed in the many intangible items associated with the Macassans including customs, kin relationships, language and designs. This chapter aims to lay the framework for analysis of Arnhem Land material culture influenced by Macassans by identifying the categories of items and places a focus on ones that have not received much attention, beads. Through this research beads and things made from them will begin to assume a position not only in trade systems in Southeast Asia but within the culture of Aboriginal people in Arnhem Land.

The Macassans were united in their purpose, to find trepang for trade, particularly to China. Trepang was known as *bunapi* (small ones) or *dharripa* (large ones) by Yolngu, the people from northeastern Arnhem Land. Trepangers arrived at coastal communities on the mainland and islands in their distinctive praus, often depicted in rock art imagery. They also exchanged goods for pearls and tortoise shell (Trudgen, 2000, p. 14; Warner, 1969, p. 132–449). Trepang and other natural resource items that Macassans took away with them to Sulawesi are well known but items of material culture made by Aboriginal people that Macassans obtained for themselves are not well documented. William Lloyd Warner recorded one example. ‘The Malays also bought spears and spear-throwers from the blacks, but it is likely that this was done in modern times because of their interest in them as mementos rather than weapons

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(Warner, 1969, p. 450)'. I assume by modern times he meant in the last years in which Macassans were legally allowed to come to Australia.

Arnhem Landers were participants in the trading cycle of trepang; they received material goods in exchange for their work in collecting and preparing sea cucumbers. This stuff or *girri*' was the tangible part of the exchange. The two early anthropologists who documented/commented on the influence of the Macassans were William Lloyd Warner, the American who worked at Milingimbi, 1927–1929, and Donald Thomson who worked in Arnhem Land from 1935–37 and again 1942–43. Thomson was known for his attention to material culture and his large collections while Warner was better known for his writing about social life (Hamby, 2008). Warner stated that: 'With the exception of the canoe, sail, mast, tobacco, pipe, Malay beard and tamarind tree, little else was contributed by the traders as a permanent part of Murngin culture (Warner, 1969, p. 456)'. Warner felt that the Malay contributions to Arnhem Land culture were small and that they were 'but modifications of original indigenous inventions' (Warner, 1969, p. 455). Donald Thomson disagreed with Warner's conservative ideas about material culture. 'Professor Warner has missed entirely the tremendous importance of the impact of this Indonesian culture on the ceremonial life of these people in his review of Malay or Macassar contacts with the people of Arnhem Land, from which the above extracts are quoted (Thomson, 1949a, p. 85)'. Thomson's book *Economic Structure and the Ceremonial Exchange Cycle in Arnhem Land* details the involvement of the Macassans and their great influence on Arnhem Land people.

That this influence was extensive is proved beyond question by the fact that the term *muadäk*, which gives its name to *kumar muadäk*, the northern sector of the exchange cycle, is the collective or generic name given by the natives to all the *gerri* which they obtained formerly from the Macassar visitors, of which the chief items are knives, axes of the type called *lunga linya*, nails (for fish hooks etc.), fish hooks and lines, bottle glass (for scrapers), tobacco, smoking pipes (*pämatukka*), belts, wooden dugout canoes, (*lippalippa*), beads, (*männi-männi*), and material such as calico, blankets, string and later wool, to which the collective term *mähäkäl* was applied (Thomson, 1949a, p. 86).

An aspect of material culture that seems to have eluded Warner was the value of items that were part of the ceremonial exchange and the intrinsic value created by those with the skill to make things. Thomson highlights the craftsmanship and the process of it adding to the prestige of objects. 'It is part of my thesis to show that an important function served by the ceremonial exchange cycle is in supplying this incentive, this motive for fine craftsmanship, the anticipation of the ritual and pageantry, by adding romance or "glamour" to work which would otherwise be drudgery (Thomson, 1949a, p. 87)'.

Lloyd Warner and Donald Thomson were key individuals in the documenting of Macassan exchange at a time when Aboriginal people had living memories of their visits. The legacy of hundreds of years of exchange is still evident in Arnhem Land today despite the cessation of the Macassan visits in 1906. Material culture linked to these visits is complex. The connections are not always apparent to young Yolngu today nor are they immediate to outsiders. For this chapter I have established a typology of material culture items in four categories: botanical heritage, materials, Macassan artefacts and derived artefacts. These types are not fixed in that it is possible

for some items to move between categories depending on evidence and criteria. I am including items that have been made by Aboriginal people or items that may be Macassan in origin but have been modified in some way by Aboriginal people.

## Botanical Heritage

The criteria for botanical heritage is straight forward. The item must be a plant. The botanical heritage from Macassans consists of food items, rice and tamarind fruit, tobacco and *abrus precatorius*. Tobacco itself was not made into an item of material culture but was the impetus for the use and manufacture of smoking pipes. Rice and the tamarind were also not made into objects but have had a long lasting impact on people in Arnhem Land. Rice is a favoured food but the tamarind has left its mark on the landscape and its fruit is still eaten. *Tamarindus indica* are most commonly cited as being brought to Arnhem Land by the trepangers (Brock, 1997, p. 311; Knaap & Sutherland, 2004, p. 241; Warner, 1969, p. 454; Yunupingu et al., 1995, p. 72). Tamarind fruit was brought as a food source on the voyages and eaten at sites. The seeds of that fruit produced trees; stands of these are now common.

Although Aboriginal people do not use this tree, *djamban*, to make specific items it is firmly fixed as being a legacy of the Macassans. Lloyd Warner was the first person to perform archaeological excavations at Milingimbi. He did this primarily at the Macassan Well, even then it was surrounded by tamarind trees. He was so fascinated with the trees he tried to date Macassan visits by having a large tamarind tree cut down to count the rings (Warner, 1969, p. 455). Sir Hubert Wilkins noted in 1924 when he was collecting for the British Museum of Natural History that the trees were a height of one hundred feet with branches extending for 15 yards (Wilkins, 1929, p. 133). Today children love eating the fruit often mixing it with water in plastic coke bottles and drinking the mixture.

The other exotic plant that arrived with Macassans was *abrus precatorius* (Ganter, 2006, p. 31). This is a plant that Aboriginal people have used for their own purposes. Regina Ganter has discussed whether or not Macassans were considered settlers. She aligns the concept of a settler as one who plants. Besides the tamarinds and other crops the Macassans planted abrus seeds. From her research with Peter Danaja, Willie Gunderra, George Gulan'buma and Terrichi Yumbul, their understanding is the Macassans planted abrus with the same symbolic significance as Europeans planting a flag (Ganter, 2005, p. 3). 'Lembana Mani Mani means abrus seed bay, the Makassar name for Maningrida' (Ganter, 2012).

These plants are found today in Peninsular Malaysia, Java, Borneo, the Philippines, Sulawesi and New Guinea. They are commonly known in Australia as Crab's Eye, Jequirity or Rosary Pea, other names include Crow Bead, Precatory bean, Indian Licorice, Akar Saga and Giddee Giddee. They are distinctive and easy to see having a bright red body with a black eye. The plant itself is a climbing vine with pinnate leaves. The seeds, ready in the dry season, are used for making necklaces. As with many plants used by Aboriginal people they have various purposes but the primary

one in recent times is for making necklaces (Hamby, 2010, p. 133; Hamby & Young, 2001, p. 47). Women have made necklaces totally from these seeds or they are used in combination with other seeds or shells.

The Guyula women from Gapuwiyak, the late Margaret Ngangiyawuy and Nancy Walinyinawuy have made long necklaces totally from these seeds. They are also used as attachments to baskets like ones made by Mavis Ganambarr from Elcho Island and other items like hats made by Minawala Bidingal from Gapuwiyak. The seeds, the plant as well as the necklaces made from them are called *yiringaning*. At Yalangbara it is possible to find totally black seeds (Yunupingu et al., 1995, p. 13) that women have explained as having a connection to the ancestral figures the Djang'kawu Sisters (Hamby & Young, 2001, p. 47). A major drawback to the use of the seeds in the commercial arena is that the seeds are poisonous due to the presence of the toxin abrin that can be fatal if ingested (Fig. 4.1).

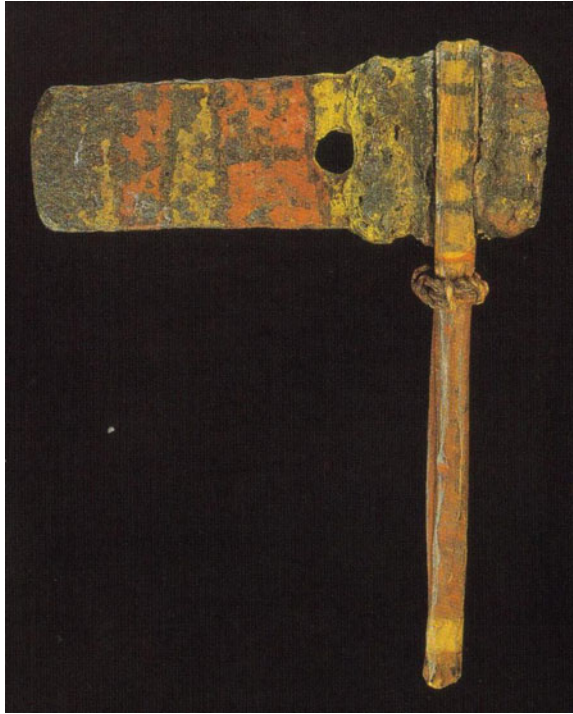
The last plant with a connection with Macassans is *flagellaria indica*. In Arnhem Land a common name for this climbing vine is lawyer cane, jungle vine or whip vine. This tropical plant is also found in southeast Asia. This vine is used by Aboriginal people to make armbands. The vine and the armbands are known as *baku'* or *djali*. Lindy Allen, Senior Curator, Anthropology (Northern Australia), Humanities Department at Museum Victoria and I took objects from the Donald Thomson Collection to Arnhem Land; interlaced armbands were included. We showed these to Jimmy Burinyila of the Mildjingi clan. The Mildjingi clan belong to the Yirritja moiety which Macassans and their goods are connected. The armbands sparked great interest and we went out to collect the appropriate materials to try and make these items. Burinyila was remembering materials and techniques taught to him by his father Rraywala Mildjingi who was the companion of Donald Thomson when

**Fig. 4.1** The characteristic red seeds with black eyes from *abrus precatorius*.  
Photograph: Louise Hamby





**Fig. 4.2** Hafted axe with metal blade painted with ochres. Milingimbi. Collected by William Lloyd Warner. 1928. Macleay Museum, University of Sydney ETH1799



he worked in Arnhem Land. Burinyila, his sister Myall and I made an unsuccessful attempt to make these interlaced armbands from the ‘jungle vine’ that grows in abundance at his outstation of Garinyal. He commented on the fact that Macassans used this material as well when they were making their houses out of bamboo, perhaps to secure or tie the ends (Burinyila, 2004).

### *Materials*

The Macassans brought many materials with them that were appreciated by Aboriginal people, like tea, rice and alcohol, but for purposes of this chapter it is the items that were taken and transformed into other objects that are the main concern. The two items with the strongest links to Macassans are cloth and metal.

## *Cloth*

Thomson records that Aboriginal people used the collective term, *māthäkäl*, for materials such as calico, blankets, string and later wool. The current spelling of the word is now *mardhakal* and it refers to clothes, things, possessions. Cloth came in pieces, yardage (Knaap & Sutherland, 2004, p. 241) and as sarongs to Arnhem Land. Ganter documents instances in memory of Aboriginal people in which sarongs were presented as gifts (Ganter, 2006, p. 42–3). Campbell Macknight recorded that Bishop Gilbert White found some Malay calico in an Aboriginal camp on Groote Eylandt in 1907 (Macknight, 1976, p. 157). The sarongs and other cloth have had an influence not only in subsequent uses of cloth itself but on designs and images that have been used in rock art, bark paintings and sculpture. The late George Chaloupka was convinced of this fact.

Aborigines from the Wellington Range region who visited Makassar were very much impressed with the beautiful sarongs worn there. They called them *liba*, from the Makassan term *lipa*, a name still used by the descendants of the voyagers to identify such items worn by human figures in the rock art. A painting of one such figure with a short, patterned sarong is thought to be a depiction of the artist's Indonesian girlfriend. Many of the decorative elements in the art of the northern shelters are similar to patterns seen in Indonesian weavings and textiles. Although the majority of the trepang fishermen were Makassan, there were also Bugis, Bajau and members of other ethnic groups wearing a wide variety of clothing made from a range of textiles. The decorative hatching, diamond and lozenge designs as well as the patterned parallel, horizontal and vertical blocks found in the art could be based on such fabrics (Chaloupka, 1993, p. 192).

The depiction of sarongs or patterned cloth in rock art is open for debate. Regardless of whether or not this is proven by rock art images, Aboriginal people liked the materials they obtained from the visitors, particularly cloth and metal items. Lloyd Warner's main consultant was a Wangurri man Harry Makarrwala. He told Warner that his people were very sad when the Macassans stopped coming to Arnhem Land because they no longer got calico and tomahawks which they liked very much (Warner, 1937, p. 475). A desire for cloth was met to some extent by people like Lloyd Warner who brought yards of fabric from Chinese traders in Darwin with him to Milingimbi for trade (Hamby, 2008, p. 362). Cloth in some form new or as rags would have been available from the mission at Milingimbi and other places in Arnhem Land.

Large pieces of cloth were often used to make flags that were used in ceremonies connected with the Macassans. The smaller pieces are ones that Aboriginal people used and valued at a time shortly after the Macassans stopped coming to Arnhem Land. Sir Baldwin Spencer was the first anthropologist to make note of the use of these remnants of fabric.

Their cane and string-plaited dilly-bags must take a long time to make, but they never seem to run short of them, though, unfortunately, they are already too fond of using white man's materials in making and especially decorating them. They actually prefer little tawdry tags of coloured calico or wool to their own beautifully made string and feather ornaments (Spencer, 1928, p. 831).

Spencer did not understand the significance of cloth to the people from whom he obtained the baskets. The cloth was valuable not just because of its rarity but its association with the Macassan visitors. Thomson maintained a similar attitude towards the use of cloth as Spencer until his fieldwork informants presented him with additional information that allowed him to connect the strips of fabric to not only the Macassans but also to clan rivalry over ceremonial objects. The following excerpt is from his field notes and details information about the strips of fabric used on baskets by the Mildjingi clan.

They use these on dilly bags and on wännä (*gindjerr*) not as others do (and as I thought at first) as a degradation of their culture but as a legacy from the Macassars and this seems to explain the way in which these people have been influenced by the Macassars – to avoid the jealousy of their *neighbours* (Thomson, 1937a, p. 2 File 7).

Thomson collected baskets that contained pieces of fabric that are in the collection in Museum Victoria in Melbourne. Even earlier Sir Hubert Wilkins collected fibre objects that contained fabric strips in December 1924 at Milingimbi as part of his collection project for the British Museum. There is an example of a conical mat (Oc1925,1113.58, Wilkins #14) and a twined basket (Oc1925,1113.50, Wilkins #23). Lloyd Warner also collected items at Milingimbi that contained fabric including a biting bag now in the collection of the National Museum of Australia (1985.72.92).

In addition sacred objects have been documented as being made with materials associated with the Macassans. Tony Swain quotes Donald Thomson regarding a sacred Mildjingi object associated with Macassans. ‘In this case the ritual representation of the dog, which Thomson felt to be “the most remarkable totemic object in the whole of Arnhem Land”, was made of Melaleuca bark and string, wool and fabrics which were specifically associated with the Macassans (Swain, 1993, p. 174)’. There is a Mildjingi dog in the restricted store at Museum Victoria but it may or may not be the one described by Thomson.

As I have demonstrated, anthropologists and others originally misinterpreted the use of fabric as a degradation of culture, as not being traditional or authentic. However this was not and is not the situation in more recent times. When Nicolas Peterson was working at Mirrnatja in the 1960s cloth was a valuable commodity. Peterson noted that people hoarded cloth as a form of wealth in long rolls of 8–15 yards (Cawte, 1993, p. 43). Some artists still use strips of cloth in their baskets such as Chris Yawirryawirr and Djabaybay Maywadjba from Maningrida who use fabric strips in their work made for sale. Maningrida Arts and Culture labels these baskets as ceremonial; this does not imply that the baskets have been used in a ceremony but they are ceremonial in their design.

## ***Metal***

Aboriginal people were given metal knives, axes, tomahawks and fish hooks as noted above by the Macassans. Perhaps what is more significant is that Aboriginal people

were able to perceive of new uses for metal, not just the ones the Macassna had of weapons, tools and pots used for cooking and preparing the trepang and for food. I do not know if any of the original tools and weapons remain in collections but what does remain is the use of metal. Many of these metal tools would have been traded to other Aboriginal people inland almost as soon as they arrived to coastal ones.

Metal, *bala* or *gotha*, itself became an important resource for Aboriginal people due to the fact that knives, axes and spears made from metal were sharp and efficient. The value of metal made into axe blades was a point of contention between Warner and Thomson. Warner saw the metal blades as being superior in that work could be done more efficiently, especially the making of canoes. Thomson highlighted the fact that the metal axes were almost instantly traded to partners to the south having a different criterion for value. The hand-crafted stone axe blades were made by specialists and were highly prized. Both men accepted the fact that the metal blades whether they were in axes or spears were to become a permanent feature of Aboriginal life. Warner collected an exquisite painted metal bladed axe now in the Macleay Museum Collection at Sydney University (ETH1799). The fact that this blade was painted with ochre increased its value. There are many items in the Donald Thomson Collection at Museum Victoria that contain metal either as wire or flat pieces. Spears with metal blades-shovel nose spears, *gayit*, became very popular (Fig. 4.2).

There is an opposing view to the idea that Macassans brought metal to Arnhem Land. John Cawte put forward the ideas of David Burrumarra in his book on the Warramirri. Birrindji was the creator god of the Warramirri and Bayini was the female ancestor. 'They brought forth a line of people of special brightness and leadership who discovered a new way of life, an era of minerals, of iron. Not iron alone, but the tools and appliances of an iron age. An age of long steel knives, of boats and anchors, of clothing and flags (Cawte, 1993, p. 43)'. Cawte stated that David Burrumarra said the proof was that the songs for these items are all in the old Warramirri language. Burrumurra said: 'Scientists will suggest that we bought them from Macassans, in the trade on our coast. They too are wrong! All this iron was here before, under Birrindji the smith. My own father was the front person to meet the Macassans, and he should know (Cawte, 1993, p. 43)'.

### *Derived Artefacts*

The third category of objects, derived artefacts, are ones that Aboriginal people made themselves that were morphologically the same as the traded Macassan goods.

## *Pipes*

Smoking pipes or *bamutuka* fall into this category of object. Donald Thomson said ‘...the wooden pipes of Arnhem Land are equally definitely of Indonesian origin and were probably introduced into Arnhem Land, with tobacco, by the early Macassar voyagers, or their predecessors (Thomson, 1939, p. 87)’. There are many sizes of the pipe from around 20 cm to over 90 cm in length. Thomson illustrated these in his paper on smoking pipes. Pipes that have been painted are usually associated with specific clans though the pipes themselves are Yirritja, the same moiety as the Macassans. Some of the collected pipes belong to the Mildjingi clan, identified by Jimmy Burinyila. Lloyd Warner before Thomson also collected pipes from Milingimbi. Three of these are in the Peabody Museum at Harvard. They have been identified as belonging to another Yirritja clan, the Gupapuyngu. Joe Neparnga Gumbula believes that these were made by his grandfather NarritjNarritj.

## *Canoes*

An important item that was given or traded to Aboriginal men by the Macassans was the dugout canoe. Neparnga Gumbula highlighted this in his exhibition *Makarr-Garma Aboriginal collections from a Yolngu perspective* held at the Macleay Museum at Sydney University in 2009. He included a model of a dugout canoe, *lipalipa*, and a sail. ‘This lipalipa shows the knowledge that the Makassans have given to the Yolngu people when they visited the Arnhem Land shore from the sixteenth century, when they did trade in conjunction with Yolngu (Gumbula, 2009, p. 46)’. With sails, called *garrurru*, these watercraft provided a means of transport that was more durable than the classic bark sewn canoes. Warner points out that Aboriginal people did not make the canoes or use them frequently (Warner, 1969, p. 452) until their supply from the Macassans was cut off due to the government ruling that Macassans would no longer be allowed to enter Australia (Warner, 1969, p. 451). Warner’s informants explained to him the main reason they used the dugout canoe was to provide them with a better opportunity to harpoon sea animals. The sails for the canoes were easily adapted for Yolngu as the technology required for them was already present in the twining of baskets and mats made with pandanus. Warner stated that the sail was easy to make and could be done in a couple of hours (Warner, 1969, p. 453). The time given by Warner is perhaps questionable based on my own experience working with pandanus and the comments of others. Joe Gumbula reaffirms this with a story about his grandmother.

My mari (grandma), my mother’s mother, her name was Gutjuringu and she was a Mandjikay woman. She was a sailmaker, a weaver and she would actually build the sails in her ‘factory’, if we put it that way. During that time she was making lots of baskets, a sail is another artwork, you sit on top of it and you start weaving on the floor, on the ground, and it takes you a long time. You have to lay down to stretch your back. It’s a long job, and a big job that women carried out. In the Yolngu style of living, when that canoe is going to the open to

fetch something like fish, to bring back good meat or big meat like turtle, they actually bring some of the meat, the big meat, back home just for that lady, for the manufacture of that sail. They always give that return gift and that return gift, we have that, still that's part of our understanding and part of our culture as well, we share things (Gumbula, 2009, p. 46).

Warner documents how the canoe, mast and sail became part of a Yolngu ceremony, the raising of the mast (Warner, 1969, p. 458). The importance in the ceremonial exchange cycle of the dugout canoe within Arnhem Land seems to have eluded Warner or perhaps not of concern at the time. Donald Thomson however stresses this fact. 'If a man comes from a group some distance away, and the occasion is an important one, a dugout canoe (*lippalippa*) may be presented.' This is a big gift and highly valued (Thomson, 1939, p. 37). There were two other ways of obtaining a canoe, employing someone to make it or giving a craftsman a steel axe to keep after making one (Thomson, 1939, p. 52). The canoe was also part of a ceremonial exchange with the Macassans as they were given at the end of their stay as final payment.

### ***Grave Posts***

The other item of material culture that was derived from the Macassans was the sculpture called *wurramu*, grave posts. According to the Berndts in the Celebes the *wurramu* were known as crooks, collection or stealing men as they collected dues at the wharf when the trepanners came home (Berndt et al., 1950, p. 54). The Macassans buried their crew members who died in Arnhem Land in graves that were often marked with posts at either end (Berndt et al., 1950, p. 54, Macknight, 1976, p. 69). The carving of this style of sculpture was taken up by Aboriginal people. They have been carved and placed on the graves of Yirritja moiety people (Swain, 1993, p. 176). Lloyd Warner collected one of these posts that is now in the Berndt Museum in Perth. Warner also photographed one of these posts on the beach at Milingimbi.

### **Macassan Artefacts**

#### ***Glass Bottles***

The last category, Macassan artefacts, will be one that is certain to cause debate. Glass bottles are known to have been brought to Arnhem Land from Macassans. The predominant bottle was a square one made from dark green glass that originally contained Dutch gin (Brady, 2008, p. 10; C. C. Macknight, 1976, p. 81; Thomson, 1949b, p. 60). Aboriginal people quickly found uses for broken glass as scrapers and cutting tools. However the bottles themselves became part of the Mildjingi clan totem objects. They called these *butulo*. They are painted with cloud designs 'which

the people say were reflected on the wet surface of the old square-faced bottles when they were found, wet and glistening, cast up by the sea (Thomson, 1949a, p. 90)'. Donald Thomson discusses and indeed illustrated a painted bottle in his famous *Economic Structure and the Ceremonial Exchange Cycle in Arnhem Land* belonging to Mildjingi (Thomson, 1949a, p. Plate 5). This particular item is in the collection of Museum Victoria and is held in the restricted store where it will remain as per the wishes of the senior Mildjingi custodian Jimmy Burinyila. Since I have not viewed this item it could be an actual bottle painted or it could be a carved bottle in the form of the glass one which would then make it a derived artefact.

## ***Beads***

In museum collections from Arnhem Land there are few items that one can say are definitely of Macassan origin or manufacture. Research from various scholars has shown that the Macassan voyagers brought beads with them as trade items (Macknight, 1976, p. 13; McMillan, 2007, p. 29; Thomson, 1949a, p. 86). In addition Hubert Wilkins added in his book a note about beads and colour. He does not say whether or not he provided the blue beads. 'The natives traded turtle-shell for tobacco, cloth, and blue glass beads... (Wilkins, 1929, p. 130)'. In terms of long-distance trade in general, beads and textiles have been in the forefront of the trading activity (Sciama, 1998, p. 7). It is the beads and the things made from the beads that I now draw your attention to.

I preface the remaining part of this chapter with the proviso that I can not prove that any of the beads/bead items I discuss are ones that actually came from Macassans but there is that possibility, hence my category of Macassan artefacts. They could also become derived artefacts if Aboriginal people made their own objects or necklaces from the beads. Glass beads were brought and traded by Macassans so I ask what did Aboriginal people do with them and where are they now? These are questions that come naturally to a devoted scholar of material culture and anthropology. Lidia Sciama and Joanne Eicher hint at some solution. 'While some scholars have considered the study of beads to be of little interest, archaeologists have shown otherwise. Indeed, beads, usually crafted from materials that outlast long-standing burial and are less subject to decay than other artefacts (such as textiles), are frequently found in archaeological sites (Sciama & Eicher, 1998, p. viii)'. I have extended my research to determine what archaeologists have found at Macassan sites, starting with Lloyd Warner who first excavated at Milingimbi. Unfortunately he does not mention any beads but found numerous other artefacts (Warner, 1969, p. 455). Campbell Macknight found five glass beads from the Anuru Bay site in the top 10 cm of deposit. 'They are basically from the area of most usage which seems relatively recent in the site's use (Macknight, 2012)'. They include three green [S68, S74, S93], one yellow [S70] and one blue bead [S83] (Macknight, 1969, p. 315). In addition there is a white bead [S44] from the Hardy Island West in Arnhem Bay in eastern Arnhem Land.

All of these beads are now in the collection of the Museum and Art Gallery of the Northern Territory.

The more recent work that involves beads in any way is that of a team of people, Paul S.C. Taçon, Alistair Paterson, June Ross and Sally K. May, working on the ARC project *Picturing Change: twenty-first Century Perspectives on Recent Australian Rock Art*. For this chapter their work in the Wellington Range, northwest Arnhem Land is of most interest as it was also the site for Campbell Macknight's early work. The team's work was focused on rock art but they did include other work at the site. 'This was done in collaboration with Daryl Wesley's PhD research which investigates changes that have occurred in Indigenous occupation of northwestern Arnhem Land in relation to contact with the mythological Baijini, the Macassans and Europeans (May et al., 2010, p. 58)'. May and Wesley found beads that were surface finds from Djulirri; one an intact lavender cylinder disk bead and one half of a spherical turquoise one.

Although Daryl Wesley's research is primarily rock art he is also interested in the relationship between images, objects and people. He is involved with the possible origin and significance of beads found at the sites. Three beads excavated from between 5 and 8 cm below the ground surface are from Red Lily Lagoon rock shelter site. He states: 'My interpretation from the stratigraphic context, weathering and other artefacts found with the beads is consistent with being late nineteenth to early twentieth century. From the appearance of Red Lily Lagoon beads, the glass beads appear to be of European origin (Wesley, 2012)'. In the Bald Rock 3 site in the Wellington Range he found a collared white bead that is of possible Chinese/Asian origin. This site is located near the coastline close to the Anuru Bay Macassan sites. He plans to subject these beads to PXRf (Portable X-Ray Fluorescence) to determine the mineral content of the beads. This may provide additional information about the origin of the beads (Fig. 4.3).

Individual beads are found in early collections coming from Arnhem Land usually associated with other items. In the 1924 collection of items made by Hubert Wilkins for the British Museums there is a possum fur pubic cover (Oc1925,1113.62) that contains a single orange glass bead. In addition two beads, a blue and a yellow one are threaded onto wrapped armbands (Oc1925,1113.68). At Gunbalanya (formerly



**Fig. 4.3** Beads excavated by Daryl Wesley at Red Lily Lagoon in western Arnhem Land. Photograph: Daryl Wesley



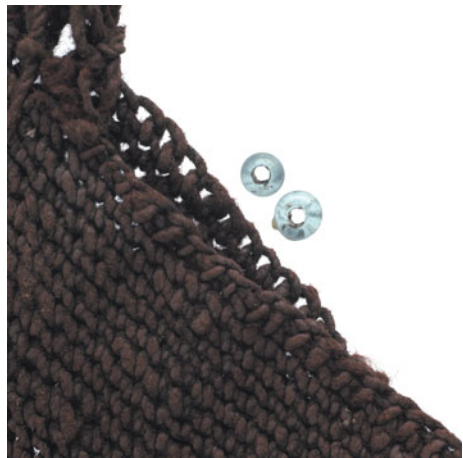
**Fig. 4.4** Pubic cover with one glass orange bead. Milingimbi. Collected by Hubert Wilkins. 1924. British Museum. Oc1925,1113.62



Oenpelli) Paddy Cahill first started collecting for Sir Baldwin Spencer and continued after Spencer left the Northern Territory. There may be earlier examples in the collections of Baldwin Spencer, Paul Foelsche or Edward Stirling (Fig. 4.4).

The development of the exhibition and subsequent publication *Twined Together: Kunmadj Njalehnjaleken* provided the opportunity to examine many fibre objects from western Arnhem Land with community members and brought to light some surprises for myself and museum staff in relation to some of the string bags. When the artists, myself and Lindy Allen were examining the densely ochred fibre bag X28535 what should roll out of the bag but two small blue glass beads. They had been inside since 1922 without anyone knowing about them. These two beads are the beginning of the bead trail at Museum Victoria (Fig. 4.5).

**Fig. 4.5** Two blue beads found inside string bag. East Alligator River. Western Arnhem Land, Australia. Collected by Paddy Cahill. 1922. String, 390 × 155 × 30 mm Museum Victoria. X28535. Photograph: Rodney Start



### *Single Strand Necklaces*

Individual beads that have been strung together by Aboriginal people are the logical next stage in the investigation. One such example is a biting bag or *ballduk*, from 1918 collected by Paddy Cahill that contains strung beads. This is a small stuffed looped string bag tied closed. It has a small necklace of beads to tie around the button sewn on the looped structure of the bag. The late Thompson Yuldjirri discussed this added element and explained it as ‘making it pretty’ (Hamby, 2009, p. 293). During the examination of the collection there were two string bags with their contents that the people wanted to investigate so their contents were removed. Both of these string bags were also collected by Paddy Cahill; one in 1918 and the other in 1922. The contents were indicative of what women were carrying with them at the time and included armbands, feathers and a hair string belt, as well as a glass bottle, strips of red cotton fabric and tiny glass beads threaded on string. Bag X25934 collected in 1918 is thought to have belonged to a dead woman. Roslyn Nayilibidj and Garnbaladj Nabegeyo who saw the bag during the visit to Museum Victoria thought that this bag must have been sold to Paddy Cahill, perhaps by the woman’s husband. ‘Maybe she was using it when she died. One of the men gave this to white man—maybe husband. He sold it to that white man (Allen & Hamby, 2005, p. 48)’. This bag contains not only fabric strips but a single strand necklace composed of green, yellow and white beads. The other Kunwinjku bag with its contents is thought to have belonged to a woman pregnant with her first child and contained items considered to be gifts for the child. Included in this bag were strands of beads of yellow, blue, red and green.

### *Chokers—Woven Bead Necklaces*

All of the single strung examples from the string bags and the necklace on the biting bag I believe were threaded and designed by Aboriginal people due to the context of their finding and that this technology was one with which they had familiarity. The beads and fine threading material were available either from Macassans or from the beginning of trade with anthropologists and missionaries. The next group of artefacts with beads found in museum collections are chokers, necklaces worn tightly around the neck. Alison Clark, a PhD student in the Australian Studies Department at Kings College London and the British Museum first brought a group of objects to my attention that were in the collection of Jessie Litchfield made between 1910 and 1930 from Arnhem Land. Included in the selection of fibre objects were eight beaded chokers. These necklaces link in with my previous research on threaded objects from Arnhem Land (Hamby & Young, 2001). They were the impetus for re-examining objects and photographs that I had seen in the past but not researched. One item that I remembered was a photograph in which an Aboriginal man was wearing a beaded choker (Fig. 4.6).



**Fig. 4.6** Beaded chokers. Melville Island. Jessie Litchfield Collection. 1927–1930. British Museum. Photograph: British Museum

This photograph was taken by the German photographer, Edward Reichenbach (1892–1968) better known as Ryko. Riding on his bicycle in the NT between 1914 and 1917 he was easily remembered. Amongst his subjects were trepangers. Roslyn Poignant includes in her book one of his photographs of men divers in the water holding up trepang (Poignant, 1996a, p. 26). Poignant documents Ryko’s interest in the Macassan trepangers in her article in *Australian Aboriginal Studies* about the murder of two coastal Aborigines by ‘Malay’ fishermen. Ryko photographed a re-enactment, by Yan-nhangu language speakers from Milingimbi of these murders Poignant includes several of these in her article (Poignant, 1996b).

In a photograph held at The Northern Territory Library Ryko has written ‘trepang hunters’ on an image. The people in this photograph are wearing patterned cloth and three of the women are wearing some type of necklace (PH0055-0018). There are three other photographs of great interest for this chapter as they show men wearing choker necklaces. The first is a group of four men called ‘Melville Island Hunters’. The two men standing in the back are wearing beaded chokers. There are three other portraits of men wearing the chokers. The Melville Island man has his head turned and the choker is not as visible. The Port Essington and the Yawadja portraits the men are wearing beaded chokers, one zig-zag and one diamond design (Figs. 4.7 and 4.8).

**Fig. 4.7** Port Essington man wearing beaded choker necklace. Photograph: Edward Reichenbach. circa 1915. Ryko Collection. Northern Territory Library. PH0055-0005



After finding the Ryko photographs at the Northern Territory Library I went in search of more beaded necklaces. Christiane Keller, then Senior Curator Aboriginal Art and Material Culture, at the Museum and Art Gallery of the Northern Territory (MAGNT) located four beaded chokers in their collection. These necklaces (ABETH 2901–2904) were part of the MAGNT collection prior to Cyclone Tracey. Their origin and collector are unknown but the records include a reference to a Ryko photograph of a Tiwi man wearing a glass beaded choker circa 1918. All of the necklaces range in size from 3 cm to 3.5 cm width and from 16 to 23 cm length for the beaded portion of the necklace. The most unusual necklace is ABETH2903 that has attached two single threaded loops of alternating pink and green beads.

The last group of necklaces that I have located to date is necklaces in the collection of Museum Victoria in Melbourne. Three of the necklaces were from the Adelaide River collected in 1923 by D. G. Aiston. The Rum Jungle near Darwin was the origin of one necklace collected by D. Raymond from 1931. From 1918 in Darwin there is a choker collected by G.F. Hill. Another choker X75974 was found inside bag X72561. The collector of the bag was a Ms M. A. Carter (Fig. 4.9). The tag for this choker points the search for some understanding in another direction. It says ‘ornament-missionary’. There is the possibility that this necklace was made by missionaries, given by missionaries or made from materials by missionaries. The

**Fig. 4.8** Yawadja man wearing beaded choker necklace. Photograph: Edward Reichenbach. 1915. Ryko Collection. Northern Territory Library. PH0055-0046



first mission in the area was Goulburn Island in 1916, followed by Milingimbi 1923 and Oenpelli in 1925. However, Paddy.

Cahill had been at the East Alligator River since 1906.

From whom did the makers get the beads? Where were the beads themselves actually made? Who made the necklaces? A detailed analysis of the designs of



**Fig. 4.9** Beaded neck band found inside a bag. Attributed to Darwin Region, Northern Territory, Australia. Collected by Ms M. A. Carter. String, glass beads, 570 × 20 mm. Museum Victoria. X75974

the necklaces has yet to be done, hopefully it will provide visual linkages between the known necklaces and others. Howard Morphy looking at the British Museum necklaces the first time thought they were Aboriginal designs. Ian McIntosh thought one looked like a Gupapuyngu honey design. They do have the hallmarks of some classic Yirritja motifs, diamonds, triangles and zig-zag arrangements of colour.

All of the materials used in the construction of the necklaces are of a manufactured nature with the exception of possible hand-made glass beads. Aboriginal people did not have the technology necessary to produce glass beads. These necklaces are not threaded on single strings as we have seen in the necklaces found in bags from western Arnhem Land. According to Heidi Munan, honorary curator of beads at the Sarawak Museum and bead expert says: 'The items are not "worked" on descending strings, but woven on a loom; this argues a certain amount of sophistication. Did your Arnhem Land people weave? (Munan, 2011)'. The answer is that they did not weave at least not in the usual manner. There is no evidence that I am aware of to indicate that Aboriginal people had looms. The looms, the thin long metal needles and the thin thread necessary would have to come from outsiders. All of the necklaces have the same wefts extending from both ends of the pieces that are then used as ties. This is characteristic of loom woven beads versus the technique used by African women to make 'love letters'. These are made using the brick stitch or net stitch and does not involve weft threads or use of a loom. A characteristic of this technique is that the beads are off-set one bead like classic brick walls. The beads in the Arnhem Land chokers are aligned one on top of the other characteristic of loom woven bead work.

I do know that these necklaces were worn by Aboriginal people as evidenced by the Ryko photographs. Perhaps what is even more intriguing is what the necklaces may have meant to Aboriginal people when on and off the body. Sciamia has observed 'Such transformations (literally, such *dressings*) of the body are at the same time aesthetic expressions and ritual behaviour—they are in either case associated with culturally defined ideas of physical beauty, and with magical actions aimed at achieving or maintaining health and keeping away illness and other calamities (Sciamia, 1998, p. 15)'. Ian McIntosh has provided me with information from his research that indicates necklaces, perhaps these very ones, were associated with important cultural and ceremonial activities. He has references to the gifting of necklaces by Macassans to Yolngu. In addition McIntosh has documented stories relating to the ancestral dog Djuranydjura who is always being plied with gifts, which others have also written about (Ganter, 2006, p. 32). In these versions the dog rejects all the gifts.

McIntosh records one inside version of the story in which the Macassans give a necklace and several other items to the dog Djuranydjura and they were accepted (McIntosh, 1994, p. 79, 1999, p. 187).

Djuranydjura was offered a piece of rotting whale meat, and she ate it, and in a repeat of the meeting with Macassans at her homeland, she was offered a necklace and a fishing line and this time she accepted it, but added, 'I am only taking this because you want me to. These things still belong to you' (McIntosh, 1999, p. 187).

McIntosh also provided me with the following information. He recorded a reference from Burrumarra from around the 1930s at Elcho Island where a replica of the 'Djuranydjura' necklace, a *rangga*, a sacred object for both Gupapuyngu and Warramiri clans, was being argued over by clan members. They included David Burrumarra's older brother Nyambi who was the leader in the 1930s. This particular necklace *rangga* was claimed by both groups and a great discussion ensued about the Macassan legacy and the significance of the object as it was believed to be a copy of the one in the sacred narrative in which the Macassans gave it to the Gupapuyngu and they were not willing to give a copy to the Waramirri (McIntosh, 2012).

This information about ceremonial use of beads and necklaces is key to an understanding of the place of the necklaces in Aboriginal culture in general. Early necklaces and beads were brought by the Macassans to Arnhem Land. They fit into the highly complex trade links between countries in Southeast Asia. 'An understanding of this relationship might also help explain the cultural similarities in the region as trade brought not only goods but also cultural influences (Cayron, 2006, p. 5)'. I have started this investigation and will present a few possibilities about the origins of the beads and necklaces, all without any proof. By returning to the beads themselves one avenue of research has been brought to my attention by Paul Clark, Curator of Maritime Archaeology and History at MAGNT in Darwin. There are beads found on shipwrecks.

One famous Southeast Asian shipwreck, the Pandanan, is a rare find from the mid-fifteenth century. It was found off the Coast of Pandanan Island in Southern Palawan in 1993 by pearl diver Eduardo Gordovilla. It contained over 4722 artefacts with an exceptional number of well-preserved ceramic pieces. It contained various other items and included thousands of glass beads. 'The beads were found inside Vietnamese stoneware jars along with many other foreign artefacts. The context in which these beads were found presupposed that they were imported and that they were items for trade as the existence of a local manufacturing site had yet to be confirmed (Cayron, 2006, p. 3)'. Jun Cayron's research has found that the beads were probably made in Sungai Mas, Kedah, Malaysia based on a comparative analysis of beads from there and the Pandanan sites. Some of these beads are similar to ones in the necklaces. Jennifer Craig, PhD Candidate at the Oxford Centre for Maritime Archaeology has examined some of the beads from the Pandanan. Black and red beads have been analysed to date. They have a dull paste-like finish indicating that they were only fired once. Other beads with a high gloss are ones that have been fired twice (Craig, 2011).

Craig has discovered that often ships whose pilots have shared a common language in mathematics also had a shared commodity, ubiquitously expected—beads (Craig, 2011a). There is much work to do in this area of research in regard to Macassan shipwrecks. There is no physical connection of the wreck of the Pandanan to Arnhem Land. Paul Clark points out that there is historical evidence that some of these vessels were wrecked and lost on the north Australian coast, but no tangible archaeological evidence of their existence has been found and identified to date (Clark, 2011). He is continuing to explore the possibility of finding the remains of these wrecks.

If there is the possibility of these necklaces being made in Sulawesi there should be some visual record or documentation of the style or ornament used there. Robyn Maxwell has written that ‘In central Sulawesi beads are a powerful bridge between this world and the spirit realms, and often used and worn by shamans (Maxwell, 2010, p. 194)’. From Toraja in Sulawesi a conically shaped ritual object with a fringe made of braided beads is known as the Kandaure. These ritual objects are known for their glistening beads and having special powers (Adams, 2006, p. 201). There are visual similarities between these and contemporary headbands used in Toraja (“adjusting-bead-waistlet.jpg,” n.d.).

Moving to other parts of Southeast Asia there are examples of beadwork that look like some of the chokers. Dubin provides the cultural importance of beads in this area. ‘In Indonesia, Malaysia, Sarawak and the northern Philippines, many layers of social and religious iconography were incorporated into jewellery, which was kept as ancestral treasure and family heirlooms symbolic of their owner’s place in the world (Dubin, 1987, p. 225)’. Monica Janowski worked with the Kelabit of Sarawak during 1986–1988. She illustrated beaded necklaces made from small machine-made beads (Janowski, 1998, p. 231). They are similar in design to the Arnhem Land necklaces. There are examples from Alor in the Philippines (Cutsem & Magliani, 2005, p. 227), a Bagobo woven necklace of beads from Mindanao, early twentieth century, (Richter, 2000, p. 281), a Karo Batak beaded bag from Sumatra (Richter, 2000, p. 203) and to throw the mix out completely there are beaded headbands from Africa (Cutsem & Magliani, 2005, p. 40; Dubin, 1987, p. 147). Professor Harry Beran, expert on Massim tribal art of Papua New Guinea does not think they come from the Massim (Beran, 2012). Many of the individual beads found in the examples above come from Europe, China and some places in Asia. If they were traded as necklaces, that were broken down on arrival in Australia, they most certainly would have had different cultural meanings elsewhere. Sciamia points out this characteristic in her work on beads. ‘One general feature that has emerged from our comparison of the uses of beads in different cultural contexts concerns the ways in which strings of beads, which on leaving Europe already had well-defined religious significance, after reaching their new destinations rapidly took on new meanings, in keeping with the most diverse cultures and symbolic systems (Janowski, 1998, p. 16)’.

Beads were an important part of the trade with Macassans. If the Macassan desire to please the Aboriginal people with whom they worked was important enough they may have over time developed an awareness of what Aboriginal people particularly liked in relationship to beads. Anna Edmundson, curator, put forward one idea that perhaps the trepangers themselves made the necklaces on their ships. Another possibility is that the Macassans knew what motifs Aboriginal people favoured and had necklaces made for them for the trading season by some of their trading partners. At this point in the investigation I do not know who these people may have been.

The last category of material culture, Macassan Artefacts, is one of the uncertainties but provides avenues for additional research. The association of the necklaces with Aboriginal ceremonial use is of great significance and points towards the valuing of certain materials that come from outside the community. In general material culture items have much to offer to the study of Aboriginal social life and culture. Donald



Thomson was very aware of this during his time in Arnhem Land. We would know much more about Aboriginal culture today if others had taken up his passion.

Donald Thomson described the process by which fine or valued objects of material culture are dedicated to a person's clan that renders them sacred; they are then said to be *yarkomirri* (now *yäkumirri*) and have clan designs painted on them.

The practice is employed frequently with spears' but chiefly with the greatly valued iron-headed spears, *kaiyit*, rarely with wooden spears; with canoes and canoe-paddles, but only with wooden dug-out canoes, *lippa'lippa*, and their paddles, and not with the indigenous bark-canoes or the paddles of them; and again with smoking-pipes of the type called *lungin*, *i.e.*, with objects borrowed from the Macassar voyagers.

This is a matter of no small importance in the study of culture-contact in this region, for it reveals the psychological attitude adopted by the natives of Arnhem Land towards the incoming culture, and the association of the adopted elements with *prestige*. It is suggested that with such an attitude towards the 'invading' or 'borrowed' elements a high degree of receptiveness towards the incoming culture exists, not only to objects of material culture but also in social matters, and that the borrowed elements, whether material or social, acquire a prestige and a formal approval that finds expression in this ceremonial dedication to the sacred *ranga*, the centre of the sacred and ceremonial life of the group (Thomson, 1939, p. 88–9).

Thomson sums up extremely well not only the influence of the Macassans on Arnhem Land material culture but the process in which items become part of their own classification systems and value creation. Within the categories described in this paper I have outlined the items of material culture that have been influenced by Macassans. These items are deserving of detailed analysis of their making, morphology and meaning to better understand their position in Aboriginal culture in Arnhem Land. The choker necklaces in the museum collections are an enigma in terms of their origin and manufacture. Perhaps they were made by Aboriginal people inspired by previous gifts from their Macassan partners. They require more investigation in all areas but certainly hold keys to relationships between Macassans and Aboriginal people and perhaps many other trading partners in Southeast Asia.

**Acknowledgements** Lindy Allen, Harry Beran, Jimmy Burinyila, Judith Cameron, Alison Clark, Marshall Clark, Paul Clark, Jennifer Craig, Anna Edmundson, Joe Neparrnga Gumbula, Jill Hassell, Christiane Keller, Ian McIntosh, Campbell Macknight, Heidi Munan, Daryl Wesley

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**Dr. Louise Hamby** was the Chief Investigator for the ARC Linkage Grant, *the legacy of 50 years collecting at Milingimbi Mission*. She is a leading researcher in Indigenous fibre arts, the material culture of Arnhem Land, Indigenous collection-based research and in the digital repatriation and re-documentation of museum collections and archival material. She has been an honorary associate of Museum Victoria since 2003. Hamby has been awarded a number of ARC grants researching Indigenous Museum collections in Australia and overseas. She has many years of experience undertaking fieldwork in Yolngu communities starting in 1992. Through her research she has developed a number of collaborative curatorial projects working with Indigenous Australians supported by VISIONS grants: *Art on a String, Twined Together: Kunmadj Njalehn-jaleken* and *Women with Clever Hands: Gapuwiyak Miyalkurrwurr Gong Djambatjmalala*. Her most recent publication about Milingimbi is in *Art from Milingimbi: taking memories back*. Dr. Hamby is currently a Research Fellow in the School of Archaeology and Anthropology at The Australian National University.

**Part III**  
**The Woven**

# Chapter 5

## In Her Hands: Bilum Weaving in Papua New Guinea



Susan Cochrane

### Introduction

In Western eyes developments in the contemporary art and culture of Papua New Guinea (PNG) are often below the horizon; media images are of women with clinging children in ragged clothes living in rural poverty, bureaucrats and businessmen fattened on corruption. The phenomenon of talented, entrepreneurial PNG women and the explosion of vibrant, locally made fashion and other types of bilum art has, until now, largely escaped our attention. Bilum of all kinds have been in my life since my childhood in PNG, and for some 25 years, I have been fascinated by the trends in bilum bags and fashion that sweep through PNG. Perhaps we can step back a little in time and unravel a few threads.

Very few people in the 1960s waxed lyrical about bilum, and they were considered a utilitarian item, of no particular value and only limited interest to ethnographers. My mother, Renata Cochrane, used to write a weekly newspaper column for the local *Post Courier* newspaper in the 1960s, and among her writings found the following musings (Fig. 5.1):

The bilum (there are, no doubt, seven hundred different words for it in the languages of the country) is part of the persona of New Guinean woman. She makes it herself, knotting the mesh with skilful fingers. The handles are long enough to fit across the top of her forehead. When empty, the bilum covers the shoulders like a half-cape; full, the mesh stretched to the limit with a treasured personal item - an infant's cradle, a shopping basket, and a delivery van propelled by womanpower, head bent, shoulders bowed under its weight. Weaving is almost a daily activity; in rural and remote areas this may be from the necessity to provide all kinds of net bags and other items made by looping or netting string for personal use, gifts, everyday clothing and ceremonial wear.<sup>1</sup>

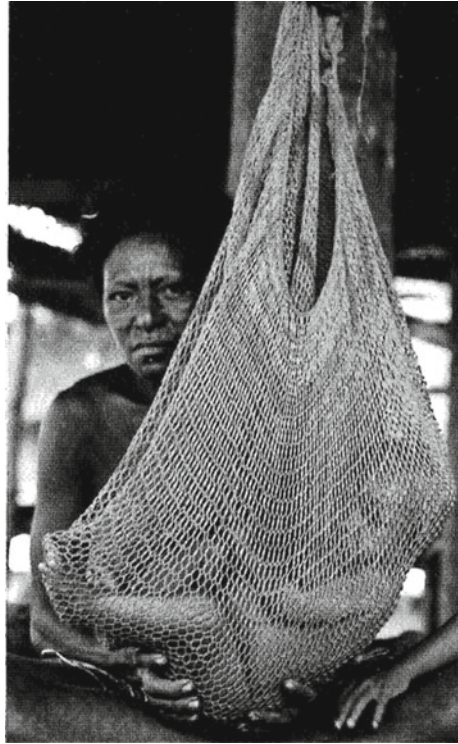
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<sup>1</sup> Renata Cochrane, < What So You Think > column typescript in the Percy and Renata Cochrane Collection, University of Wollongong Archives, D160.

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**Fig. 5.1** Baby in a bilum, a gently swinging cradle that allows the mother to work on her other tasks. Photo Renata Cochrane



Contrary to popular belief (and my mother's impressions), bilum were not made in every region of PNG. They were essential material culture items for the peoples of the huge river systems and flood plains of the Sepik and Western provinces.<sup>2</sup>

Ethnographic works often ignored, or had biased attitudes towards the roles of women in Papua New Guinean societies, as Maureen Mackenzie explained:

Western assumptions have led generations of male anthropologists to concentrate on male activity, and to consider the study of women to be peripheral to studies of society. The imposition of Eurocentric values... inevitably led to the presumption that the ubiquitous bilum, so generally produced by women, was but a women's thing... wrongly presumed to represent only the feminine in a male dominated world.<sup>3</sup>

Studies by Mackenzie and Michael O'Hanlon revealed some of the many uses of bilum as garment, ornament and ritual adornment and how it features in many myths throughout PNG. Particular types of bilum are used in men's rituals and, in some societies, are still believed effective in providing protection in the supernatural

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<sup>2</sup> The Austronesian language groups of coastal regions of PNG and the large archipelagoes adjacent to the PNG mainland specialised in baskets woven with a variety of fibres and coloured with natural pigments.

<sup>3</sup> Mackenzie (1992) cited in Cochrane (2001), p. 97.

realm. The word bilum is synonymous with the womb and is associated with other female qualities and values. O’Hanlon recorded that:

Among the Whagi people of the Highlands, the return of a girl in marriage to her mother’s clan is called < giving a scull in a netbag >, and < netbag > may serve as a synonym for both bride and womb.<sup>4</sup>

While each characteristic regional style of net bag has its own name, net bags became known by the generic Tok Pisin name bilum and the skill spread to other regions of PNG, notably the Highlands and Central Province, as changing social patterns in the post-Independence decades brought women greater mobility and entrepreneurial opportunities. No longer constrained to their village, clan and kin, many women moved beyond their villages for school, higher education, employment or economic benefit. Highlanders settled in Port Moresby and Lae, Islanders moved to the mountains; inter-marriage between Papua New Guineans from different provinces increased exponentially. In both rural and urban areas women began to make traditional and innovative bilum for sale as a means of asserting their economic independence; selling bilum raises the cash needed to pay for school fees, medicine, clothing and transport.

By the 1990s, the proliferation of new designs for bilum in the Highlands townships of Mt Hagen and Goroka was evidence of a new context for women’s creativity. In an earlier publication, I noted that for women at Mt Hagen in the Western Highlands:

The bilum is an important part of dress; like any fashion accessory there is a choice of several styles in natural fibres and colours and nupela (new designs) woven with bright acrylic thread. Women often exchange the bags among themselves as informal gifts, and make them for family members as well as for sale. Whether bilum are used in formal exchange or informal gifting, great care is taken in the choice of fibres and the colour scheme, as for example when weaving a large, circular ‘wedding bilum’ as a gift for a sister or close female relative. This will be an important part of the bride’s costume and later will be used to carry the firstborn child. Such bilum are treasured personal possessions.

New designs are constantly appearing on bilum bags, which have become the colourful carry-all toted by every woman—and many men—in PNG. As the bilum is an important part of the dress, like any fashion accessory, there is a choice of styles and patterns, especially with nupela (new designs) woven in brightly coloured combinations of mercerised cotton or acrylic thread. Women often exchange the bags among themselves as informal gifts and make them for family members as well as for sale. Whether bilum are used in formal exchange or informal gifting, great care is taken in the choice of fibres and the colour scheme, as for example in the Western Highlands when weaving a large, circular ‘wedding bilum’ as a gift for a sister or close female relative. This will be an important part of the bride’s costume and later will be used to carry the firstborn child; such bilum are treasured as personal possessions (Fig. 5.2).

The Eastern, Western and Southern Highlands provinces continue to be a fertile source of innovative design, and decorative Highlands bilum are sold at marketplaces across the country, whether draped over airport fences, displayed on pavements

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<sup>4</sup> O’Hanlon (1989): 71.



**Fig. 5.2** Bilum market at Goroka, Eastern Highlands Province in 2009, where women make and display colourful bilum bags and clothing. Photo Susan Cochrane

outside hotels and at roadside markets. At Goroka in the Eastern Highlands, women gather early at the town marketplace or lay out their wares on pavements. Among the vendors of garden produce, betel nut and single cigarettes are clusters of women surrounded by a patchwork of brightly coloured bilum. There is an air of convivial competitiveness among the sellers. The potential buyer hesitates in front of one array and the seller points to each bilum with a long stick, citing prices and answering questions, others willingly volunteer Tok Pisin, English or vernacular translations to ensure that a fair and informed transaction takes place. Although each maker has her own speciality, some designs and motifs become fashionable; some are self-evident, for example, ‘Cross’ is favoured as a Christian symbol, and ‘One Ace’ by card players. ‘Butterfly’ is generic, but the source of ‘Yonki Pawa’ is not evident until told it is derived from the shape of pylons at Yonki power station. For everyday use, the national flag of PNG is a must-have bilum design ‘State of Origin’ rugby players woven in team colours on a bilum bag beat any team t-shirt hollow (Figs. 5.3 and 5.4).

Text messages on bilum are increasingly popular, ranging from PNG flags and patriotic slogans to quotes from the Bible, or stating an individual’s identity and locality, or bearing greetings such as Hapi Krismas. Little trinkets sewn inside add another personal touch. Supplies for bilum makers is also a profitable trade; sellers display balls of commercial acrylic and cotton yarns, little piles of prepared kapul (possum fur), coloured plastic wire, tinsel, keeping abreast with fashion trends.

Large bilum, loosely woven with coarse natural fibre, are still used to transport heavy loads of garden produce and firewood. Most often the fibre for this kind of carrying bilum is ‘bush string’, but unravelled hessian or plastic-coated fibre from rice or coffee sacks has been found to serve just as well. Although synthetic coloured yarns are readily available and often preferred for new designs, bilum connoisseurs



**Fig. 5.3** Mrs Kyiye Agua making bilum for sale in front of a display painting and bilum at a Port Moresby street market. Each *bilum* is completed from a continuous string to which different colours are added to achieve the desired pattern. The weaver adds to the string by spinning selected fibres against her thigh and then uses the new length to loop the desired effect into the netbag. Photograph Deveni Temu



**Fig. 5.4** Street sellers display bilum and baskets outside Port Moresby’s Islander hotel. In these jealously guarded patches of territory, each seller represents several makers from their community; this seller is from Koroba, Lake Kapiago, and Southern Highlands. Prices are inflated for tourists, and bargaining is accepted. Photo Susan Cochrane

**Fig. 5.5** Display of bilum at Kambot Village on the Kerma River, East Sepik Province; Materina is showing some of the leaves used to obtain natural dyes. Photo Susan Cochrane 2010



also treasure excellent examples of netbags made from bush string. The quality of bush string bilum from Crater Mountain has not been surpassed for virtuosity in weaving and the subtlety of natural colour tones.

Along the huge Sepik and Ramu river systems, the strength and resilience of natural twine are appreciated for large carrying bilum. Among the tribal groups of the East Sepik Province, certain complex patterns woven into the bilum are inherited and can only be made by women who rightfully own this knowledge. These are proudly worn or displayed during ceremonial events, such as yam festivals, tambuan dances and bride price payments. As well, prized bilum may be prestige items in exchange systems between the riverine people and tribal groups further inland (Fig. 5.5).

Bilas (self-adornment) is the ultimate form of creative expression and the many forms of bilum are integral to bilas. Men and women have their own distinct sets of bilas, which might include face and body painting, magnificent headdresses, masks and elaborate wigs and an enormous variety of armbands, necklaces, pendants, ear-lobe and nose ornaments. For certain clans bilas also include the appropriate type of bilum, which is incorporated into the splendour of a full set of ceremonial attire. The speciality of women around Madang is for long fringe decoration and beautiful patterning in violet and pink hues derived from natural dyes. These are prized as an essential element of the local women's dance costumes. As Michael Mel explains, there are many occasions for which bilas are necessary for families and clan groups at the time of death and mourning, birth, initiation and marriage; on secular occasions, to welcome dignitaries, to mark important days for schools or churches and to participate in festivals.

Igope Jakupa, sister of the renowned contemporary artist Jakupa Ako, designed a dance cloak in one of Goroka's fashionable bilum patterns, 'Diamond', for Jakupa to

wear as part of an elaborate costume. Cloaks, like those worn by men of Gahuku in the Eastern Highlands, are created by women to enhance the presence of their kin in a group performance. It is always exciting to try a new pattern and competitiveness among women is keen.

Considering that bilum were—and still are—an integral part of prestige costumes and elaborate self-adornment, the ready acceptance by the PNG public of the new fashion for bilum clothing is not surprising. Appreciation of the skill and originality of each weaver is embedded in PNG culture. In addition to design skills and virtuosity in weaving, a spirit of competition, entrepreneurial skills and flair are qualities of today's PNG women.

Although experimental weavers like Agatha Waramin and Maggie Wilson designed and made bilum clothing in the 1970s–1980s, in the first decade of the 2000s, bilum fashion has really taken off in PNG; it is now getting wider exposure through a few PNG gallery and designer websites like Lava Lava Innovations<sup>5</sup>. High fashion garments are proudly worn by Miss PNG beauty contestants and in fashion parades attracting big media coverage. On their website Pasific Nau reported that mothers in Goroka ordered bilum dresses for their daughter's school formals, and children's clothes are popular. While there are some known designers, in typical *pasin bilong ples* (PNG style), it is still likely to be a young woman's mother, grandmother, auntie, sister or girlfriend who delights in designing and making her stunning fashions. Beyond PNG, it is only recently that bilum have begun to be considered as 'collector's items' or 'artwork' and exhibited in cosmopolitan art galleries in Australia and elsewhere.

Apart from dance cloaks, bilum bags and clothing are woven in the round, not as flat 2D pieces. Although images of people and animals woven into bilum bags are now more common, large-scale pictorial representations or abstract works executed as major artworks in bilum stitch are still rare. In 1994, Agatha Waramin visited the Blue Mountains where she was vividly impressed by the immense Three Sisters rock formation. Later in the year, Agatha embarked on her first major pictorial work in 2D using bilum stitch—a representation of the Three Sisters.

In 1999, the Aketaufa Sori Mama Grup (a group of widows from the Goroka community) was commissioned to make a continuous bilum weaving, *Bilong Ol Meri* (for all women), to be part of an installation by Michael Mel at the third Asia Pacific Triennial (APT) at the Queensland Art Gallery. In this context, the collaborative work titled *Bilong Ol Meri* was indicative of the respect and appreciation for the art of weaving in Pacific Islands cultures. Its presence in the APT signalled the abandonment of the prejudiced concepts that indigenous women's art and creativity are inferior, utilitarian and insignificant in the hierarchy imposed by Western interpretations of it. The continuous bilum, *Bilong Ol Meri*, was a fine example of the innovations that are occurring in bilum-making; it was discussed, negotiated and completed as a collaborative enterprise by the Aketaufa Sori Mama Grup (Fig. 5.6).

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<sup>5</sup> <http://tosamo.fm.alibaba.com/> Lava Lava Designs website.

**Fig. 5.6** Bilum fashion, like this original 'bilum wear' outfit by Cathy Kata, is rapidly gaining popularity. Photograph courtesy of Cathy Kata and Kevin Murray



Since the 1990s, local trendsetters of high fashion, including Cathy Kata<sup>6</sup> and Florence Kamel, both based at Goroka in the Eastern Highlands, have made a name for their original bilum outfits. Kata names her fashion garments < bilum wear >. Seamless skirts and tops are made with the same hand-looped, woven in the round techniques as bags. Choice of fibre, colours, motifs, fringes, decorative edges, other embellishments and finishes are carefully considered by the designer and their client, as with any original creation. In 2009, Kata's Bilum Wear fashions were featured in a ground-breaking international exhibition entitled *Hailans to Ailans* (Highlands to Islands). Five major artists from Papua New Guinea featured in this exhibition which was designed to promote global recognition of the meanings, values and diversity of Papua New Guinea's contemporary visual arts.

Florence Jaukae Kamel describes herself as a <bilum fibre artist>, who has exceptional entrepreneurial flair as well as her own talent. In 2009, she organised the first Bilum Fashion Parade to coincide with the Goroka Show and is the leading designer of Jaukae Bilum Products, which have been successfully promoted in the Pacific Islands Trade and Investment Commissions Maketi Ples exhibitions. As well as her

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<sup>6</sup> Cathy Kata biography on Hailans to Ailans website <https://www.hailanstoailans.com/art/fibre/cathy-kata-biography/>.

**Fig. 5.7** Some *bilum* transit from street markets to gallery websites, but there is a real lack of consistent marketing to bring PNG art to a wider world of consumers. Marketplace prices for bilum are fairly standardised, but inhibit realistic prices being realised for exceptional pieces. ‘State of Origin’ bilum, maker unknown. Photograph courtesy Pasifik Nau virtual gallery [www.pasifiknau.com](http://www.pasifiknau.com)



own designs, she collaborates with a group of Goroka weavers to fulfil innovative commissions. Happy Talk commissioned Florence and ten weavers from Goroka—Alice Lucas, Freda Buko, Julie Danny, Jollan Kelaimo, Rolan Dick, Daisy Raymond, Julie Pilo, Jenny Tiku, Nancy Apae and Hella Bikukure—to make the largest Bilum they had ever woven. In just under eight weeks, Florence and the Goroka weavers created a bold and very contemporary artwork that explores a fresh new direction for this Pacific weaving tradition.<sup>7</sup> This spectacular weaving was displayed at the Art Gallery of New South Wales in conjunction with the *Plumes and Pearls* exhibition in 2014 (Fig. 5.7).

The export market for bilum bags and clothing is driven by some galleries and internet marketers, but mostly by entrepreneurial Papua New Guineans with relatives living abroad. Displays of bilum appear at many weekend and craft markets, music and community festivals in Australia (Fig. 5.8).

PNG bilum started to gain an international reputation, in part because of the huge reach of websites. In 2009, a scandal erupted on PNG media and blogspots. A French firm poached PNG’s iconic name bilum and patented it for their range of bags made from recycled giant advertising banners with used car seat belts as straps. As a Tumburan and Dukduk blogger seethed:

<sup>7</sup> <https://www.amongequals.com.au/blogs/news/the-bilum-meri-florence-jaukae-kamel>.

Florence Jaukae Kamel, known fondly as the ‘Bilum Meri’, is a fiercely passionate advocate for the women bilum weavers of Papua New Guinea and an integral part of Among Equals, not to mention a constant inspiration.



**Fig. 5.8** Florence Jaukae Kamel preparing bilum designs for a fashion parade at the Goroka Show, 2009. Photo Susan Cochrane

The most ironic thing about this French firm is that it labels its creations “eco-ethical fashion” and even entered the 2008 Ethical Fashion Show... how can it be ‘ethical’ when its commercial brand is a poached national cultural identity unique to PNG?

As well as outrage, there is growing support for a ‘Made in PNG’ label as a marketing tool for bilum and other iconic PNG products.

Bilum art bear witness to the creative energy and spirit of innovation of PNG women today. The incorporation of new materials (coloured cotton and synthetic yarns, plastic and tinsel), the continual invention of motifs in weaving and styles for wearing, keenness to participate in new avenues like fashion parades and exhibitions, marketing bilum fashions on websites, all indicate the eager spirit with which New Guinea women are taking advantage of every opportunity to display and market their work with pride (Fig. 5.9).

## Notes

1. Renata Cochrane, <What So You Think> column typescript in the Percy and Renata Cochrane Collection, University of Wollongong Archives, D160.
2. The Austronesian language groups of coastal regions of PNG and the large archipelagoes adjacent to the PNG mainland specialised in baskets woven with a variety of fibres and coloured with natural pigments.
3. Mackenzie (1992) cited in Cochrane (2001), p. 97.
4. O’Hanlon (1989): 71.
5. Lava Lava Designs website.
6. Cathy Kata biography on Hailans to Ailans website.
7. <https://www.amongequals.com.au/blogs/news/the-bilum-meri-florence-jaukae-kamel>.



**Fig. 5.9** Women from Madang incorporate their characteristic bilum as part of the bilas (costume and adornment) for performances and ceremonies. Photo Susan Cochrane 1994

8. <https://garamut.wordpress.com/2009/02/09/french-firm-poaches-and-patents-pngs-bilum/> French-firm-poaches-and-patents-pngs-bilum.

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# Chapter 6

## Craft, Culture and Sustainable Development—Weaving Their Way to Self-sufficiency



Elizabeth Oley

### Introduction

A strong weaving tradition exists in many parts of India. The weavers are part of a large group of hereditary weaver communities who have acquired the knowledge of their craft from their forefathers. Through the ages, this well-established weaving industry has supplied local, domestic and international markets. Within the village, producers knew their market and were able to supply client-specified products while a complex system involving master-weavers and other intermediary agents operated to satisfy distant domestic and foreign trade. Royal courts provided significant patronage and employed large numbers of highly skilled weavers and other artisans to supply the court's requirements. Imperial craft workshops (*kharkhanas*) recruited the best workers who produced goods for consumption, gifts and exports (Roy, 2010:132). Weaving and dyeing techniques, representing a traditional knowledge system, were closely guarded secrets passed down through families for many generations. Four such hereditary weaving communities are the major ones in South India: the Sāliya of the Tamil country, the Sāle of Andhra who migrated to Karnataka and Kerala, the Devānge from Karnataka and Andhra, and the Kaikkolar in the Tamil area (Ramaswamy, 2006: 14), (Ramaswamy, 2013: 19).

One specialist weaving group in Patan, Gujarat is the Salvi family which is unique in making double ikat silk saris in natural dyes. These weavers continue the work in which their forefathers were engaged for 800 years in Patan after migrating from elsewhere. In the spice trade these prestigious double ikat saris, known as *patola*, circulated in Southeast Asia where they are still treasured as heirlooms. The following case study, drawn from my fieldwork in India, tells a very different story of introducing weaving into a community where there was no previous tradition. It also relates to Gandhi's ideas about the importance of villages and crafts and is an extension of the

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post-colonial efforts to regain traditional knowledge of crafts as a means of livelihood, self-sufficiency and a reclaiming of national identity. In southern India in the state of Karnataka one man, Prasanna, wishing to avert further ecological degradation in the Western Ghats, offered an alternative livelihood to the local tribal women who depended on agriculture. As a Gandhi devotee, he thought of handloomed cotton. His initiative in establishing a village-based organisation has given hundreds of women vocational skills, a better standard of living and improved working conditions.

This case study illustrates how craft and culture have contributed to sustainable development on both the human and ecological front. My research in India focused on intermediaries, in centres of natural dye practice, who were linking artisans with their market. It was suggested that I contact Prasanna because the organisation he had established had installed an indigo dyehouse not long beforehand.<sup>1</sup> During my initial phone call with him to arrange a visit to this organisation, I was impressed that he had introduced women to weaving in an area with no prior tradition. This is especially unusual in southern India where weaving is normally a male preserve. In India, weaving is an activity where all members of the family are involved but men are normally seated at the loom and weave for eight or more hours each day.<sup>2</sup> Women help with ancillary tasks around their childminding and household duties. Before turning to the case study it is relevant to consider the broader context of cloth in India: its significance in pre-colonial times, the impact of the Industrial Revolution and Gandhi's strategy in the independence movement.

## Historical Significance of Cloth in India

Cloth has long played an enormous part in the social, cultural, political and economic life of India. Indian cloth was exported to the Mediterranean, the Middle East and Asia. The Romans admired the inimitable gossamer-like muslin made in Bengal which they termed *nebula venti* ("woven air")<sup>3</sup> that was prized for its capacity to pass through a ring (Chattopadhyay, 1985: 29). Trade records of Indian textiles to Southeast Asia date back to the fifth century (Gittinger, 1982: 13). During excavations at Fustat (old Cairo), a cache of 3000 textile fragments was discovered in 1980.<sup>4</sup> The earliest examples of these "Fustat textiles", made for daily wear for a mass market, have been carbon-dated to the late ninth or early tenth century and have been confirmed as handblocked and originating from north-western India (Balfour-Paul,

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<sup>1</sup> I am indebted to the management team at Dastkar Andhra for the suggestion to contact Prasanna.

<sup>2</sup> By contrast in Indonesia, where I lived for eight years, these gender roles are reversed. In Sumatra, Kalimantan and the outer islands of Nusa Tenggara it is the women who weave.

<sup>3</sup> *Nebula venti* is literally "cloud or mist of wind" but is generally translated as "woven wind" or "woven air".

<sup>4</sup> Small fragments of probable Indian origin have been found at Central Asian and Red Sea archaeological sites, dating from the third to fifth centuries (Barnes, 2004: 137).

2006b: 30).<sup>5</sup> For many centuries prior to the entry of European powers, Arabic and Gujarati traders had plied trade routes exchanging textiles for spices in the islands now known as Indonesia. India's unique achievement was the production of bright colourfast cotton textiles. In fact, knowledge about the requisite mordants<sup>6</sup> used in dyeing was unknown to the western world until Europeans documented their use in the seventeenth century.

Once the Portuguese reached India by sea, the British, Dutch, French, Spanish and Danish all vied for trading footholds in India. The English used gold bullion to obtain textiles in India, which were then exchanged in a triangular form of trade for spices in Indonesia where textiles served as a form of currency (Guy, 1998: 14). These textiles which were light, brightly coloured and washable made a huge impact when they became known in Europe. By the mid-eighteenth century, India virtually clothed the world (Gittinger, 1982: 15). The consumption of Indian textiles in the Western world in the seventeenth and eighteenth centuries has been described as "one of those astonishing processes of diffusion which is comparable to the discovery and spread of tobacco, potato, coffee [or] tea" ... (Gittinger, 1982: 14).<sup>7</sup>

During the seventeenth and eighteenth centuries, the British shipped Indian textiles to England and also traded them in Southeast Asia for spices. The Industrial Revolution and the development of machine-spinning in Britain reversed the direction of this commerce and had devastating effects on the Indian economy. India became a supplier of raw cotton for England's spinning and cloth-making mills and instead of being an exporter of cloth became an importer. Inexpensive textiles were produced in Britain in large quantities from cotton grown in India and sent back there to be sold. Cloth production had been the premier industry of India and its decline was a chief cause of Indian poverty (Bean, 1989: 359).<sup>8</sup> Thus the world's greatest exporter of cotton cloth became an exporter of raw cotton and an importer of British-produced cloth and mill-spun yarns.<sup>9</sup>

Once chemical dyes were introduced and natural dyes were displaced in the market, a "discontinuity" in production knowledge occurred (Appadurai, 1986a: 42). There was an interruption in the hereditary system of passing on specialised knowledge about natural-dye sources and the expertise required in identifying and processing them. This knowledge had been accumulated over many generations and passed down through families, generally from father to son, but kept from daughters

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<sup>5</sup> Examples from this find are held in both the Ashmolean Museum in Oxford (Balfour-Paul, 1997: 125) and the Textile Museum in Washington, DC (Gittinger, 1982: 7).

<sup>6</sup> A mordant is a substance (frequently a metallic oxide) that helps to create a chemical bond between the dye and the fiber in the dyeing process (An Introduction to Textile Terms, The Textile Museum, Washington). The term mordant is derived from the Latin root "to bite".

<sup>7</sup> Gittinger is citing Chaudhuri, K.N. *The trading world of Asia and the English East India Company 1660–1670*. Cambridge, Cambridge University Press, 1978, p. 277.

<sup>8</sup> Between 1849 and 1889, the value of British cotton cloth exports to India increased from just over 2 million pounds a year to just less than 27 million pounds a year (Bean, 1989: 362).

<sup>9</sup> In 1750, India was producing 24.5% of the world's manufactured goods. By 1800, this share was down to 19.7% and by 1860 was only 8.6% (Kennedy, 1989, as cited in Bakshi, 1998: 234–5).

for fear they would pass on details to their husbands' families when they married (Liebl & Roy, 2004: 67).

## Gandhi's Use of Cloth

Gandhi's political and symbolic use of cloth helped propel a national campaign to boycott British goods and to gain independence. Gandhi's idea was the reindustrialisation of India through artisans, not machinery:

*Swadeshi* [self-sufficiency] was also heir to a movement of artistic revival, which sought to protect the values of indigenous craft traditions against the impersonality of all mill production and the drab uniformity of chemical dyes (Bayly, 1986: 310).

Self-sufficiency (*swadeshi*) was seen as the key to self-rule (*swaraj*). *Swadeshi* meant not only avoiding foreign products but also producing traditional goods (Trivedi, 2007: 7). The self-sufficiency movement sought to resuscitate parts of "traditional" society seen as superior in material and spiritual terms to "progress" being offered by the west (Trivedi, 2007: 4). Gandhi sought to restore India's lost supremacy in textiles, its "second lung", the first being agriculture (Bean, 1989: 370). Hand-spinning became crucial to Gandhi's vision of self-rule because textile production had been the most significant traditional industry of India. In his plan to defeat the British, Gandhi wanted to appeal to all members of India's disparate population. His campaign to encourage Indians to wear the uniform of handspun handwoven cloth (*khadi*) had the effect of minimising class, caste, regional and religious differences.

Cloth was used by Gandhi as a "weapon" in the passive resistance campaign against British rule. When Gandhi set out to reverse the effect of British mill-made cotton on India, *khadi* became significant socially, economically and politically as an alternative to imported cloth and a sign of shared beliefs. Gandhi's use of cloth symbolised a political viewpoint, a promise of economic prosperity and hope for a free India. Gandhi appropriated indigenous cloth as a symbol of India's pre-colonial past and used it to project a post-colonial future.

Gandhi's philosophy and his belief in the importance of villages in India underpin the contemporary search in India by many activists looking for an alternative to the dominant Western model of development. Gandhi's ideas about manual labour, natural products and sustainable development continue to resonate with and influence those working to strengthen the lives of rural-based artisans. His emphasis on the importance of sustainability and self-sufficiency expressed nearly a century ago, pre-empted the values espoused by ecological movements today.

Many organisations in India in a vibrant civil society are working to improve a lot of those of low socio-economic status. Organisations such as Dastkar and Dastkar Andhra are working to strengthen the livelihood of handloom weavers.<sup>10</sup>

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<sup>10</sup> Dastkar is a Delhi-based not-for-profit NGO working to support traditional craftspeople. Dastkar Andhra began in 1989 as an offshoot of Dastkar Delhi and in 1996 was incorporated as a public charitable trust.



**Fig. 6.1** Women preparing warping frame

Through design intervention they help differentiate their products. One such method is through the use of natural dyes so that handloomed cloth is totally eco-friendly, thus strengthening its market appeal. Handloom weaving is the largest activity in the traditional sector, second to agriculture, in terms of employment and value of output (Mukund & Sundari, 2001: 12). In an increasingly competitive market handloomed cloth has to vie with machine-made cloth, synthetics and imported goods. Activists work to connect artisans with a market from which they are now distant physically, socially and often linguistically. At a time when handloom weavers are facing incredible market pressure and some are abandoning their looms in favour of more lucrative work in urban centres, the following case study focuses on a different story where a new way of life was introduced to local women in the final years of the twentieth century (Fig. 6.1).

## Charaka

An awareness of the fragility of the environment in a region in Karnataka prompted Prasanna to act. Prasanna is a scientist by training and a dramatist and drama teacher.<sup>11</sup> For several decades he worked in the Western Ghats in Karnataka during drama seasons before deciding to move there permanently. While involved in previous projects, Prasanna had acquired a deep knowledge of the region through extensive travel in the area. When he arrived to settle there, he observed the environmental

<sup>11</sup> He spent several months following my visit to the village as acting director of the National Theatre in Delhi.

impact of the local Dalit<sup>12</sup> women's total dependence on agriculture. What had once been beautifully preserved tropical rainforest was in ecological crisis. As he described it:

So here was a situation where it was not the timber contractor who was the enemy. It was not even the big industry who was the enemy; not even the hydroelectric project. But it is the poor people who are the "enemy" in a sense. ... So that's when I realised that the only way is to actually shift this population away from agriculture into a more ecologically-friendly productive activity. And of course my understanding of Gandhiji and this *khadi* movement that happened during the freedom struggle told me that it had to be weaving (Interview, Prasanna, 7 August 2006).

Realising that agricultural work was not sustainable Prasanna offered a group of women an alternative livelihood. Motivated by his admiration of Gandhi he thought immediately of cloth and weaving but initially provided training in tailoring. The product chosen was a shirt (*kurta*) as it was a popular item that men wore. Prasanna realised that many handloom producers were catering to a declining market by continuing to make saris and *dhotis*,<sup>13</sup> so his choice of *kurtas* matched contemporary demand. During the initial stages of the project in the mid-1990s, *kurtas* were sold at cultural events in Bangalore through the literary trust Kavi-Kavya which Prasanna had established. Gradually others in the village saw that these women were paid on a year-round basis while avoiding outdoor work, so they also wanted this opportunity.

Once the making of *kurtas* was mastered, each new process in the production chain was introduced. Working backwards from tailoring, the next step was weaving, then chemical dyeing and the final step was natural dyes. After the women had learned to use sewing machines, Prasanna introduced weaving by inviting master-weavers to train and supervise them. As a great admirer of Gandhi, he named the organisation Charaka after the spinning wheel and set it up in the village of Bheemanakone. The initial group of 20 women was trained in tailoring using different varieties of purchased cloth. This allowed them to learn what fabrics were suitable in terms of thickness and thread-count when setting up the first loom. Prasanna pointed out that the people being trained had come from a line of forefathers who had worked on the land for many generations, so for them it was a huge change of occupation and mindset. Once weaving became well established the next step was to introduce dyeing, initially with chemical dyes before phasing in natural dyes. The final stage was the introduction of an indigo dye-house. Blockprinting was introduced later and also the making of patchwork quilts using material from off-cuts to avoid wastage.

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<sup>12</sup> *Dalit* is a member of the oppressed Hindu class, considered below the four divisions within the traditional Hindu caste system. Sanskrit *dalita* means oppressed. Gandhi coined the term Harijan meaning "Children of God". The term Scheduled Castes/Scheduled Tribes is also used in the Indian legal system to refer to this group.

<sup>13</sup> This study considers handloomed cotton only. Silk saris are still the preferred wear for ritual and formal wear at weddings and demand for them is expanding as the population increases. However, the number of people wearing cotton saris for daily wear is decreasing especially since cheap synthetic saris are readily available. In addition, many young people are now wearing western clothing while others choose the *salwar kameez*, a tunic dress worn with loose pants and a long scarf (*dupatta*) originating from the pre-partition Punjab area. A *dhoti* is an unstitched piece of cloth which men wear as a waistcloth wrapped and folded around the lower body.

As Charaka became established on a firm footing, ownership of the organisation was handed over to the producers. Charaka was set up as a women's cooperative society which was staffed predominantly by women. Its members manage production and run the village-based society. Now nearly 400 women are shareholders of this organisation. There were 150 people working in the central facility during my visit. Training and supervisory work plus all the dyeing were being done by men. The male master-tailor and master-weaver, who were invited to train the women, continued working there in supervisory roles. New recruits are given six months of training. They learn to weave on narrow looms and are paid a stipend during this period. Once trained the weavers are paid by the metre of cloth produced.

A strong motivating factor in introducing natural dyes was the availability of abundant sources. Trees on the Charaka site provide an essential ingredient while other sources are available as by-products of agricultural activities. This reduces production costs while resulting in fully eco-friendly products. Since natural dye sources are plentiful locally only indigo has to be purchased. The indigo dyehouse was installed with the assistance of staff from Dastkar Andhra and has 12 indigo vats. The master dyer, who had been trained in Bangalore, joined Charaka when it began and is in charge of eight male workers in the dye-house. A special drying room has been built to ensure that dyeing can continue during the monsoon season, thus avoiding interruptions to the production cycle. This has been constructed with a bamboo platform above pipes which are warmed by a wood fire controllable by a thermostat allowing for the drying of up to 60 kilos of cotton yarn in 24 h.

## Decentralising Production

Charaka trains many young single women. Formerly when they married many women left the organisation. Steps have been taken to enable these women to continue to participate in the production. A crèche has been set up at Charaka enabling married women to continue working there and to bring their children to daycare. Prasanna has decentralised weaving by supplying looms in the weavers' homes. In addition to seeing women weaving at the production centre in Charaka, I visited four young women who were weaving at home. As I approached I could hear the unmistakable sound of the clacking of the weft shuttle as it moves through the shed of the warp threads. The looms were built by Charaka's two carpenters and, being large (10 × 10 ft.), require dedicated space in the weavers' homes. As well as providing looms, Charaka supplies the home weavers with the 240 m warp which is prepared at the central facility. The weavers I met reported that they complete the weaving of this warp in a month, averaging up to 10 m a day. The vocational training, received through Charaka, allows them to weave in their homes and attend to household duties without having to go to the central facility (Fig. 6.2).

During my initial meeting with him, Prasanna had expressed his hope to expand the dyeing sector. His idea was to produce yarn, so weavers outside his organisation could phase over to natural dyes. This would mean no change from their viewpoint but



**Fig. 6.2** Weaver at Charaka

would mean an increase in the production of natural dye goods and would add value to their products. He aimed to boost public awareness of the value of handmade products while increasing livelihood options for artisans. Prasanna has now decentralised the dyeing process to include many other people living near the village. Now members of the farming community in the surrounding district are involved in dyeing which gives them the opportunity to earn a supplementary income. Farmers and their wives are thus able to use the time available after tending their crops to dye yarn using natural dyes. During the agricultural season, their involvement would be less but in lean seasons this option gives them an alternative income. In the decentralised dyeing project, all materials are supplied by Charaka which then pays people for their service.

This decentralisation process has been extended to include older women who prepare weft bobbins at home. The material is supplied by Charaka and the results are collected weekly. Embroidery has also been decentralised and, in general, is done by older women. A technique has been developed where a design is printed on material for the women to embroider at home. The number of people involved in bobbin preparation and embroidery is increasing. Charaka has 12 separate processes. The intention is to eventually phase in the decentralisation of more of these processes. Charaka would then recompense the dispersed producers for their services.



## DESI

During the experimental stages of the Charaka project, the sole product was the *kurta* (shirt) and it remains a major stock item. Designers introduced women's and children's clothing later. The *kurta* is regularly modified to satisfy consumer preferences. Different weights of cotton are woven to suit seasonal requirements with a thicker variety for the cooler months. As the number of tailors and weavers increased, it was necessary to devise a strategic marketing plan. Once production expanded beyond what could be sold and absorbed at literary events, a lifestyle shop was set up in a converted home located on a busy thoroughfare in Bangalore. In addition to this urban outlet, Charaka has a shop in the village and also participates in exhibitions in urban centres. These exhibitions allow handloom producers to have direct contact with consumers and to gain feedback regarding product development and design innovations.

Once the urban outlet became well established, a Bangalore-based trust and sister company called DESI<sup>14</sup> was set up as an independent body. DESI is the name of the outlet as well as the brand name for the goods Charaka produces. DESI sells handloomed products supplied by Charaka as well as goods sourced from like-minded organisations. These include pottery items, recycled paper, greeting cards, handcrafts and toys. The DESI outlet contains a small bookshop where a selection of the books sold is by or about Gandhi. On the bookshop wall is a statement about Charaka's adoption of natural dyes which not only informs customers about DESI's products but reminds them of the influence of Gandhi and his philosophy (Fig. 6.3):

Our institute has been endeavouring for the past three years to develop Natural Dyes and propagate its advantages. We have managed to develop an entire range of products using Natural Dyes. We plan to start an institute which will provide training and a research laboratory for natural dyes. Desi dedicates this cause in memory of Gandhiji, a person who believed and propagated the uses and advantages of indigenous materials - DESI.

A discreet sign with the name at the front of the building alerts customers to DESI's location. The relatively small single-storeyed building on the street level has a quiet and welcoming ambience that suits its residential appearance. DESI has attracted a loyal clientele who value handmade products and who prefer its homely atmosphere to crowded shopping malls. DESI's consumers prefer eco-friendly products which match their own values regarding sustainability as opposed to mass-produced ones. These consumers know where their products come from, how they are made and that the producers are fairly compensated. DESI has kept its prices low in order to broaden the consumer base horizontally. *Kurtas* are sold at much lower prices than their competitors to increase their popularity amongst the middle and lower-middle classes which constitute a stable market even during the worst times.

Over the years DESI has built up its clientele and attracted additional support largely through word of mouth with no paid advertising, a substantial saving in

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<sup>14</sup> DESI is an acronym for Developing Ecologically Sustainable Industry, but it also means "indigenous" or "local, regional". The term is used to refer to people or things of South Asian origin. It has the same meaning in several Indian languages.



**Fig. 6.3** Natural dye cotton yarn drying at Charaka

overheads. Supporters have written articles in local newspapers, which alert urban customers to its existence. Many consultants and designers provide advice and design assistance without charge to Charaka since they have the same values or, as Prasanna says, “they also share this dream”. During my last visit to Charaka, a designer had just produced a special range of women’s clothing using handloomed cotton. A retired bank manager worked as an accountant for DESI at a fraction of his former income. In a surprising reversal of the normal trend of migration to the city, a former relatively senior Information Technology worker from Bangalore chose to settle in the village specifically to work at Charaka.

The National Institute for Rural Development (NIRD) in Hyderabad and Dastkar Andhra conducted a study that examined non-government organisations involved in handlooms. They found that DESI has the best linkage between the rural producer and the urban market. Charaka has linkages to DESI through two trustees who represent the producer group’s interests at board meetings in Bangalore. As the producer organisation, Charaka receives payment from DESI for what it produces. The Kavi-Kavya Trust, which started both Charaka and DESI, is linked with them both on the board of management but the three organisations remain independent.

The DESI trust established a development fund that returns a fixed percentage of the total business that Charaka supplies to DESI annually. This is used for the development of the central facility in the village and for the benefit of its members. The development fund is used for quality control, development work, staff bonuses, a provident fund and other benefits such as subsidising lunches in the Charaka canteen.<sup>15</sup> The

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<sup>15</sup> This substantial and nutritious lunch is subsidized heavily and would cost about four times the amount charged if taken in a local hotel.

fund was also used to build the drying room adjacent to the dye house to allow for the drying of yarn during the wet season.

Prasanna points out that crafts provide the potential for social mobility by breaking linkages between practice and caste and thus help integrate lower castes. Weaving gives these women, for whom agriculture would be the only alternative, a dignified occupation. This was a strong motivation for him in introducing weaving to the area. He observes that government schemes have often considered poverty alleviation as an economic agenda, but in fact they need to be regarded as a social agenda through the introduction of occupations that give people mobility. Prasanna also notes that the government views *khadi* (handloom) as a cheap cloth that it subsidises, whereas he stresses that the cultural aspects of handloom and natural dyes actually add value. Since natural dye resources are abundant in the region they are attractive in economic as well as ecological terms. Prasanna's organisation is now regarded "as a role model for other similar organisations" (Kasturi et al., 2006: 3369).

## Conclusion

Prasanna started a weaving project with a strong social and environmental agenda. What began as an experiment had a very successful outcome. Motivated to help the rural women, Prasanna chose the second largest rural income generator in India, Gandhi's "second lung", and he set out to prove that weaving could be viable in the area. In addition, he aimed to break linkages between practices and caste since he realised that crafts provide the potential for social mobility.

As an ardent admirer of Gandhi, Prasanna established the women's cooperative and honours his memory in its name Charaka meaning spinning wheel. Prasanna gave the women, formerly reliant on agriculture, a sustainable alternative and a dignified occupation. Through the provision of training opportunities, he shifted the women from the outdoors to a comfortable working environment where they now earn a regular income rather than a seasonal one. He has redirected their major income source from the village to the city by establishing an urban outlet and a trust to manage it for the benefit of members. He achieved maximum returns from urban consumers to the village producers and eliminated the need for intermediary agents. He ensured that the producers' interests are upheld through representatives' attendance at city-based board meetings. The women were further empowered when given responsibility for the management of the village-based organisation. They now produce eco-friendly, handloomed cotton products made with natural dyes ensuring sustainability in the region. The decentralisation of processes has increased community participation, enabling elderly women and farming families in the region to gain supplementary income while working at home.

Charaka is a unique organisation for the following reasons. It is a social enterprise that has been established in an area where there was no former tradition of weaving. It provides meaningful employment and income generation for local women through weaving which in southern India is predominantly a male activity. Charaka has

transformed the lives of its members giving them improved socio-economic status, a sustainable livelihood and social uplift. These women have been shifted from agriculture to an eco-friendly productive activity. Prasanna was motivated to establish Charaka to help the rural women gain a sustainable livelihood and therefore reduce the ecological damage in the region. These objectives have both been achieved and in the process a model organisation has emerged.

## Notes

1. I am indebted to the management team at Dastkar Andhra for the suggestion to contact Prasanna.
2. In contrast, in Indonesia, where I lived for eight years, these gender roles are reversed. In Sumatra, Kalimantan and the outer islands of Nusa Tenggara, it is the women who weave.
3. *Nebula venti* is literally “cloud or mist of wind” but is generally translated as “woven wind” or “woven air”.
4. Small fragments of probable Indian origin have been found at Central Asian and Red Sea archaeological sites, dating from the third to fifth centuries (Barnes, 2004: 137).
5. Examples from this find are held in both the Ashmolean Museum in Oxford (Balfour-Paul, 1997: 125) and the Textile Museum in Washington, DC (Gittinger, 1982: 7).
6. A mordant is a substance (frequently a metallic oxide) that helps to create a chemical bond between the dye and the fibre in the dyeing process (An Introduction to Textile Terms, The Textile Museum, Washington). The term mordant is derived from the Latin root “to bite”.
7. Gittinger is citing Chaudhuri, K.N. *The trading world of Asia and the English East India Company 1660–1670*. Cambridge, Cambridge University Press, 1978, p. 277.
8. Between 1849 and 1889, the value of British cotton cloth exports to India increased from just over 2 million pounds a year to just less than 27 million pounds a year (Bean, 1989: 362).
9. In 1750, India was producing 24.5% of the world’s manufactured goods. By 1800, this share was down to 19.7% and by 1860 was only 8.6% (Kennedy, 1989, as cited in Bakshi, 1998: 234–5).
10. Dastkar is a Delhi-based not-for-profit NGO working to support traditional craftspeople. Dastkar Andhra began in 1989 as an offshoot of Dastkar Delhi and in 1996 was incorporated as a public charitable trust.
11. He spent several months following my visit to the village as acting director of the National Theatre in Delhi.
12. *Dalit* is a member of the oppressed Hindu class, considered below the four divisions within the traditional Hindu caste system. Sanskrit *dalita* means oppressed. Gandhi coined the term Harijan meaning “Children of God”. The term Scheduled Castes/Scheduled Tribes is also used in the Indian legal system to refer to this group.

13. This study considers handloomed cotton only. Silk saris are still the preferred wear for ritual and formal wear at weddings and demand for them is expanding as the population increases. However, the number of people wearing cotton saris for daily wear is decreasing especially since cheap synthetic saris are readily available. In addition, many young people are now wearing western clothing while others choose the *salwar kameez*, a tunic dress worn with loose pants and a long scarf (*dupatta*) originating from the pre-partition Punjab area. A *dhoti* is an unstitched piece of cloth that men wear as a waistcloth wrapped and folded around the lower body.
14. DESI is an acronym for Developing Ecologically Sustainable Industry, but it also means “indigenous” or “local, regional”. The term is used to refer to people or things of South Asian origin. It has the same meaning in several Indian languages.
15. This substantial and nutritious lunch is subsidized heavily and would cost about four times the amount charged if taken in a local hotel.

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**Dr. Elizabeth Oley** Lived in Indonesia for 8 years during the 1990s where she developed an interest in textiles, was a member of committees organising conferences in Jakarta, Jambi and Bali and was a guest lecturer on P&O two-week cruises introducing textiles of the islands visited to passengers travelling from Bali to Timor on the northern arc of islands and returning on the southern arc. As a component of an Art Curatorship course at University of Melbourne she did a research project on the revival of weaving by the Benuaq, a subgroup of the Dayak or indigenous people of Borneo. This was subsequently submitted as a short thesis and later published as a chapter in a book *Material choices: refashioning bast and leaf fibres in Asia and the Pacific* edited by Roy Hamilton and Lynne Milgram published by the Fowler Museum at the University of California, Los Angeles in 2007. This led to her completing a Ph.D. at Monash University in anthropology *Dyeing for life: intermediaries, artisans and the natural-dye revival in historical context in India and Bangladesh*. It involved Liz, based in Hyderabad for over eight months, pursuing fieldwork in centres of natural dye practice. She focused on the activism of individuals who enable rural artisans to compete in a market from which they are often socially, culturally and geographically distanced. Her research revealed a variety of creative ways these individuals provide artisans with design advice and crucial market linkages that enable viable livelihoods and consequent socio-economic empowerment.

# Chapter 7

## Traditional Bedouin al-Sadu Weaving and New Solutions



Keireine Canavan

### Introduction

al-Sadu Textile Research Project was founded in 2009; a collaboration between Cardiff Metropolitan University UK, and the Public Authority of Applied Education and Training, Kuwait, and funded, in part, by the Welsh Assembly Government UK. Research and training has been undertaken at Sadu House, Kuwait; National Museum of Kuwait; Scottish National Museum Collection Centre UK; and National Museum of Qatar.<sup>1</sup>

The aim of the study is to consider the heritage and material culture of al-Sadu woven textiles, with a focus on the traditional symbolism of the woven *shajarah*, a decorative panel found within the large tent divider or curtain textile (*gata*, *ibjad*) that divides the men's and women's quarters in the traditional Bedouin tent (*beit al-sha'ar*). Also, to record and preserve the oral history of some of the dwindling number of Bedouin al-Sadu master-weavers, before the knowledge of this vital cultural handicraft and its patterned lexicon is lost forever.

Analysing museum and private al-Sadu textile collections in the Arabian Gulf and the UK, and working with Bedouin weavers in the Gulf Region, particularly Kuwait, the semiotic codes and their meanings within the patterned *shajarah* panel are documented. As weaving practitioners, the researchers record the associated

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Important Information: It is important to note that much of the material above and the terminology used has been conveyed to the researchers orally from master-weavers and scholars, over many years. While every effort has been made to conform to a system of transliteration, in line with other scholars and publications, it is difficult to establish a system of consistency and accuracy. The researchers have attempted to represent the Bedouin terms as pronounced, although there is great regional variation and multiple terms are frequently used for the same object or practice.

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technical weaving practices to preserve and retain the memoirs and knowledge of some of the few remaining women master-weavers. The unwritten lexicon of woven symbols, motifs and patterns, informs and unlocks the individual women weaver's personal interpretation and communication of her indigenous culture and social history (Canavan & Alnajadah, 2013).

The significance of the study is the dialogic and tacit exchange of knowledge of this dwindling Bedouin material culture, to identify the current status and terminal decline of traditional al-Sadu weaving, as nomads settle or are forcibly domiciled into new and ever-changing environments (Weir, 2010: 11). Will al-Sadu weaving cease altogether, due to a lack of nomadic lifestyle and utilitarian or popular demand, with a consequence that all knowledge and associated weaving skills will be eradicated? Does an understanding of traditional tribal patterns and motifs matter in today's society, or are the extant textiles admired solely for their aesthetic beauty, with little or no cultural value? Have contemporary weavers lost the practical techniques, creative handicraft skills and physical endurance to produce traditionally woven Bedouin textiles, as new technologies exclude traditional crafts, tacit knowledge and associated material cultural histories?

The study results in an academic record and understanding of al-Sadu textile practices, and the oral history of some of the remaining al-Sadu master-weavers, contributes to the preservation of this decorative cultural identity and material symbolism. Through 'live' educational al-Sadu design projects with university students and school children in Kuwait and the UK, the research has enabled the transmission of this visual language and elements of this dying or lost material culture to the next generation of scholars, craftspeople, and artisan weavers, which in turn has informed the creation of innovative, contemporary applications to guide and perpetuate traditional al-Sadu weaving into the twenty-first century.

## **Traditional Bedouin Lifestyle and Today**

The industrial revolution threatened to replace handmade traditions with machine mass-production, but human creativity and people's expression of their culture remained unsuppressed. Today, the development of fast, new technologies has altered and replaced many traditional handicrafts and societies' value of them, with detrimental effects. Like most woven handicrafts practised in the twenty-first century, Bedouin al-Sadu weaving faces new and diverse challenges.

In the mid-1930s, the discovery of oil in the Arabian Gulf Region, and the wealth that has been pursued until today, brought about rapid regional societal, cultural and economic changes. The traditional Bedouin lifestyle, with pastoral nomadism and annual migrations as its guiding principle (Boas 1955; Dickson, 1949: 45–65) changed beyond all recognition and today has virtually ceased in the Middle East, exchanged for urban dwelling and modern consumerism. Many of the desert environmental and seasonal rhythms that linked historic Bedouin traditions and relationships between material culture and woven symbolic identities are lost, but for a dwindling

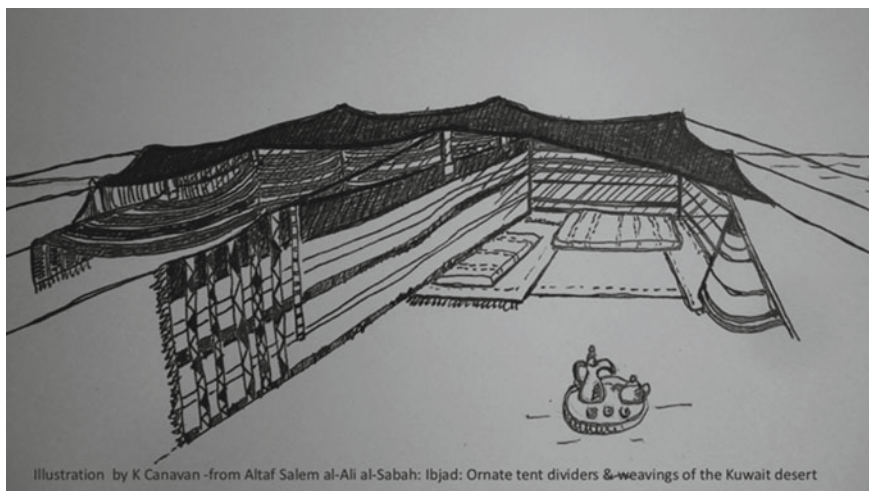


number of women master-weavers, most of whom are illiterate and in their autumn years of life. With virtually no written documentation, this leaves very few remaining weavers who retain the knowledge and skills to translate the lexicon of visual imagery of extant al-Sadu textiles. Technical weaving practices and social identities continue to disappear in the face of mechanisation, *fast-fashion* principles and modernism, acknowledging the traditional language of al-Sadu only for its historic aesthetic values, with little or no comprehension of its symbolic meaning and cultural values (Canavan & Alnajadah, 2013: 163).

Today, as for other traditional handicrafts, al-Sadu weaving needs to find its rightful place. The weaver's hand, her skills on the loom and material interpretations inspired by nature, her environment or her prized possessions, express her creative imagination and cultural identity through her own personal aesthetic values, but which has less cultural value or practical use today. Historically, the oral passage of knowledge from mother to daughter, generation to generation, developed myths and traditional symbols and motifs, which altered according to the weaver's own creative interpretation, dexterity and technical ability. Today, that transmission of traditional creative knowledge and aesthetic is arguably lost, or at best, a weaker solution of the past in terms of technique, quality and cultural value, as generational transmission systems cease.

In the past, traditional Bedouin poetry exemplified the men's cultural prowess and articulated their perceptions of the harsh beauty of the nomadic tribal lifestyle and their heritage. The poems leave no tangible evidence, due mainly to the widespread illiteracy, but some of the poems are narrated and remain in use today as an oral history and tradition. They reflect the rhythmical repetitions of the desert cycles, the nomadic lifestyle and the fast-moving pace of the camel (Canavan & Alnajadah, 2011: 81). In contrast, women weavers left a tangible trail of extant al-Sadu textiles. They skillfully created utilitarian textiles on simple ground looms, which depict the rhythms of their environment and annual migratory experiences, but also showcased the women's personal expressions of beauty, their tribal loyalty and personal possessions, via a system of semiotic codes of parallel patterns, symmetrical dots and geometrics. This tangible evidence gave birth to important and extraordinary textiles that transmitted and recorded tribal information. Woven textiles formed the Bedouin tent or 'house of hair' (*beit al sha'ar*), the rugs, storage bags, pillows and large tent dividers or curtains (*gata, ibjad*) (Fig. 7.1). The Bedouin nomadic lifestyle relied upon these vital textiles for their migratory existence and survival of the tribe. The decoration and patterning systems, inspired by the women's creative dexterity, physical endurance and emotional sentiments, showcase innate human artistic innovation, and responses to visual preferences of symmetrical forms (Enquist & Arak, 1994: 169–172, Gombrich, 1984: 7–18) in a '*sense of decorative beauty*' (Darwin, 1871).

The tent divider (*gata, ibjad*) was the largest and most extraordinary of the Bedouin textiles. Its majestic and colourful presence in the desert environment inspired a tribal spirit and sense of pride (Al-Sabah, 2006: 20). As a crafted artefact, it was and remains highly prized and treasured within the tribes, although now rarely used in the traditional way of dividing the tent. The creation of this magnificent textile



**Fig. 7.1** Illustration by Keireine Canavan, from illustration in Altaf Salem al-Ali al-Sabah: Ibjad: Ornate tent dividers and weaving of the Kuwait desert. 2006. *Photo credit* K Canavan

was a huge feat to undertake, using basic spinning, dyeing and weaving equipment, and woven on a primitive ground loom, using a finger-picking technique and supplementary warp threads. Tent dividers can measure approximately 10 m in length and 3 m in width and are made from four or five narrow woven strips (*filjan*), which were embroidered together to make one large curtain. A twined woven technique (*ragoum*) was used to create a colourful ‘badge’ (*ragoum hanbali*) at the outer edge of the tent divider, to attract attention. The narrow patterned sections, or *shajarah* (Fig. 7.2), depict the most distinct messaging information to articulate simple narratives, and like the rhythms of the weaving process itself, the symmetrical flowing lines and repetitive border patterns reflect the vast desert environment, the nomadic migratory seasons and the rhythmical pace of the desert camel, resembling the men’s traditional poetry.



**Fig. 7.2** Shajarah—geometric symbols in shajarah weave section, including earrings (*terrachi*), with triangular border pattern called *urweirjan*. Private collection. *Photo credit* K Canavan

Today, the Bedouin weavers have little political voice. They are suppressed by a continued lack of education, social status and economy, and very few artisan weavers retain the ability and knowledge to translate the lexicon of this endangered handcraft. Across the world, the next generation of weavers appears disinterested in traditional, slow-paced skills, in favour of fast production digital applications. In the main, Bedouin al-Sadu traditions now lack social status and as the knowledge of this material culture declines, the young have become more materialistic, and have generally lost interest and the manual dexterity for such traditional heritage crafts.

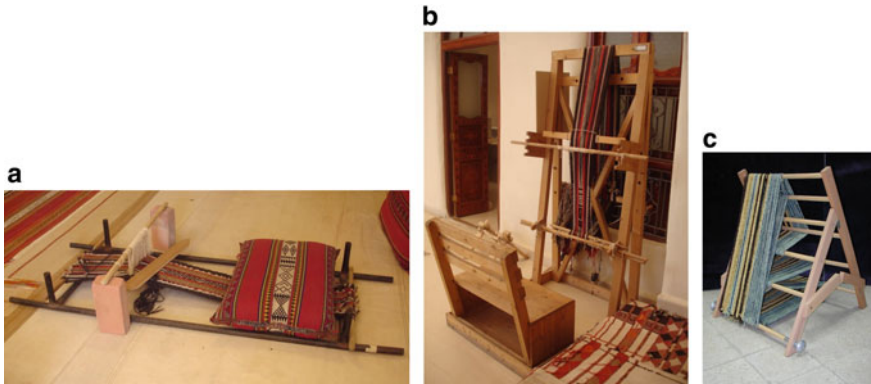
## Spinning, Dyeing and Weaving Techniques

Fine quality spinning and dyeing skills held high tribal status for the women weavers, *'the finer the yarn, the more pronounced and delicate the structure and design pattern of the woven piece'* (Al-Sabah 2006: 14). Young girls learnt to spin sheep's fleece, goat and camel hair from a very early age, using simple hand spindles (*mighzal*). *'No other appliance is used as much as the spindle. It accompanies women and young girls wherever they go'* (Ferdinand, 1993).

Historically, natural dye sources found in the desert environment and local markets provided soft dye colours, which were mixed with the natural beige, brown and black colours of the sheep fleece and animal hair. Later commercial dyes and natural cotton colours were used, and bold colours of bright reds, golds and oranges reflected the sun and desert sands, with accents of green and blue. Colour selections were the personal choice and expression of the weaver herself, although today much of the knowledge associated with dyeing has been forgotten and lost with the introduction of pre-dyed commercial yarns, which are cheap and readily available.

As part of the research project, and in collaboration with al-Sadu Weaving Cooperative Society, Fibre Arts Group, at Sadu House in Kuwait, a natural dye workshop to reintroduce lost natural dyeing methods and improve chemical dyeing skills was set up.<sup>2</sup> No traditional Bedouin al-Sadu weavers attended the workshop, only local textile experts and interested international visitors to Kuwait. While there appears to be a general appreciation among weavers for the quality of natural dye colours and precise chemical dyeing, there appears to be little local interest in reviving lost skills due to pressures of time, age of the remaining master-weavers, and a modern preference for easy, inexpensive and brightly coloured commercial yarns.

The term *Sadu* not only refers to the 'extension of the hand' but also refers to the Bedouin textile itself (Ibn Mandhur thirteenth-century dictionary; Al-Sabah, 2001: 37). Of the same name, the traditional al-Sadu ground loom was assembled and operated horizontally on the desert sand, usually in front of the women's section in the Bedouin tent (*beit al sha'ar*). The loom was constructed of a breast and back beam, with upright posts at each corner, to tension the warp threads. Two additional rods anchored the heddles and provided the warp-cross. This simple, portable loom was appropriate for the Bedouin migratory lifestyle, yet required high levels of skill



**Fig. 7.3** L-R. **a** Rigid metal frame loom, **b** Alnajadah Vertical al-Sadu Loom design, **c** Alnajadah Pyramid Loom. *Photo credits A Alnajadah*

and physical endurance as the weaver had to sit on the ground for many hours in the desert heat, to weave her textiles.

Today, small rigid, but portable metal frame looms are constructed to replace the traditional al-Sadu ground loom for educational purposes and textile sampling (Fig. 7.3a). To encourage and meet the needs of young weavers, the first vertical al-Sadu loom was assembled by an American engineer, Mr. Reef. The Reef loom, however, was not a practical solution due to its lack of robust stability and height, and a new vertical loom version was designed by Dr. A. Alnajadah in Kuwait. This loom was constructed with a seat and storage unit attached, to utilise the weaver's body weight to stabilise the loom, and to allow for a more comfortable and practical weaving position (Fig. 7.3b). The Alnajadah loom was tested by al-Sadu master-weavers, and the design was approved; however, the loom was too large to be mobilised easily, and consequently, a smaller adaptation of the primed loom was constructed for weaving. Additionally, a small pyramid loom (Fig. 7.3c) and a portable horizontal wooden table-loom were designed for educational training purposes, to create small textile samples. The research efforts are continuing, and the design and creation of new variations of the floor loom will enable additional adaptations, such as extended warp length options, to inspire and encourage the next generation of weavers, and revitalise this important traditional handicraft.

## Patterns Symbol and Motifs

Warp-faced al-Sadu textiles were traditionally woven on a continuous warp, which when cut, created long narrow strips that were stitched or embroidered together to create larger textiles for use in the tent. Plain woven structures were the simplest

technique, with pickup warp-faced patterns, known as *midhkar* and *shajarah* techniques, being the most complex, and determined upon the warp thread preparations (Canavan & Alnajadah, 2013: 156). Repeating geometric forms and patterns were passed from weaver to weaver, mother to daughter, and memorised by master-weavers. Semiotic codes made from a series of dots, stripes and triangles were identified with specific names, related meanings and associated symbolism. While generally loyal to traditions guided by previous generations and extant textile samples, weavers ultimately created their own variations and interpretations, using their personal sense of aesthetic expression and circumstance.

Interviews and discussions with contemporary Bedouin master-weavers in Kuwait, Qatar and Oman emphasise the complexity and importance of the *shajarah* weave.<sup>3</sup> This highly skilful technique enabled a messaging system to exchange values from one tribe to another and were indicators of tribal wealth and the master-weavers' prowess. Master-weavers were highly respected within the tribe and were called *dhefra*, meaning 'victorious'.

Typically, the use of white cotton and black/brown wool used within the *shajarah*, reflected the traditional tribal use of black kohl pencil outlines, with the overall pattern reflecting a 'tree of life' design layout. Long, repeating rows of triangles or pyramid patterns, known as *uweirjan* (Fig. 7.2), frequently edge the *shajarah*, and are reported by weavers to represent the desert sand dunes or clusters of dates, or possibly birds' wings. However, *urweirjan* also appears in isolation in other sections of the textiles and is open to interpretation by the weaver herself. Rhythmical rows of dots and stripes are considered to depict body parts such as ribs (*dhalla*) or teeth (*dhrus*), but these repeating symbols also reflect basic geometric shapes, which may be due to the simple characteristics of the Bedouin ground loom. It was regularly reported during the research that concentric diamond shapes represent water pools, and depict the importance of waterfall in the desert, which after a rainstorm forms small pools that quickly evaporate or sink into the sand, getting smaller and smaller. Additionally, repeating zig-zag patterns, across the *shajarah*, signify the observations of the patterns that remain in the sand from the movements of a snake as it traverses the desert, and expressions of tribal assets, wealth and ownership, in the form of jewellery, such as earrings (*terrachi*) (Fig. 7.2), or coffee pots (*dallah*), and tribal branding (*wasm*) are symbolised. Although normally restricted by the religious principles of Islam, not to depict the living form, there occasionally appear figurative representation of animals, such as camels, scorpions and birds, and even human beings. Later, modern vehicles, airplanes and oil pipelines with details of faucets influenced new symbolic designs.

## Educational Projects and Transmission

In 1979, the al-Sadu Society was established at Beit al-Sadu in Kuwait to preserve and promote al-Sadu weaving traditions as an important cultural handicraft, and

mainly practised by female Bedouin master-weavers. Three different levels of al-Sadu weaving courses were developed to promote and transmit knowledge of this handicraft; protect the interests of Bedouins and their traditional lifestyle; inspire the next generation of weavers and obstruct it from extinction. In 1984, Beit al-Sadu had 300 registered female master-weavers. This number has critically decreased, as the traditional nomadic demand for al-Sadu weavings has declined, and the remaining master-weavers reach the autumn years of their lives. In 1991, the al-Sadu project was transformed into the al-Sadu Weaving Cooperative Society, which was owned and run by the weavers in order to encourage more master-weavers and younger craftspeople to support the al-Sadu handicrafts.

In 2008/2009, the Educational Research Sector and Curricula in the Department of Research, Development and Education at the Ministry of Education, Kuwait, published an extensive study on Kuwaiti heritage.<sup>4</sup> One of the major findings of the study showed a need to incorporate different traditional issues, including al-Sadu weaving traditions, and it dictated that cultural heritage should be included in the educational curriculum in the State of Kuwait. Consequently, it was suggested that the weaving technique and material culture of the al-Sadu handicraft would be taught to high school students.

In 2010, in collaboration with a Kuwaiti design company Zeri Crafts,<sup>5</sup> 40 final-year undergraduate BA Hons Textile design students, from Cardiff Metropolitan University, School of Art and Design, engaged in an international design competition, to create a modern interpretation of al-Sadu traditional weavings and semiotics. New symbols and pattern combinations identified cultural differences and various novel experiences and interpretations; innovative motifs and new ideas reflected modernity, with similarities between the UK and Kuwaiti design students' projects; and contemporary colour schemes and applications on a range of modern fabric and paper substrates gave new meanings and direction to a declining material cultural tradition. The winning collection was transposed into beautiful, high-end silk fabric products, which were handwoven in the Far East by master Lao Textile silk-weavers,<sup>6</sup> and later quality hand-made paper stationery products were crafted by artisans in Nepal, for sale in the Middle East.

A pilot programme was introduced to undergraduate university design students at The College of Basic Education in Kuwait.<sup>7</sup> All the students were female and included their mothers and grandmothers, where possible. The purpose was to identify the level of technical knowledge and interest in al-Sadu traditions of the three generations, and whether they could identify the names of the motifs, symbols and patterns, and depict their traditional association. Most of the students, mothers and grandmothers who participated in this study either knew or had heard about al-Sadu weaving, however, very few of them knew the names and meaning of the different al-Sadu motifs. As expected, there was greater knowledge and interest in the older generation, some of whom had been weavers themselves. It can be concluded that the main reason for the results is because of the severe decline in the practice of this traditional handicraft, due to the recent regional economic changes and women's social status, as well as the settlement of nomadic people and the decrease in traditional customs and lifestyle, as well as the lack of intangible exchanges of practice. The study continues

to raise questions about market demand, the suitability and functionality of traditional al-Sadu handicrafts, and whether the related cultural associations are important in today's society and educational institutions.

As part of the intangible heritage of Kuwait and the educational curriculum at The College of Basic Education, traditional al-Sadu weaving is taught to female students in a programme call Kuwait Artistic Heritage. In addition, al-Sadu motifs and pictographs are commonly referred to and used in the Textile Printing course, where students learn about block printing, stencilling, and surface decoration on fabrics, and translate a modern interpretation of the old traditions.

At Cardiff Metropolitan University, Wales UK, a regular series of public and student lectures distributes the al-Sadu Textile Research Projects findings and shares knowledge of this material culture. Currently, four PhD research degree projects include additional specialist al-Sadu transmission of information and research; one to the final successful conclusion, with the researcher returning to Kuwait to teach university art students.

## Conclusion

To carry forward the rich cultural traditions and knowledge of al-Sadu weaving, young people and the next generation of weavers need to be sensitised to the craft and introduced to creative weaving at an early stage of their education.

Bedouin al-Sadu weaving has its genesis and practical beginnings based not only on the traditional nomadic lifestyle but also on the Bedouin people's life substance. The intrinsic values and traditional material cultural influences symbolise their heritage and tribal spirit. Fast technology and the internet have nearly banished traditional handicrafts, and the value of creative time and physical endurance today. Wars, political economics and global changes displace people from their cultural surroundings and fracture societies. This leads to a decline or abandonment of traditions and craftspeople to near vanishing point and extinction.

The World Craft Council's Vice-President of Asia Pacific (1982–1984), Raja Fuziah Binti Raja Tun Uda, stated that the way forward is for

traditional crafts to be strategically developed and promoted and marketed to fulfill the needs of the ever changing, contemporary lifestyle... to create awareness to revitalise the traditional craft industry.... and to preserve and promote crafts as national identity and heritage. (World Crafts Council 1964-2012: 277).

The Chairwoman of the Craft Council of India CCI, and mentor of the World Craft Council WCC, Vijaya Rajan, recommends that

it is vital to preserve, perpetuate and engage with a future that is handmade, and with the impending resource crunch on our planet, this engagement is imperative for man's very survival. (World Crafts Council 1964-2012: 272).

She continues that the WCC is developing craft in education programmes for school children, across the world, bringing artisans and crafts together into a wonderful conclave.

There is an enormous challenging task ahead if al-Sadu weaving traditions are to be valued, preserved and sustained in a modern solution. al-Sadu Textile Research Project highlights valuable insights to gain recognition and recorded understanding of the Bedouin weaving skills and unwritten lexicon of traditional symbols, motifs, and patterns that unlock the weaver's interpretation and transmission of her culture and social history, that otherwise may be hidden from view or lost forever. The research draws theoretical and practical understanding from a wide range of methodologies and sources, including, museum and private textile archive analysis; interviews and memoirs of remaining master-weavers; joint practical weaving projects to identify traditional production skills and patterns; tacit knowledge exchanges materialised at a very deep personal and societal level between master-weavers and research weavers; and documentation and video recordings of oral histories reflect upon fading knowledge and lost practical skills. The introduction of scholastic knowledge and pedagogical development of contemporary weaving in education, with modern equipment and developing technology, will identify the duality of function and technical creation, and retain the knowledge of the heritage and material culture of al-Sadu woven textiles. Also, to preserve the Bedouin master-weavers' oral history of the semiotic codes and patterned lexicon, before they are lost forever.

'...all craftspeople need to be heard, understood, helped and protected.... Crafts are a driving force of local economic development. As an expression of cultural identity it remains vital that authenticity and quality in craft creation are encouraged and supported'.<sup>8</sup>

Elena Averoff, President of the World Crafts Council 2000–2004

## Notes

1. The project has been funded by Cardiff Metropolitan University UK, the Public Authority for Applied Education and Training, Kuwait, and with kind permission from Sheikha Altaf Salem al-Ali al-Sabah, patron of Sadu House Permanent Collection; Shehab al-Shehab, Ministry of Information and National Museum of Kuwait Authorities; Frederike Voigt, senior curator at National Museums Scotland UK; Peggy Loar, director of National Museum of Qatar.
2. A natural dyeing workshop, using locally sourced dye plant material and desert fungi, was delivered by K. Canavan, in collaboration with Al-Sadu Weaving Cooperative Society, Fibre Arts Group, at Sadu House Kuwait. No traditional al-Sadu weavers attended the workshop, only local textile experts and interested international visitors to Kuwait. 2010.
3. Canavan & Alnajadah Al-Sadu Research Project 2009-present recorded interviews at Sadu House, Kuwait, with Bedouin master weavers and members of Al-Sadu weaving Cooperative Society, founded in 1991: Muteira Thafeeree, Umm Abdullah, Umm Turki, Umm Bergash, Umm Saleh, Umm Talal, Umm Mahamood Seeta.



4. Ministry of Education published an extensive study on Kuwaiti heritage, with the Educational Research Sector and Curricula in the Department of Research, Development and Education, Kuwait. 2008/2009.
5. Zeri Crafts was created in Kuwait in 2010 with the aim of re-valuing the cultural capital and transforming it into a source of creativity. They create products that reflect Gulf culture with a contemporary look and feel. [www.zericrafts.com/pages/our-story](http://www.zericrafts.com/pages/our-story)
6. Carol Cassidy's Lao Textiles workshop, studio and gallery, was founded in 1990, with Lao artisans specialising in hand-woven and dyed silk textiles. [www.lao-textiles.com](http://www.lao-textiles.com)
7. Students studying at The Public Authority for Applied Education and Training, in Kuwait, were provided with imagery of weaving techniques, symbols and patterns. Individually, students were asked to identify their knowledge of the images provided. Similarly, mothers and grandmothers were asked repeat questions. The interviews were conducted in Arabic and the data was documented by A. Alnajadah. 2011.
8. Handcrafting Excellence. World Crafts Council 1964–2012.

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her research '*Dayak to Digital: Traditional ikat for contemporary patterned knitted textiles*' (McFarlane Award) and 'Material symbols of traditional weavings of Kuwait' (TEXTILE: the journal of cloth and culture—BERG Pubs 2013). She speaks regularly at conference and public events; recently at School of Oriental and African Studies (SOAS) London; Dar al-Athar al-Islamyiah Cultural Centre Kuwait; Cardiff Metropolitan University Summer Lecture Season, Cardiff; Victoria & Albert Museum London, and exhibits her practice work, nationally and internationally. Her passion for researching endangered and declining ancient textile techniques has taken her to Europe, Kuwait and the Gulf region, India, the Far East and North Africa. The focus of Dr. Canavan's research has been on endangered weaving traditions and since 2004 her interests have focused on *al-Sadu Gata* or the decorative curtain that divides the men's quarters from the women's in the traditional Bedouin tent *Beit al-Sha'ar*, and in particular the semiotics of the woven patterned panel or shajarah.

**Part IV**  
**The Carved**

# Chapter 8

## Learning to Carve Wood in the Trobriand Islands, Milne Bay Province, Papua New Guinea



Harry Beran

### The Social Context of Learning to Carve

Woodcarving is the predominant traditional art form in New Guinea. This essay describes how boys learn to become master woodcarvers in the Trobriand Islands, Milne Bay Province, Papua New Guinea. The main islands of the Trobriands archipelago are Kiriwina (also called Boyowa), Kaileuna, Kitava, and Vakuta. Milne Bay Province coincides approximately with a woodcarving style region referred to as the Massim region in the literature on Oceanic art. More published information is available as to how boys learn to carve in the Trobriands than how they learn to carve in most other regions of New Guinea (Fig. 8.1).<sup>1</sup>

This essay will first describe the social context in which woodcarving is carried out in these islands and then the initiation and training boys undergo to become master carvers. The description of the master–apprentice system, of the rite of initiation, and of the training of apprentices varies to some extent in the publications of the writers who describe them. This may be at least partly due to variations that obtain among the three islands involved: Kiriwina, Vakuta, and Kitava. There are also master carvers in Kaileuna, but at present no description of the training of apprentice carvers in this island is available. The language the writers use to describe the artworks involved also varies to some extent. This is at least partly due to different dialects of Kiriwina, the language spoken in the Trobriands, being used in different parts of the archipelago. As

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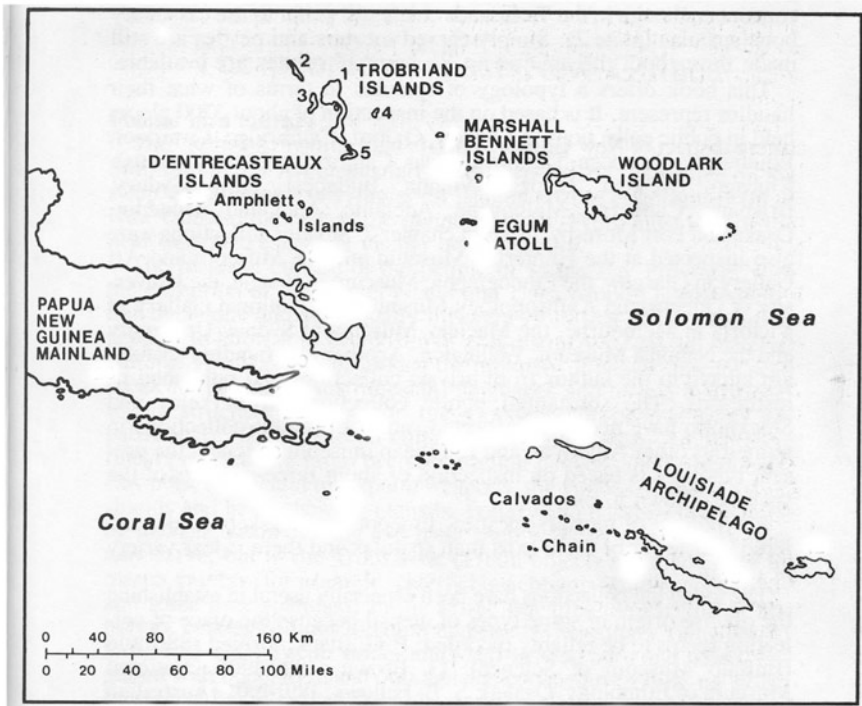
<sup>1</sup> This essay is almost entirely based on the research of other writers; especially that of Shirley Campbell, Geoffrey Mosuwadoga, and Giancarlo Scoditti, mentioned in the publications cited in the essay. I am grateful to Gunter Senft for comments on a draft of the essay and to Giancarlo Scoditti for detailed and helpful replies by email to two questions.

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**Fig. 8.1** Map of Milne Bay Province, Papua New Guinea. 1. Kiriwina. 2. Tuma (the island of the departed spirits). 3. Kaileuna. 4. Kitava. 5. Vakuta

far as possible I describe initiation and training in terms of the elements common to the writers, but I will also mention some of the variations. In describing the artworks, I use the language I consider most appropriate, except when quoting.

In the Trobriands, boys are apprenticed to master carvers, called *tokabitam*, for a number of years to learn how to carve wood, to understand the meaning of the motifs carved on the artworks, to arrange the motifs into a traditional design, and the magic required for carving. The main artworks they still carve at the time of writing are gable boards for chiefly buildings in Kiriwina, the largest of the Trobriands, and the ends of the hulls of ocean-going canoes and the wavesplitters and washboards placed on them. Ocean-going canoes are used in an exchange system called the *kula*. However, the production of these canoes is in sharp decline. During visits to Kiriwina in 2013 and 2015, I was told that only two *kula* canoes had been built in the last few years. The late David Baker told me that, when he visited Vakuta in the early years of the twentieth century, he saw no *kula* canoes. When Senft (2016: 230) asked men in Tauwema Village of Kaileuna Island in 1996 why no new *kula* canoes were being built, he was told that their time was over. And Giancarlo Scoditti is reported by

Stille (1999: 52, 63) as saying that no *kula* canoes had been commissioned in recent years in Kitava.<sup>2</sup>

The *kula* is an exchange system involving most of the islands of the Massim region in which shell necklaces are exchanged for shell armbands. The system is described by Malinowski (1922) and Leach and Leach (1983).

It seems that in the past the objects made by *tokabitam* also included lime spatulas of certain designs (Campbell, 2002: 41, 49) and drums (Simons, 1986: 8). It seems likely that the carving of dance paddles and the painting of war shields was also reserved for master carvers in the past, but these objects are no longer made for local use and no information is available as to whether those who carved and painted them were *tokabitam*.

A wide range of traditional Massim art, including some from the Trobriands, is illustrated in Beran (1980), Marcelin, 2016, Newton (1975), and Shack (1985).

It seems likely that a similar master–apprentice system is used in teaching boys to carve in the Marshall Bennett Islands, southeast of the Trobriands (Beran & Tomowau, 2007; Munn, 1977: 47). Little is known how boys learn to carve in other parts of Milne Bay Province.

The way boys learn to carve in the Trobriands can be contrasted with the way they or young men learn to carve in the Asmat region of New Guinea, another region about which there is good information. As Gerbrands (1967) explains in his study of eight Asmat woodcarvers of Amanamkai Village, there they are not formally trained but learn to carve by watching older skilled woodcarvers.

Trobrianders distinguish between general knowledge, which anyone may acquire, and *kabitam* knowledge, which involves magic, is the most highly valued form, and is restricted to a small minority (Campbell, 2002: 51ff; cf. Scoditti, 1982: 75–6, 1990: 56ff). One form of this restricted *kabitam* knowledge is that of carving certain types of objects, such as the wavesplitters (*tabuya*), washboards (*lagim*), and ends of the hulls (*pusa*) of *kula* canoes. This is reserved for men, but women can also have *kabitam* knowledge; for example, that of constructing ‘banana-leaf skirts... which are highly valued exchange articles in mortuary distributions’ (Campbell, 2002: 55; cf. Mosuwadoga, 2006: 18). At least in Vakuta, a woman can also be given *kabitam* knowledge that can be exercised only by men, if no suitable boy is available to be apprenticed and receive it. She then holds this knowledge until she can pass it on to a suitable boy (Campbell, 2002: 55).

Woodcarvers who have *kabitam* knowledge are called *tokabitam*, while carvers who lack this knowledge are called *tokataraki*.<sup>3</sup> The latter carve everyday objects but can also help in cutting *kula* canoes. Similarly, *tokabitam* may also do work which

<sup>2</sup> Scoditti (1990: 15, 27 note 2), following Seligman (1910: 660, 670) and Malinowski (1922: 306), regards Kitava as part of the Marshall Bennett Islands. However, recent maps of New Guinea include Kitava in the Trobriands and so do other scholars writing about the Trobriands; for example, Shirley Campbell (2002: 13), Jerry Leach (1983: 126), and Annette Weiner (1988: 10). Cf. Senft’s review (1993: 282) of Scoditti’s book of 1990. Scoditti is alone in spelling the name of the island Kitawa rather than Kitava. I follow the majority in spelling the island’s name Kitava and in including it in the Trobriand Islands (cf. Senft 1993: 281, note 2).

<sup>3</sup> *To-* is the male classifier (Campbell 1978: 2; Scoditti 1990: 68, note 3).



**Fig. 8.2** A master carver finishing a *kula* canoe wavesplitter. According to another photograph of the scene, published in Malinowski (1922, Plate XXVI), the carver's name was Molilakwa and he was a *tokabitam*. Photograph taken by Malinowski between 1915 and 1918. Reproduced by permission of Patrick Burke and the London School of Economics and Political Science Library (Malinowski 3/4/57)

does not require their *kabitam* knowledge. Campbell (2002: 41, 44, 46, 48–9, 56) explains the distinction with regard to Vakuta, Mosuwadoga (2006: 16) with regard to Kiriwina, Scoditti (1990: 56ff) with regard to Kitava, and Senft (1986: 386–7) with regard to Kaileuna. Austen (1945: 194–5) takes it for granted that the distinction is made throughout the Trobriands.

As the caption to Fig. 8.2 shows, Malinowski was aware that there were *tokabitam* in the Trobriands. There are two other mentions of them in his writings. In a letter to his future wife, dated 21 April 1918, he mentions that he spent an afternoon with *tokabitam* in Vakuta (Wayne, 1995: 133).<sup>4</sup> And in an essay not published until 1998, he writes that '[t]here are professional carvers in most villages [of the Trobriands] who hand down their art and the magic connected with it from maternal uncle to nephew' (Young, 1998: 35) (Fig. 8.3).

In Kiriwina and Vakuta, there are a number of schools of master carvers. According to Mosuwadoga (2006: 20) and Jarillo de la Torre (2013: 126), there are three schools in Kiriwina. The former names them as Sopi Gawa, Sopi guyau (which belongs to the chiefs of Kiriwina), and Sopi wotiya (which is found in Kiriwina), the latter as *sopigawa*, *sopiguyau*, and *sopiyelu*. In Vakuta, there are four schools: Sopi Vakuta, Sopi Gawa, Sopi Kaileuna, and Sopi Kitava (Campbell, 2002: 57). Mosuwadoga does not provide illustrations of the designs of the canoe carvings of the different schools. However, the late Martin Morububuna, who was a Kiriwina contemporary artist, made a drawing of a washboard of the Sopi guyau design for me in 1991, shown

<sup>4</sup> I am grateful to Michael Young for mentioning this letter to me.

**Fig. 8.3** The late Narubutau, Chief of Yalumgwa Village, Kiriwina, and *tokabitam*, photographed by Jutta Malnic in 1981. After Malnic with Kasaipwalova (1998, frontispiece), courtesy of Jutta Malnic



in Fig. 8.4. Campbell (2002) illustrates wavesplitters and washboards by carvers of the Sopi Vakuta school in Plates 6, , 7, , 10, and 11 and carvers of the Sopi Kitava school in Plates 8, 9, 12, and 13.

As Campbell (*ibid.*: 61, 57) explains, in Vakuta the names of the four schools of carvers refer to the geographical origin of the carving magic used by the schools. She also notes that *sopi* ‘literally refers to any water or liquid-like substance’, but that in the context of woodcarving it refers to the ‘magically impregnated substance’ apprentices drink and to the ‘aesthetic style or school of carving’ (cf. Mosuwadoga, 2006: 19).

Senft (*pers. comm.*, 12 July 2016) confirms that there were a number of master carvers in Kaileuna in the 1980s but they never mentioned ‘special schools’ of carvers to him.

Scoditti, in his article of 1982, p. 76, writes that in Kitava “[a]ll craftsmen are grouped in schools, distinguishable by a given model of *lagimu* and *tabuya* and by some of the symbols engraved on them...”<sup>5</sup> In his book of 1990, p. 60, he writes that all the carvers of Kumwagea Village ‘belong to Towitara’s school or workshop...’. In his

<sup>5</sup> Kiriwina, the language of the Trobriands, has a number of dialects and the spelling of some words differs among the dialects. For example, Campbell, using Vakuta spellings, spells the word for master carver *tokabitam* and Scoditti, using Kitava spellings, spells it *tokabitamu*. As far as possible, I use the spellings of the Kavataria dialect of Kiriwina, except when quoting writers using the spellings of other dialects. The spellings of this dialect are used in Ralph Lawton’s dictionary of Kiriwina of 2002.





**Fig. 8.4** The design of washboards of the Kiriwina Sopi guyau school, as drawn by Martin Morububuna for the author in 1991. Drawing in author's collection

book of 2012, he no longer refers to schools of carvers but mentions Towitara's workshop of Kumwageya Village (p. 17) and Kurina's workshop of Lalela Village (pp. 167, 178). Scoditti (email 21 July 2016) advises that he uses 'school' and 'workshop' synonymously, confirms the importance of the two workshops already mentioned, and mentions two workshops no longer active: Toudubwau's of Okabulula Village and Mwgula's of Kodeuli and Wapaiya hamlets.

Scoditti illustrates numerous wavesplitters and washboards by carvers of the two workshops that were still active during his period of fieldwork. They are listed in the Table 8.1.

In his comments on two series of canoe wavesplitters and washboards, Chief Narubutau does not use the words *tokabitam* and *tokatari*, but he attributes some of the canoe components to carvers who have *sopi* (that is are *tokabitam*) and others to carvers who lack *sopi* (are not *tokabitam*). He does not mention whether the carvers with *sopi* belong to particular schools (Fig. 8.5).

At least in Vakuta, a *tokataraki* may be commissioned to produce a carving reserved for production by a *tokabitam* by someone unwilling to pay the fee due to a master carver. However in such a case, the *tokataraki* has to copy a *kabitam* design and make an appropriate payment to the *tokabitam* who has the copyright to the design. (Campbell, 2002: 56.)

**Table 8.1** Canoe wavesplitters and washboards by named artists listed according to their workshops (or schools)

Workshop	Artist	Wavesplitters illustrated in Scoditti publications	Wash-boards illustrated in Scoditti publications	Source of information for the artist's name and workshop
Kumwageya	Towitara	1990, Fig. 61	1990, Figs. 9, 67	Scoditti's email 21/7/16
	Gumaligisa	1990, Fig. 59	1980, Fig. II, 10; 1990, Figs. 20, 68 <sup>a</sup>	Scoditti's email 21/7/16
	Pilimoni		1990, Fig. 26	Scoditti's email 21/7/16
Lalela-Lalekeiwa	Kurina	1980, Fig. II, 9		Scoditti's email 21/7/16
	Tonori		1990, Fig. 15	Scoditti's email 21/7/16
	Tokwaisai		1990, Figs. 10, 55	Scoditti (1990)
	Syakwakwa	1980, Fig. III, 1a		Scoditti (1990)

<sup>a</sup> The illustration numbered 68 on its page seems to be nr 69 in the list of illustration on pages 387–9. There is no illustration that corresponds to Nr 68 in the list of illustrations. Scoditti includes drawings of canoe components by named artists in his book of 2012, but they are not drawn clearly enough to permit judgements as to whether they are different ones from those listed in the present table

## Learning to Carve

In the Trobriands, normally, boys are apprenticed to master carvers to learn to carve objects of great social significance when they are still quite young. Campbell (2002: 59) mentions that in Vakuta they are approximately 8–10 years old. Scoditti (1982: 77) mentions the same age group for Kitava. Mosuwadoga (2006: 18–19) writes that it is possible for adults to be apprenticed. He mentions that adults, being mature, learn more quickly, but that boys, having gone through initiation and having observed certain taboos from an early age, are likely to acquire a more thorough knowledge of carving.

The population of the Trobriands is divided into four clans (*kumila*) distinguished by their different totems. Each clan is divided into a large number of sub-clans (*dala*), each tracing its descent back to an original female ancestor. (Lawton, 1999.) Descent is traced in the female line and in Kiriwina succession in political office is also in the female line. This means that a son belongs to the same sub-clan as his mother, not his father.



**Fig. 8.5** One end of a fully decorated *kula* canoe, called *Toilamlaguyau* (*Crying for the Chief*), carved by the late Chief Narubutau of Yalumgwa Village, Kiriwina. Photograph by Jutta Malnic. Reproduced from Malnic with Kasaipwalova (1998: 12), courtesy of Jutta Malnic

Ideally, a boy should be apprenticed to a *tokabitam* of the same sub-clan; for example, a mother's brother, if he is a *tokabitam*. However, sometimes a father may train a son to become a *tokabitam* out of affection for him. (Campbell, 2002: 58–9; Scoditti, 1990: 29, 32, 33.)

The apprenticeship begins with a rite of initiation, which has two or three stages (Campbell, 2002: 62–4; Mosuwadoga, 2006: 19–20; Scoditti (1990: 33–4, 42–5). According to Scoditti (*ibid.*: 44), initiation opens the mind of the initiand.

First the *tokabitam* puts a betel nut in a mortar and mixes it with lime and the fruit of the betel plant. He chants magical formulae over it and gets the apprentice to imbibe it. The mixture is called *sopi* (water) and helps the initiand to recall the designs of the wavesplitter, washboard, and canoe-ends. Scoditti (*ibid.*: 34ff) quotes two versions of the initiation formulae.

Second, the master takes the initiand to the sea shore or a creek, makes a water channel in the sand or earth, dams some of it, chants a magic formula over it, and gets the initiand to drink some of the water. Then the water is allowed to flow back into the sea or creek. This part of initiation makes the initiand's mind 'flow like water', and ensures that 'the knowledge gained through the ritual will continue to flow' (Mosuwadoga (2006: 19). Mosuwadoga (*ibid.*), writing about Kiriwina, mentions an alternative to the second stage of initiation just described. Instead of drinking sea or creek water, the apprentice eats the flesh of a coconut which has a new shoot growing

from it. Coconut shoots grow into coconut trees. So eating the flesh of the coconut with a shoot ensures a continuous flow of knowledge which will grow.

Campbell (2002: 63–4) mentions a third stage of initiation in Vakuta. The apprentice is taken to a mangrove swamp where a type of snake called *kaisipu* is found. The *tokabitam* catches one of the snakes, cuts its tail, and lets some blood drip into a coconut bowl. The *tokabitam* of some of the Vakuta carving schools recite a magic formula over the blood. This blood is considered to contain the essence of *kabitam*. In drinking it the apprentice absorbs the slippery nature of the *kaisipu*. This allows the designs the apprentice has to learn to slip into his mind and from his mind onto the wood he is carving.

None of the writers cited mentions how much time passes between the two or three stages of initiation.

At least during the period of initiation and perhaps during the whole period of apprenticeship, certain taboos have to be observed by the apprentice. Campbell (2002: 60), Mosuwadoga (2006: 21), and Scoditti (1990: 52–3) provide different lists of these. However, all three lists include a ban on eating the head, the intestines, and the tail of fish. According to Mosuwadoga (op. cit.), eating the head of the fish would make the carver's hand hesitate and eating the intestines would make his mind impure. All three writers explain that because a fish waggles its tail when swimming, eating its tail would make the carver's hand waggle while carving.

Only Mosuwadoga (op. cit.), writing about Kiriwina, also mentions a ban on sexual intercourse during initiation.<sup>6</sup> Again, only Mosuwadoga mentions things which apprentices are advised to do. These include chewing young betel nuts grown in Kiriwina because they open the apprentice's mind and chewing betel nuts and eating bananas from the lower part of the bunch because this enlightens the mind.

Mosuwadoga regards the relationship between breaking the taboos and the apprentice's ability to carve as a causal one. For example, he writes (op. cit.: 21) that eating the tail of a fish 'causes the hand to shake'. Campbell also seems to regard the relationship as a causal one but her language is less clear. For example, she writes (2002: 60) that if an apprentice 'ate the tail of a fish his hand would likewise waggle'.

Scoditti, in his essay of 1982, p. 83, writes that

[a]s the tail of a fish moves in the water, to eat it would cause a *takabitam* to carve with [a] trembling hand, producing uncertain and confused symbols.

However, earlier on the same page he writes that

[w]hen a carver talks about the tail of fish taboo, he knows very well ... that there is no relationship of cause and effect between the tail of the fish and a 'trembling hand' which would be a consequence of eating a fish's tail.

The taboo appears to be one of 'a set of metaphors which a carver memorizes as an abridged version of Kitawa aesthetic philosophy' (ibid.). Scoditti's discussion of taboos and of breaking them in his book of 1990, pp. 52–6, does not clarify the

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<sup>6</sup> As Malinowski (1982: 47–9) mentions, in Kiriwina, before the missions arrived, children were allowed to have intercourse as soon as they were physically capable of it.

issue. His view of the matter seems to be that the claim that eating the tail of a fish will make the carver's carving hand tremble is not to be interpreted as a claim of a causal relationship. Rather, it serves to impress on the apprentice that he must have a firm image of the design he has to carve in his head so that his hand can execute it as firmly on a piece of wood.<sup>7</sup>

The writers cited differ in their reports as to the period during which the taboos have to be observed. According to Mosuwadoga (2006: 20–21), it is during the period of initiation. According to Scoditti (1990: 52, 55, 56), they have to be observed '[d]uring the apprenticeship'; that is, until the apprentice can carve canoe boards 'very well'. According to Campbell (2002: 61), the food restrictions are generally lifted after the apprentice 'becomes a fully-fledged carver'. It seems that the taboos do not apply to *takabitam*. Perhaps their ability to carve is so well established that eating the foods prohibited to apprentices no longer threatens their carving ability. However, Scoditti (1990: 64) writes that a *tokabitam* may choose to observe the taboos 'so that he can become more spiritual and free to concentrate on the art of carving'.

Initiation is followed by practical instruction, which takes a considerable number of years, but it should be remembered that the initiate has already 'dreamed' the designs of the artworks he must learn to carve and paint.

Scoditti (1990: 48–51) reports that in Kitava the apprentice carves a series of canoe boards 'on a reduced scale'. He carves these boards according to the designs he has dreamed and seen his teacher carving. The apprentice must not sketch the design on the board before he starts carving (cf. Mosuwadoga (2006: 20). He carves motifs from top to bottom and from outside to inside. If the model is badly carved it is burnt. According to Scoditti (op. cit.: 50, 47), in theory the apprentice must copy the design of the teacher accurately, but in practice he may introduce some innovations. The apprentice must also help his teacher in carving and painting full-scale canoe boards.

According to Campbell (2002: 64–6), in Vakuta the apprentice must learn to choose the correct trees from whose buttress roots wavesplitters and washboards are cut, the correct seasoning of wood, and how the motifs are carved on the wood. He also learns the magic formulae associated with carving and to make and care for the tools of his calling. Since metal became gradually available in the late nineteenth and early twentieth centuries, the tools have included nails, screwdrivers, and small knives. They also include an axe and adzes with traditional hafts but metal blades. The nail with a flattened end is driven by a wooden mallet. To smooth the surface of the finished carving, the carver uses the skin of a stingray or a particular type of leaf with a hard, rough surface.

When the apprentice has learnt all this, he carves a succession of six wavesplitters and six washboards of reduced size under the guidance of and with criticism from his teacher. They are burnt after completion.

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<sup>7</sup> This interpretation of Scoditti's view on the taboos to be observed by apprentices is based on his email of 18 June 2016. However, I must stress that this is my interpretation of his remarks which may not reflect them accurately.

When the master carver inspects the seventh completed board he finds it perfect, and tells the young carver that he is now a *tokabitam* . . . (Campbell *ibid.*: 65–6, cf. Scoditti, 1990: 56).

The period of apprenticeship is a lengthy one. According to Campbell (2002: 64), an apprentice does not start to ‘carve in earnest’ until three or four years after initiation. Scoditti (1990: 51, 56) writes of a ‘long period of apprenticeship’, a period that lasts ‘fifteen to twenty years’.

Apprentices have to learn to carve a great number of motifs, their symbolic significance, and how to arrange them on the object they are carving. Mosuwadoga (2006: 21–2) lists 29 motifs, but writes that ‘[i]t is difficult to identify individual motifs and it is still not clear how many motifs there are’. Campbell (2002: 91–109), Narubutau ([HYPERLINK "SPS:refid::bib8lib9"](#)), and Scoditti (1990: 99–146) identify some motifs not included in Mosuwadoga’s list, but no one has published a complete list of motifs carved by Trobriands *tokabitam*. Some of the motifs seem to be of great antiquity, while others have been invented recently.

According to Mosuwadoga (2006: 14), Kalaguma, a ‘legendary paramount leader of society’, created in the remote past some of the motifs still carved today on gable boards for chiefly houses.<sup>8</sup> One of these is called *kulakola* and represents the marks a receding tide leaves on a sandy beach. It is a wavy line, or two wave lines, carved on the lower one of the two horizontal boards shown on the gable illustrated in Fig. 8.6. The other motif is called *siwai* and represents the cuttlefish.<sup>9</sup> It is carved in the centre of the upper of the two horizontal gable boards illustrated in Fig. 8.6. According to Pulayasi Daniel, Paramount Chief of Kiriwina (Beran et al. 2007), the *kulakola* motif symbolizes that if one wants the wealth of the sea one has to go to the beach and if one wants the wealth of Kiriwina one needs to approach chiefs. And the *siwai* motif symbolizes that chiefs have to be approached with respect.

Mosuwadoga (*op. cit.*) mentions that ‘[t]he creation of other motifs [other than *kulakola* and *siwai*] possibly came later but mythology fails to reveal this’. There is indeed evidence in the literature on Trobriands woodcarving of innovation. A good example is reported by Scoditti (1990: 104). He writes that Towitara, a famous *tokabitam* of Kitava, who died in 1975 (*ibid.*: 66), added a row of birds across the top of washboards, as shown in Fig. 8.7. The innovation was followed by some of the other carvers in Kitava, as shown by the washboards carved by Tokwaisai, Tonori, and Gumaligisa, illustrated by Scoditti (*ibid.*, Figs. 10, 15, and 20, respectively). Some Kiriwina carvers have also adopted the innovation, as shown by the washboard carved by Chief Tolobuwa of Okaiboma Village shown in Fig. 8.8. In Vakuta, carvers of the Sopi Kitava school have also adopted the innovation (Campbell, 2002: 105).

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<sup>8</sup> Kalaguma is not mentioned in the literature on the Trobriands. However, while Mark Mosko (email 5 July 2016) has not heard of a historical individual called Kalaguma, he has heard of a sub-clan of the Malasi clan called Kalaguma. Linus digim’Rima (email 5 July 2016) has also heard of a sub-clan alternatively referred to as Kalaguma and does not contest Mosuwadoga’s story.

<sup>9</sup> Mosuwadoga (2006: 14, 22) writes that the *siwai* motif represents the squid. However, a number of Kiriwina informants have told me that it represents the cuttlefish (Beran et al., 2007).

**Fig. 8.6** Gable boards on Paramount Chief Pulayasi's council house, Omarkana Village, Kiriwina. Photographed by the author in 2006



In the last decades of the twentieth century, when Campbell, Scoditti, and Mosuwadoga did their research on carving in the Trobriands, the number of *tokabitam* was low. Campbell (2002: 53) reports that '[t]here were seven men on Vakuta... who owned carving knowledge' in the 1970s. Four of these were undisputed *takabitam*. Scoditti (1990, chs 2 and 3) names 17 carvers and 4 of these are explicitly said to be *tokabitam*. However, some of the others are also said to have carved wavesplitters and washboards for *kula* canoes.

A *tokabitam* can have a number of apprentices but should pass the full magic associated with initiation and carving to one apprentice only (Campbell, 2002: 57; Scoditti, 1990: 30). The *tokabitam* has to be given gifts during the apprenticeship and retains part of the magic formulae until his old age to ensure that gifts keep coming (Mosuwadoga, 2006: 20; Scoditti, 1990: 32, 65–6). However, Scoditti notes (*ibid.*: 66) that sometimes a *tokabitam* does not pass his whole magical knowledge to any of his apprentices. For example, Towitara, the foremost carver of Kitava during his lifetime, did not pass all of his knowledge of magic to any of his apprentices because he thought they had been bewitched by Christianity.



**Fig. 8.7** Upper, central part of a washboard carved by the *tokabitam* Towitara, Kumwagea Village, Kitava. Note the row birds across the top. After Scoditti (1990, Fig. 44), courtesy of Giancarlo Scoditti

At least in theory, there should be only two *tokabitam* within a carving school: the old master and the apprentice who has finally obtained all the magic formulae from the master (Campbell, 1978: 6). However, it seems that in practice a man who has been initiated and carves well and knowledgeably may be regarded as *tokabitam*, even if he has not been given all the initiation and carving magic formulae. This seems to be the implication of a remark by one of Scoditti's Kitava informants (1990: 56) that 'an initiate becomes a *tokabitamu* when he carves a life-sized *lagimu* [washboard] and/or *tabuya* [wavesplitter]', presumably to the satisfaction of his teacher. A similar remark by Campbell (2002: 65–6) is quoted above.

*Tokabitam* can achieve considerable prestige in their society. Towitara was famous as a carver far beyond his home island of Kitava (Scoditti, 1990: 62, 66–7). Another carver was immortalized in a song composed in Kiriwina in the 1930s about a *kula* canoe. It mentions Galawai as having carved one of the components of the canoe (Baldwin, 1949–50: 264, 277).

The Trobriands master–apprenticeship system for training boys into master carvers produces outstanding woodcarvers, indeed artists, who are not only able to produce fine artworks but also to explain their iconography to outsiders. Alas, most of the types of objects once made by *tokabitam* are no longer made and the construction of *kula* canoes seems to be in terminal decline. However, gable boards for chiefly houses are still carved by *tokabitam* in Kiriwina at the time of writing.





**Fig. 8.8** Chief Tolobuwa, Okaiboma Village, Kiriwina, with a washboard from a canoe he had carved. Note the row of birds across the top. There is an unpainted arc near the upper edge of the board where egg cowries were attached when the board was on the canoe ready for a *kula* voyage. Photograph by the author taken in 2006

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### Harry Beran In Memoriam: Harry Beran 28/02/2021

Bill Rathmell and Crispin Howarth, wrote the following words of condolence to members and friends of the Oceanic Art Society and I wish to include them here in memory and gratitude to Harry Beran for his valuable contribution to this book. *Lindy Joubert Editor*

“It is with heavy hearts that we have learned of the death of Harry Beran, founder member and first President of the Society, in Cambridge, England, as he approached the age of 85.

Harry Beran’s love of PNG art, the art of the Massim region in particular, led to his recognition as the foremost authority on the art and culture of Milne Bay Province. Such was his depth of knowledge—he was called upon by the Barbier-Muller Museum and the British Museum, amongst others, to write about their collections. In 1980 he was curator of an exhibition of Massim art

shown at the Australian Museum and he made an important personal collection of Massim art which has since been sold, but continues to enrich the appreciation and understanding of this cultural area. In association with the Oceanic Art Society, Harry's publications include co-editor, with Barry Craig, of the book "Shields of Melanesia".

Harry not only had a strong presence in the first decade of the OAS, but he continued to present research papers at the conferences of the Pacific Arts Association around the world. It is a testament to the value of his research that he brought a hitherto unknown Massim artist to light in the 1990s: Mutuaga. Today, Mutuaga's work has entered the collections of the Metropolitan Museum of Art (New York) and the National Gallery of Australia. Harry's scholarship and enthusiasm were contagious; most OAS members—and both of us who bring you this sad news—have had our interest in Oceanic art and culture encouraged and supported by Harry over a quarter of a century or longer. He became a life member of the Society in 2014.

With Harry's passing after a long illness, we feel a sense of loss for a colleague, for the knowledge he had, for a fellow member and above all, we feel the loss of a friend. Our thoughts go out to his wife Clare Harding. His research interests include social aspects of cities and architecture, public space, place studies, identity, social sustainability and local/global interaction. He has published over 10 ISI and ISC Journal papers and participated in over 60 conferences in Iran, Italy, Turkey, Canada, Australia and USA.

**Part V**  
**The Fired**

# Chapter 9

## Firing Sculpture and Its Public Interactions



Azam Fallah Azizi and Morteza Mirgholami

### Introduction

The art of pottery has an ancient history spanning ten thousand years. The art includes many capabilities of which most people have very little knowledge; one of the capabilities is creating works in large dimensions. Several artists, especially in Denmark, are innovators of firing-sculpture, which are baked at the site of their creation and in addition create a beautiful and pleasant space in the city. In this way, the artist gets to introduce and to teach this old and effective art. Making firing-sculpture is a means of interactional communication between artist, audience and pottery.

### The Concept of Firing-Sculpture

Firing-sculptures are structures with environmental and urban usages that are applied in their emplacement and are dried and then baked at the same place, their structures are often designed and applied so that the statue itself is the baking furnace (Ghorbani et al., 2012, p. 212). The firing-sculptures are a subset of the urban ceramic. In this research, the urban ceramic means the creation of a three dimensional (3D) volume with an aesthetic shape and expression. The main ingredients being non-metallic minerals that are hardened in the hot temperatures after steps of formation and then are exposed to the public eye. Urban ceramic statues are made of ceramic raw materials or baked mud and are located in urban spaces. They are presented individually, in groups or in different layouts. The most important feature of the urban ceramic is to

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L. Joubert (ed.), *Craft Shaping Society*, Technical and Vocational Education and Training:  
Issues, Concerns and Prospects 35, [https://doi.org/10.1007/978-981-16-9472-1\\_9](https://doi.org/10.1007/978-981-16-9472-1_9)

communicate harmoniously with the environment and the audience. Urban ceramics include visual features having a good effect on audiences and interacting well with the surrounds.

Ceramics are not just applied art forms, meeting the daily, practical needs in today's world as in the past. These days they are now also used in aesthetic arts. In the modern world, the artistry of ceramics was started as a movement by new pottery groups, leading to a revolution in the ceramic world. It saved the art from only not only being an applied practice but also an aesthetic, highly creative art form. Significant changes and developments have been made in the field of ceramic tools and materials leading to widespread developments. These have contributed to the appreciation and efficiency of ceramics, holding their place among against other areas of sculpture (Smagoula, 1992, pp. 39–40).

Firing-sculpture while being a muddy process, it has become a common practice since the mid-1990s up until the present day. Among the contemporary artists who follow the procedure are Nina Hole, Jorgen Hansen and Wali Hawes among other artisans, often from Denmark and considered the innovators and pioneers of this field. These individuals have often used specific techniques such as a special shaping technique, which they apply to their works, speed of doing the project, way of drying and baking the work in one piece and by the use of firewood on all processes. Making a large ceramic volume with no need for a big furnace and in the least possible time is a special feature of this technique compared to other methods claims Ziyaei, and can be seen in Fig. 9.1.



**Fig. 9.1** Firing-sculpture, by Nina Hole in Mexico 2007

## Introducing Firing-Sculpture Artists

Some pioneering artists in this field and their way of making and performing firing-sculpture projects are presented here, showing the difference in each artists' performance and technique, including the special use of their materials.

### *Nina Hole*

Danish artist, Nina Hole, is an international artist and has performed many firing-sculpture works in various parts of the world. Most of her works are inspired by Danish architectural patterns. She makes preliminary, small, muddy models of them to understand the final model and to control any problems and the flow of baking and firing. She uses the finest mud in her works and doesn't believe in using local mud in any way. She states that the process of designing and making the firing-sculptures are so complicated, requiring much energy and time. Nina Hole believes that it is not worth endangering her work by using cheap and poor quality materials. Undoubtedly, her work can be considered complete furnaces, which include a functional performance and are also pleasant visually. She creates her work using U-shaped modules of slab or muddy plates which are a slightly larger than a usual brick. The pieces are laid on each other as in bricklaying and the edges are stuck so that her work can be built to four meters high. She considers the empty spaces between the pieces, as in Fig. 9.2, provide a reticular pattern, a visual charm, also leading to her work being baked and dried faster.

In order to dry and strengthen her work, she keeps a small torch lit inside the work, which dries the work gradually and provides enough stability for adding the next rows. When the sculpture is prepared to be baked, she wraps it in a fire-resistant blanket or wire to ensure that the outer surface of the great work reaches a high baking temperature and has adequate strength against natural factors (Haman, 220).

The sculpture is heated slowly so that this great mass of mud has enough opportunity for being dried and allowing the steam to exit. After the temperature has reached the expected maximum and remained in the oven long enough, the blanket retainer wires are cut and the blankets are pushed aside from the work, this creates a pleasant scene by the exiting of the flames and flares of the fire.

Sometimes the artist renews the outer wall of the work using wood and sawdust, this step creates a colourful effect, which is an interesting event on the outer body of the firing-sculpture.



**Fig. 9.2** U-shape of bricks in building firing-sculpture

### ***George Hansen***

Danish artist, George Hansen was a student of ceramic courses in Europe and Canada and started his activities in firing-sculpture from 1994 and up to now has made over 20 firing-sculptures around the world. He differs from Nina Hole who uses U-shaped slabs as George Hansen uses various sensory shapes of slabs. He does not express his sensitivity by joining pieces to each other as Nina Hole does. He considers the empty spaces between the pieces as providing a reticular pattern and a visual charm. This method also leads to the work being baked and dried faster (Hansen, 2014).

George Hansen uses colourful white, black and red mud in his firing-sculptures, which leads to more variety of colours and contrast of the work (Fig. 9.3).

### ***Wali Hawes***

Wali Hawes has worked for years on creating structures, which are baking furnaces themselves. He often performs the works live at ceramic and clay festivals in various parts of the world and bakes them at the same site. He usually uses the soil from the work performance area and reinforces it with pulp from the local factory's waste. He uses the technique of 'wick' and builds up the works without an internal structure and creates the whole process of performance in an open-air area (Fig. 9.4).



**Fig. 9.3** George Hansen's firing-sculpture



One of Hawes's works is titled 'Fire Trees' which he constructed with cellulose flowers. After the sculpture dries, which looks like the trunk of a tree, he paints and then bakes on it, using colourful slurries and grouts in various designs (Ghorbani et al., 2012: 215).

## **Interactions**

In order to make more tangible interactions, demonstrated by the audiences during the process of building firing-sculptures, first we should be familiar with the word interaction, the types of interactions and the ways of interacting.

### ***Definition of Interaction***

Interaction is an Arabic word with its roots in the word 'action'; it has been translated as 'transact with each other' in the Deh-Khoda dictionary (Deh-Khoda, 1998, p. 863)



**Fig. 9.4** Wali Hawes's firing-sculpture

it means 'mutual relationship between two or more groups or media' in the approved glossary of Academy.

Catherine Mie writes in the book of Contemporary Art of History and Geography:

Some other works interfere in social life and forces the citizens to new behaviors. The citizens make the professional artists accept their utilization to create objects needing non-traditional techniques of art and change it; they apply the people impromptu participation or collaboration for artistic performance in urban environment. (Mie, 2011, p. 59)

Achievements of contemporary art are so extended to attract audience that sometimes they rise up to the performer's audience level. (Rafiei Monfared, 2015, p. 227)

## *Interactional Art*

Interactional art is a value and a position. Contemporary art gives value to the observer and promotes him/her from being an artistic consumer and an audience to assuming an active position and role in the art work. In interactional art, the audience can continue or complete the artistic work. This field of transaction demands an active role from the audience; therefore, the value and dimension of interactional art is sometimes more than other areas of visual arts. Perhaps the simplest definition is that it's completed with the audience and allows the audience to enter, to contemplate and to change it, either in effecting the form or content. The art is an extensive and receptive interaction with countless possibilities in regard to substances, materials, ideas and content. Interactional art is alive and responsible. Interactional art is exchanging and changing. It can be considered the idea and venture to remove the artist in favour of the audience as one of interactional art features (Rafiei Monfared, 227–228).

## *Kinds of Interactions with the Audience*

Being the audience of a work isn't a unilateral action. Not all people can be called an audience. We're not only an art audience congenitally but also we can become an audience. 'Becoming' is an event which takes the audience out of passivity. Being an audience is a position that a person can achieve in facing with a work of art; potentially, everyone can be a work of art audience. Therefore, the term of 'becoming an audience' is a more proper equivalent than being an audience. 'Antigone Mouchtouris' states this subject as:

the audience gets familiar with the artist or the cultural work through third party. This perception originates from following thought axis: The human being isn't born an audience, but also he becomes an audience and in order to do it, he needs teaching. (Mouchtouris & Mirzaie, 2007, p. 58)

Normally, in a correct approach, the person's reaction when faced with a work of art: (considering the audience's emotional relationship with a work of art here), leads to four possible events:

1. Inviting the audience to communicate and act with the work
2. Receiving the presented aesthetic of the work and understanding its artistic pleasure
3. Disagreement and criticizing it, which can focus on various aspects of the work
4. Disregarding or—in other words—not communicating. (Bagheri Fard, 2015, p. 71)

In the first item, the best possible interaction occurs with the work of art by the audience. The audience enters into an action with the work of art, in the interaction he's invited to touch or to replace the statue.

In the second and third points, we are confronted as a critical audience the work communicates a positive or negative effect with its audiences.

In the fourth point, no interaction has happened between the work of art and the audience. We should remember that even if the work of art can't stimulate its audiences, they still could experience some form of being influenced or interacting with the work of art. Some visual arts try to influence the audiences through unconventional and unusual colourings, but some of the audience can't communicate emotionally or create meaning with the artwork and the work doesn't affect their mind and soul except as an ineffectual and incomprehensible feeling.

After surveying the audience's emotional reactions to the works of art, I will present the audience's interaction techniques with the visual arts in this section:

1. Interaction between the audience and the work from a distance (visual interaction)
2. Interaction between the audience and the work from near (visual interaction and also sometimes touch interaction)
3. Interaction between the audience and the work by the practical aspect of the work (urban dishes and furniture. Visual and touch interaction)
4. Interaction between the audience and the work during construction of the work. (Visual, touch and construction interaction.)
5. Interaction between the audience and the work after construction. (The action and interaction of the work with the audience leads to a sort of replacement of the work.)

Finally, classifying the interactions between the audience and the work of art in several categories, which includes mental, practical, smell and maybe taste interaction.

### **Kinds of Audience's Interactions in Constructing a Firing-Sculpture**

The considerable point in firing-sculptures is to present them in 'bake-in-place'. The works can involve the audience in the process of producing a work and or setting the audience to watch the procedure of creating a ceramic work from the first to the last processes of baking it. The set of actions which are performed in make a firing-sculpture such as stepping out of the workshop and gallery, the exciting processes of working with fire, the smell of firewood and smoke. All of these actions apply an effective and nostalgic relationship with the audience that regardless of planning to achieve a visual purpose with a special usage, the participant shares in the group experience.

Ceramic is a material in which the interaction with the audience is accomplished easier than other materials, there may be many reasons that some of them are presented summarily. The human feels an innate emotional attachment or a closeness to the material of mud, which makes it easier for him to cooperate with the artist. In the process of shaping and constructing, the audience isn't threatened by any special danger and the artist provides the mud for the audience in order to easily recreate his

work. Painting on earthenware is considered a process, which is attractive to work with for the audience. Ceramic is a very attractive material in the baking process, it's smelted and melted. In this step, the audience throws the firewood and pockets of salt into the furnace and enjoys the events, which are happening.

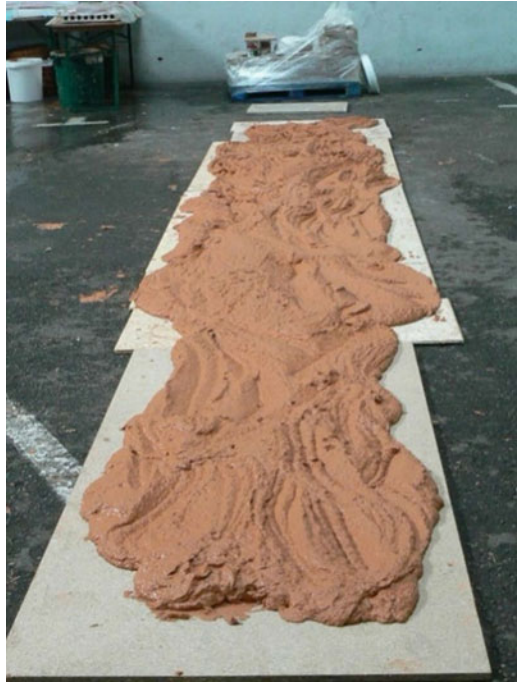
For example, George Hansen asks for help often from his audiences in constructing the firing-sculpture because he believes that the firing-sculptures are made for them, first he provides the mud for the audience or he teaches them how to prepare and stick the slabs together and/or he asks them to work as they like. That is why his works include a poetic and irregular sense, unlike the works by Nina Hole that contain a special regulation. The firewood is provided from the timbers of the area and the audiences accompany Hansen in this step and accompany him in throwing the timbers into the furnace and adding salt to it. Accompanying Hansen, the audience become familiar with his kind of colourful mud, making the slab mud, sticking the mud to each other's work and baking the earthenware works (Fig. 9.5).

Wali Hawes believes firmly in people's participation during the creation of his works, and he tries in all his work processes to benefit from their help; he uses the mud of the area and prepares the mud and pulp using the people's help. He asks his audiences to 'fuse' the mud and to give it to him and he makes the sculpture (Figs. 9.6 and 9.7).



**Fig. 9.5** The audience cooperating with George Hansen in preparing the slab and sticking the mud to each other's work

**Fig. 9.6** Preparing mud for Wali Hawes firing-sculpture



**Fig. 9.7** Making wick by the audience for Wali Hawes firing-sculpture

**Fig. 9.8** Painting colourful slurries on the firing-sculpture



Sometimes, Hawes uses colourful slurries in his works for painting in a variety of his work; of course, he gives this step over to his audience to draw the designs on the firing-sculpture (Fig. 9.8).

In the baking step, he benefits from the audiences participation, as does Hansen (Fig. 9.9).

The following photographs of the firing-sculptures of Nina Hole, it is the people that help renew the firing-sculptures and/or throw the salt onto the fire (Figs. 9.10, 9.11 and 9.12).

## Conclusion

The potters of the world have tried to introduce ceramics globally; some of them applied the art in interior decoration, some in urban spaces in the form of sculptures and also some in the form of firing-sculptures. The firing-sculptures are ceramic structures which are baked at the site of the performance, which enables the audience to watch all performance stages during the making of the firing-sculpture and also to benefit from the artist's teachings besides observing a beautiful sculpture.



**Fig. 9.9** The audiences' participation during the baking furnace

Some artists use these capabilities to develop the art more and more and to spread it comprehensively and give their audience some instructions and responsibilities during the creation of the work. The development of technology in increasing the production of ceramic craftwork cannot be ignored.





**Fig. 9.10** Throwing the salt on the firing-sculptures of Nina Hole by audiences



**Fig. 9.11** The firing-sculptures of Nina Hole and the presence of people and their participation in the process



**Fig. 9.12** The firing-sculptures of George Hansen and the presence of people and their participation in baking the work

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**Part VI**  
**The Educational—Research**  
**and Development**

# Chapter 10

## Contextual Learning—Craft and Design in Technical and Vocational Education



Pernille Askerud and Barbara Adler

### Introduction

Development projects in the 1960s and 1970s focused on supporting industry as a driver of development and a focus on design was part of this effort. In 1977, UNIDO and the International Council of Societies of Industrial Design (ICSID) signed the Ahmedabad Declaration on Industrial Design for Development. The Plan of Action promoted design competencies as an important element in socio-economic development while emphasizing the role of design in preserving and promoting local cultural traditions. UNIDO and also UNESCO supported the Ahmedabad Declaration by commissioning research and chairing meetings that brought together a wide range of professionals to seek design-based solutions to practical challenges related to, e.g. the establishment of rural health centres or schools. These activities also stimulated more academic discussions of cross-cultural design practices with contributions from people like Victor Papanek (*Design for the Real World*), Gui Bonsiepe, A. Charterjee, ('Design in Developing Countries'), A. G. Rao and S. M. Idris ('A framework for design policies in Third World development'<sup>1</sup>).

In the last decades, however, this dialogue has had a much smaller impact on what is actually happening in development programmes and design education in many countries of the world. The cross-cultural design debate today tends to focus on high-profile projects and mainstream developments. Hence, it is clear that while advanced

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<sup>1</sup> For an overview of this literature pls. refer to Er (1997).

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economies have been exploiting design as an asset for their economic advantage, developing countries mostly have disregarded design as a tool for economic and social development (see Raulik et al., 2008).

The 2013 Papanek Symposium: Emerging and Alternative Economies of Design which discussed the explosive growth of design and innovation initiatives in China and social dimensions of design and design policies in emerging economies with speakers such as Sulfikar Amir (Singapore), Vinay Venkatraman (Denmark) and Xu Ping (Shanghai) is a refreshing exception to this trend. In recent years, issues of design have also increasingly featured as an aspect of cultural diversity and sustainability agendas.

The specific conditions that led to the emergence of the modern concept and practices associated with the notion of design in industrialized societies have not existed in many of the countries and cultures we are considering in this article. Many poor areas in the world have in fact not experienced industrialization at all, but are now entering directly into a post-industrial economy requiring a very different way of doing things. While the fundamental, core elements of design exist in all human creation, the lack of the Western concept and practice of design as a methodology is a logical consequence of this development. However, as emphasized in the Ahmedabad Declaration design competences provide a useful perspective for development of crafts-based industries that may help negotiating the gap between traditional practices and new technology and the market.

In general, design practice and product design capabilities for local development appear under-researched in many countries. There is of course a language issue involved due to our limitations vis-a-vis local languages (which may be one reason that India has taken a prominent role in alternative approaches to design). The best source of information is therefore often case stories and UN reports rather than pure academic research.

In the Western part of the world, rather than a quality attached to material objects the concept of design is increasingly perceived as a central means of how we organize the world and imbue it with (cultural) meaning. In this article, we are interested in what concept of design is implied in typical design training activities in different cultural context (Morocco, India, Thailand, Mexico and Singapore). Drawing on research and project experience from many countries, the article outlines approaches and efforts to establish design competence with a particular view to the fostering of sustainable economic and cultural development in local communities. These observations may stimulate an awareness of the important impact of notions of design in terms of innovation and cultural diversity and may even give rise to more research into these issues.

## **Development, Design and Cultural Industries**

Cultural industries have increasingly become a focus of enterprise and investment. The shift towards knowledge-based production is not only a shift from one kind of

product to other goods and services; it is a fundamental shift in the way in which production/businesses are organized and in the way we live and understand ourselves. Changes in the field of education and the variety of occupations stimulated by the introduction of new technology are therefore part of this shift. Increasingly, the development of cultural industries is adopted as a strategy for local economic growth in poorer regions. In very poor and rural communities, these efforts are often, though not always, focusing on development of crafts-based industries.

In this context, the notion of design is almost totally absent—and where the term is known and used, it is primarily thought of as synonymous with *fashion design*, perceived as a purely aesthetic phenomenon closely related to modern mass media and consumer culture, whereas design (and entrepreneurship) could be seen as key to bridging the gap between traditional practice and knowledge, new technology and the diverse demands of the market place.

## Concepts of Quality

The introduction of new technology and new working procedures is an aspect of cultural industries development. All too often the knowledge and skills, and the spirit needed to underpin this transformation are lacking as they are neither taught in schools nor included in the training offered to professionals working within cultural industries. Clashing with proven traditional practice and knowledge, new products therefore tend to exist in a space where traditional notions of quality no longer apply, presenting a serious challenge to quality, innovation, as well as to the preservation of cultural diversity. The crafts industries are characterized by the degree in which design determines the quality and value of produced goods and services. Derived from evolving cultural knowledge and expressions of culture and heritage, the competitive edge and quality of designed products is linked to the innovative potential of a diversity of cultural expressions. In this respect, there is no fundamental difference between traditional arts and crafts and the more modern expressions of design that constitute a continuum of products stretching from the traditional to the modern. As a creative capital, traditional art/crafts are embedded with the knowledge, worldview and the technical disciplines of a specific culture, and so ensure the distinctive basis for skills development and innovation that is necessary for the successful participation in a global market—not only in the area of crafts but also as an entry point to other aspects of the creative economy.

While the link between cultural industries and cultural diversity is indisputable it is not always positive. It is vitally important not to overly simplify the matter by, e.g. copying training or business models mindlessly from one place to another. Cultural industries cover a wide range of different products and activities and because of the link to culture the context must be considered seriously when planning for the sector's development in a particular place.

While there is nothing wrong with innovation and simplification based on traditional designs, the specific cultural knowledge and its expressions through symbols,

colours, design and ways of doing things are often underpinning a product's creative quality and originality. Hence, the important consideration here is **how to keep the cultural knowledge that is embedded in more traditional products and practice alive** so that it will continue to provide a source of inspiration and guidance—a **creative capital for future creation and product development**.

Training/education relating to *design knowledge* as a field of technical research is therefore emerging to meet an urgent need in places where only rarely has it been represented in the local tradition. The need to identify specific training needs, curricula and related practical institutional support mechanisms suitable to this context is a challenge we need to take on. As described above, we are neither the only ones nor the first, to point to this situation but the **call for a design policy and more structured approaches to the application of design skills** remains unanswered in most developing countries.

So how do we define design and design competence in a context that transcends the European cultural experience?

We are looking at design as a conceptual aspect of creation; design as a skill— aspiring to the sublime or the artistic. When it transcends itself it becomes art. If we define design as the articulation of the relationship between materials, functions and beauty (aesthetics) we may agree that although the conditions for the articulation are often embedded in a European cultural context, this context may change depending on the designer. We may also agree that the conditions for the articulation of materials, functions and beauty have been fundamentally altered by the technological revolution. Another important and variable factor is the perception of the designer's individualism or his/her role as a catalyst for a more collective design process. The essence of designing as a process, however, remains the same— reflecting a fundamental aspect of the way human beings live and build a way of life, their aspirations. In this way, design is also a powerful tool/skill to negotiate change: evolving economies, social conditions, new materials, norms, aesthetics, etc.

## What Concept of Design?

During the recent decades, in the European context, the concept of design has become increasingly abstract. Originally describing the process of giving form to matter, the trend is towards design as a tool or methodology to plan and control the creative process, in order to ensure the quality and replicability (unica, prototype, documentation) of individual products in a dialogue with the market and its demands. 'Controlling standards to achieve individuality' as a design concept has proven so useful that this way of design thinking has entered almost every area of our lives and has become an indicator of quality in itself. However, the concept of design is



increasingly perceived as a ‘way of thinking’—a means to organize the world and imbue it with (cultural) meaning.<sup>2</sup>

The modern practices and concepts of ‘design’ are the result of a particular historical development and context; it emerged with the systematic application of market and industry mechanisms to production and the subsequent division of labour and specializations on the assembly line. Over the last decades, the concept of design has evolved to mean different things in different contexts.

The specific conditions that led to the emergence of the modern concepts and practices associated with the notion of design in industrialized societies have, however, not existed in many of the countries and cultures we are considering here. Many of these poorer countries and areas in the world have in fact not experienced industrialization at all, but are now entering directly into a post-industrial economy requiring a very different way of doing things. While the fundamental, core elements of design exist in all human creation, the lack of the concept and practice of design as a methodology is a logical consequence of this development path.

The successful achievement of culture-based commercial production and cultural preservation/development is a highly complex affair in which cultural diversity is more often threatened than cultivated. Caught between traditional practice and market demands, the development of commercially viable products does not necessarily contribute to a deeper understanding of a specific culture. Indeed, it is often only skimming the surface of the wealth of intangible, cultural knowledge embedded in excellent examples of traditional art and crafts. Design education may be one way to strengthen the awareness of how cultural identity and cultural diversity may enrich modern design.

## **Trends from Design Education Outside Europe**

The application of western training curricula to developing countries is fraught with difficulties and we are slowly recognizing that it only works if models are not copied but used for the elaboration of similar activities with proper reference to local knowledge and cultural values. Entrepreneurship and design are concepts that increasingly are used in development projects to denote a more holistic approach to business development and to represent the embodiment of an approach or attitude to education and work. Drawing on project experience from many countries and our on-going research, the following will very briefly outline and discuss some well-tried approaches and efforts to establish design competence in different cultural contexts (Morocco, India, Thailand, Mexico and Singapore). The case studies reflect different trends in the management of creativity as a strategy for economic and social development and implicitly represent various concepts of design. These variations may in turn further

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<sup>2</sup> See for example “The Aesthetics of Imagination in Design” by Mads Nygaard Folkmann, MIT Press, 2013.

a discussion of how design competences support the integration of sustainable socio-economic change and impact on creativity, innovation and cultural diversity vis-à-vis local development.

#### Strategies and Methodologies

Case	Ownership	Characteristics
MOROCCO	NGO project	Grass-roots Training—indigenous Business support training
THAILAND	Gvt. programme	Top-down approach Cluster development Business support structure
MEXICO	Individual project(s)	Art-based and storytelling Business development Community development
SINGAPORE	Gvt. programme	National needs-based framework approach Mapping and planning (skill-set) to facilitate skills/competence building for individuals in areas that have been identified for their economic market potential
INDIA	Individual programme	Classic institution Training approach Research, dialogue Hold hands

## Morocco: Women Decision-Making and Public Leadership

### *Background*

Cultural industries, like crafts, furniture making and handlooms, have a strong basis in many communities. With proper policy attention and investment, they hold significant growth potential for the cultural industries sector in many developing countries. Over the years, a number of projects have been designed around this potential, harnessing the crafts production and cultural tourism centred on heritage sites as a motor for economic development among poorer segments of the population.

In general, these kinds of business activities are the focus of individual projects driven either by entrepreneurs or as part of development projects funded by the government or external international assistance, or by NGOs. More often than not, the activities fail to maintain the economic growth foreseen in the projects as soon as external support stops due to restraints in terms of lacking infra-structure or inadequate funding. This is partly due to the relative invisibility and the low status of the handicraft and artisan-based activities in public policy and planning. In order to change this situation, the craft and artisan sector needs to:



**Fig. 10.1** Women from the Femmes Artisanes Marrakech develop new designs based on traditional practice and patterns. Photograph Gitte Young

- gain wider recognition for its potential contribution: economically, in terms of employment, and as a base for skill-based innovation;
- introduce quality control measures and production standards;
- professionalize both production and sales;
- create access for non-formal business activities to financing and investment;
- upgrade training opportunities through the validation of, e.g. non-formal apprentice systems.

Some of the most successful of these projects are cluster-development projects. There is therefore a nascent understanding that more structured and comprehensive strategy development is needed to realize the potential of these industries for economic development and poverty alleviation (Fig. 10.1).

### ***Methodology***

In 2009, the Danish Design School approached two development organizations for economic support and collaboration in testing and implementing a dialogue approach to project formulation for economic empowerment of women based on craft manufacture. The project proposed to design and implement a dialogue project aimed at empowering crafts women in Morocco through the upgrading of their traditional crafts activities. The project dialogue is based on the fundamental ‘rapport’ and the potential for dialogue and trust based on this understanding between women who—albeit from different cultures—share the practical experience of being handicraft producers. Hence, the core of the project is a two-way teaching–learning experience.

Based on the initial dialogue, design students from Denmark support the members of the Moroccan all-women’s cooperative in the identification and training of the

skills and tools necessary not only for product development (using design tools that enable the women to develop new designs based on their own traditions) but also to take control of all other aspects of the production (incl. purchasing, organizing production, sales and marketing, budget control and communications), which have normally often been undertaken by the men in the community. In short, the women in the cooperative learn to handle all of the jobs connected to running a business, so they are not dependent on outside middlemen to do the purchasing and sales and they can control where the profits go. By gaining first-hand insight in the commercial aspects of handicraft production, however, the women gain a deeper understanding of market demand and of the issues of price and quality, which then feeds into a more successful and realistic production plan. The necessity of building the training capacity needed to transfer these design and business skills to more women in the future is part of this support (Fig. 10.2).

The Danish students, on the other hand, acquire new skills and get hands-on experience related to the dynamics between cultural traditions and market demand, and how design skills may be applied in different cultural contexts—all of it useful knowledge to bring back to working in a globalized design market.



**Fig. 10.2** Hayat and Khadija working with ornament patterns to be used for embroidery. Photograph Sine Stenbek Andersen

## *Design Paradigm*

The project is quite similar to very many other projects being implemented in the world in that it focuses on women, on participation (a grass-roots approach), on the upgrading of skills and products, and in the emphasis of the need to reach a market through product development, technology and marketing skills. This project, however, is interesting because design knowledge and business knowledge are integrated not only within the same training process but also as equally important skills to be acquired by each participant. The different skills are therefore taught by trainers who also have this dual competence. Not only, then, is design and business perceived as equally important aspects of the same process but the project makes a conscious effort not to separate this knowledge in terms of the people involved.

This extension of the concept of design is very much in line with the concepts introduced to the design colleges of Europe in the 90s and very closely linked to the needs and perspective of trade and competition in open-market economies. It was greatly influenced by the experience and needs of large-scale corporate companies' vis-à-vis the 'global market'. However, in this context, the paradigm is being brought into a more local context where the ownership of the production is in focus in the effort (a) for the Moroccan women—to empower the women involved by making them more competent in the commercial dealings related to their production and using this new insight for product development; and (b) for the Danish design students—to re-connect with the forces that drive creativity in relation to the production of unique, artisanal crafts aimed at a smaller, local market. Through the dialogue between different cultural and social experience, new ideas may emerge not only in terms of goods but also in terms of new approaches and business models.

In order to design and develop marketable quality products evolved from existing traditional skills and knowledge, new skills and knowledge is needed. Identifying these new skills and ensuring that they are available is part of the challenge. Some of the problems that have been identified in this respect include:

- Lack of specialization (no division of labour)
- Lack of standard measurements and of quality
- Lack of scale and volume of the production
- Lack of technology and technical skills
- Difficulty in identifying and meeting market requirements
- Lack of training institutions and political perspective.

The concept of design is used to refer to at least two rather different aspects of creation. On one hand, it refers to design as a tool or a skill to negotiate change: e.g. changing work conditions (technology), changing materials, new functions, different norms and values, etc.—and to identify creative solutions that satisfy demands for both functionality and beauty within these new parameters. Within this understanding, design can also function as a method for analysing and discussing the relation between form and function within the context of traditional cultures and to identify standards of different kinds. The concept of design is, on the other hand,

also used more narrowly as a tool/skill used to plan and control the creative process, in order to ensure the quality and replicability (prototype) of a product.

Design knowledge in both senses described above are useful in order for a culture to seek solutions to the challenges posed on one hand by traditional culture and knowledge and, on the other, the changes that a modern globalized world economy imposes on that very culture itself.

## **Thailand: OTOP**

### ***Background***

The *One Tambon One Product* (OTOP) programme originated in Japan but has become a flagship of the Thai export strategy in recent years. Established in 2001 with the objective of improving the farmers' standard of living through a nationwide programme of support for artisan-based entrepreneurship, the programme is similar in its objectives to the Morocco project but the approach is different:

#### OTOP Principal Objectives

- To contribute to the identification of local natural and cultural resources that have a potential for the economic revitalization of regions.
- To be a factor in the promotion of culturally value-added products.
- To encourage value addition, with unique regional features, in local primary commodities.
- To encourage the making of products that are traditionally village-specific and to promote self-respect in villages and regions.
- To contribute to making regional brands competitive in the global market.
- To be a factor in the promotion of good leadership (a crucial factor for success).
- To contribute to the promotion of rural entrepreneurial development and networking (Fig. 10.3).

### ***Methodology***

Applying local knowledge and skills handed down from generation to generation, OTOP products must be hand-made, using locally available materials and resources to manufacture goods that are, or will become, competitive in local and export markets. These specialty products are based on the originality, culture and tradition of each rural locality.

No subsidies are provided, but technical assistance to improve product quality and support for marketing are provided within the project. Today, thousands of *tambons* (village sub-districts) have been incorporated into the project that is now operating in most of the provinces of Thailand.

**Fig. 10.3** Thai design.  
Photograph Pernille Askerud



Typical OTOP products are handicrafts, textiles, cotton and silk garments, pottery, woven handicrafts, artistry items, gifts, fashion accessories, household items, food crafts and many other articles indigenous to each community. The programme is considered very successful; however, it remains unclear exactly how sustainable the programme model is, how cost-efficient it is, and how much it actually benefits the local producers (Fig. 10.4).

### *Design Paradigm*

The OTOP programme has undoubtedly had an enormous impact on the style and kind of handicraft products produced today in Thailand and has also certainly promoted creative industry development more broadly by recognizing creative skills and production.

The OTOP programme does not explicitly state the principles for turning traditional handicrafts into marketable commodities, and the concept of design is not discussed in this context. However, the products produced under the programme feature a common design quality that has been achieved through the identification and application of a series of quality standards related to materials, sizes, packaging,

**Fig. 10.4** Thai traditional design features. Photograph Pernille Askerud



colours, etc. This ‘brand identity’ is enhanced through certification and monitoring procedures, allowing the products to be produced and sold in great quantities in the domestic and foreign markets.

Even though design is not discussed explicitly, the programme has created a methodology for wide and rapid application of new techniques and skills and a standard that carries with it a concept of design not unlike Western models. As these it is a model that is closely tied to the commercialization and competitiveness of the products.

The extent to which the OTOP programme supports the conservation of traditional knowledge related to particular products or procedures, on the other hand, is more questionable just as knowledge about the values, identities and symbolic meaning linked to craft production to a great extent seems to have disappeared. Some would argue that the simplification or stripping of cultural meaning from the products in the long run will make these designs less appealing and thus also less competitive.



## Mexico—Mata Ortiz

### *Background*

Craft communities centred around one or more excellent artists represent a very different model for the development of successful cultural industries based on crafts—and especially the training and transfer of skills and knowledge in this respect. But also, here design and quality are the keys to successful commercial enterprise (Fig. 10.5).

Mata Ortiz, a small village in northern Mexico, has recently seen a revival of an ancient Mesoamerican pottery tradition inspired by pottery from the ancient city of Paquimé. Largely due to the efforts of Juan Quezada and his extended family and neighbours, the old production methods were explored and old craft skills redeveloped, enabling the use of ancient shapes and patterns of ornamentation as inspiration in new and individual expressions. Mata Ortiz pots are hand-built without the use of a potter's wheel. Shaping, polishing and painting the clay is entirely done by hand. All materials and tools originate from locally available sources. The preferred fuel for the low-temperature firing is grass-fed cow manure or wood chips (Fig. 10.6).

**Fig. 10.5** Mata Ortiz design.  
Photograph Barbara Adler



**Fig. 10.6** Mata Ortiz design.  
Photograph Barbara Adler



### *Design Paradigm*

Young potters from the area have been attracted to the Mata Ortiz revival and have joined Quezada and his family. New potting families developed and the art movement continues to expand. A vibrant flow of new ideas, freed from the restraints of traditional practices or gender appointed functions, has enabled the pottery of Mata Ortiz to avoid derivative repetition common to many folk art movements. This blend of cultural expression, economic need and artistic freedom has produced a unique artistic movement in the community, contributing to keeping cultural traditions and diversity alive.

### **Singapore**

In other places, e.g. Singapore, a very different approach has been taken to the development of creative industries. Identifying the lack of knowledge and skills as a critical obstacle to economic growth Singapore has developed a *competency framework* aimed at identifying and developing the creative competencies needed in the future by businesses and industries, including the related occupational profiles in terms of sets of skills needed for successful employment.

## *Methodology*

The *Creative Industries Workforce Skills Qualifications* (CI WSQ) is a national continuing education and training (CET) framework for professionals working in the most important sectors of the creative industries in Singapore. A joint effort by the Singapore Workforce Development Agency (WDA), the Ministry of Information, Culture and Arts (MICA) and industry players, the CI WSQ is a national credentialing system that trains, develops, assesses and recognizes the creative industries workforce for competencies needed to stay employable. Offering qualifications at all levels, CIWSQ include three defined sectors:

- Arts and Culture Workforce Skills Qualifications (WSQ)
- Design Workforce Skills Qualifications (WSQ)
- Media and Communications Workforce Skills Qualifications (WSQ) (Fig. 10.7).

**Fig. 10.7** Street ornamentation in Singapore. Photograph Pernille Askerud



## Model of Singapore Framework



The framework approach is especially important for the creative industries because so many aspects and skills needed in the cultural and creative industries are not recognized as formal employment categories and therefore have largely remained invisible in connection with strategic planning and support. This combined with the creative industry’s strong dependency on new and rapidly evolving technologies means that many professional specializations are not well known and the skills and competencies involved in these sectors have not yet been well defined.

The framework is based on a systemic identification of skills, paths and occupational profiles. Compared to the other cases we have discussed, the approach taken by Singapore is fundamental and inclusive. It opens up the field and through this openness encourages participation and innovation. Because it creates awareness of the mechanics of the relationship between skills and jobs, it also enables individuals to find their own path towards employment.

### Design Paradigm

Ideally, a framework like this could provide a tool for including creativity and the dialogue about defining skills relating to creative jobs and design, including the potential for transferability of skills. In this context, however, it is important to note that while design is included as one of the three qualification areas of creative

industries, in the case of Singapore, the concept of design referred to in the framework is defined within five particular technical disciplines and skills: fashion, graphic design, exhibition, interior design and industrial design. Compared to the definition of design found in other strategic approaches that include design discussed in this paper, the Singapore Framework represents a very narrow understanding of the concept of design that in many ways seems to be fundamentally different from the trends in other places.

## India—New Approaches to Design Thinking

In addition to the traditional competencies strengthened in projects focusing on entrepreneurship development, the introduction of analytical tools used in design thinking as a field of technical research may offer training elements that would make the entrepreneurship programmes more sensitive to the cultural context and therefore more effective. What is needed are tools that will facilitate the development of appropriate solutions bridging the gaps between traditional practice, knowledge, values, new media, technology and the market. A note of caution is needed: design education programmes have already been introduced, e.g. in India and China, with almost the opposite result of what may be needed. Many of these programmes have primarily been attracting students from the educational sector rather than from the ancient craft sector, and as a consequence the introduction of new design education in India has, arguably, strengthened the alienation from the cultural knowledge that was supposed to be the basis for design work rather than contributing to its development (Fig. 10.8).

The *National Institute of Design (NID)* in Ahmedabad is, however, a very exciting example of a school that has made concerted efforts to cultivate design as a discipline that respects and integrates Indian experience and culture. Established in the 1960s with the goal of setting up a design education based on broad humanistic principles, NID is now recognized as one of the leading multidisciplinary design institutions in India. NID has played a significant role in stimulating a debate about design and the development of the concept of design in a non-Western context.

The Ahmedabad Declaration on Industrial Design for Development (1977) was a manifesto of appropriate design for the developing world. The Declaration outlined the principles for design thinking and emphasized the need for a contextualized approach:

- understanding the values of one's society and then defining a quality of life within its parameters;
- seeking local answers for local needs by using local materials and skills, while making use of advanced science and technology;
- creating new values, addressing priority needs and preserving plural identities.

Taking the lead from these principles, Gohse (1998) discusses the wholesale import of design education models in India and China over the last decade pointing



**Fig. 10.8** Field work in India

out the link between the modern design paradigm and a particular economic and social model that does not necessarily correspond well to a different cultural and social context, e.g. India. In order to make design more relevant and effective, Mr. Gohse emphasizes the need to reflect the values and knowledge of a particular social and cultural context as part of the design approach:

Design issues in Asia, I feel, have to be perceived in the context of this slowly emerging ‘new ways of seeing’ and in all the open-ended questions that are being asked... If design is perceived as an ancient activity that has gone on for several centuries rather than as a brand new profession, then our whole perception of what constitutes Asian design begins to change... The transition from seeing things in terms of continuity or discontinuity marks the principal break between traditional design and modern design... Designers who wish to address the issues of the marginalized majority must start a brand new learning process and attune themselves to different socio-economic realities and cultural behavior patterns.

While institutions like the NID is working along these lines the practical application of these ideas has nevertheless been less widespread than one could hope for. Gohse (1998) refers to an observation of Asoke Chatterjee: ‘... yet the original inspiration for bringing design to this land (India) remains virtually untouched. Basic needs ... are outside the designer’s purview, challenging the conscience of this young profession and its ancient heritage’.

## Conclusion and Concerns

As both technology and new media are revolutionizing the way we work and live; creativity, entrepreneurship and design, have emerged as key concepts to the establishment of education and training programmes needed to meet the demand for design-led change in businesses, organizations and communities (see e.g. Chick & Micklethwaite, 2011).

There is no doubt that design education is evolving rapidly in these years and that it will gain importance and become sought after in non-Western countries as well.

The kind of knowledge we are talking about here is not just to be understood as an add-on training module. To effectively support the transition to a very different (knowledge-based) economic system, these competencies must be integrated in the education system as a new discipline of practical reasoning and argumentation that is particularly suited to cultivate trouble-shooting skills and address cross-sectoral issues. In order to do so, it is indispensable to base the development of new training curricula on accurate information on the actual competencies and needs in a given socio-economic context or situation.

In more concrete terms, designers make use of tools such as placements—models that allow the designer to position and reposition the problems and issues at hand. Buchanan (2011) has described these as:

... the tools by which a designer intuitively or deliberately shapes a design situation, identifying the views of all the participants, the issues which concern them, and the invention that will serve as a working hypothesis for exploration and development. ... By using placements to discover or invent a working hypothesis, the designer establishes a principle of relevance for knowledge ... in effect, the working hypothesis that will lead to a particular product is the principle of relevance, guiding the efforts of designers to gather all available knowledge bearing on how a product is finally planned.

So, how do we define design and design competence in a context that transcends the European cultural experience and allows mainstream design education to become more inclusive and responsive to cultural diversity? Being conscious of any given cultural context, and of the cultural meanings implicit in imported models, we may use those **integrative skills of design** that support the assimilation of insight and knowledge from different spheres (e.g. cultural traditions, industrial design, engineering and marketing) into a workable solution to a problem. As these skills may be applied to potentially any matter they are also a powerful tool in the negotiation of change whether in terms of technology, materials or wider norms and conditions more broadly.

The examples we have outlined above all represent serious efforts at stimulating creative economic activities for economic and social development. We have tried to put forward the argument that various design disciplines form an important element in the successful implementation of these efforts, and that more research and thought must be given to strengthen this element in culturally sensitive ways.

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<sup>3</sup> This article is based on our own experience and writing, which obviously is indebted to many (often anonymous) people and writers. In the following are listed those references that have been influential in the analysis as well as those references directly used in the writing of the article.



# Chapter 11

## Educating in the Crafts: Role of Research Organisations in Continuing Craft Traditions



### Case Study: Design Innovation and Craft Resource Centre (DICRC), CEPT University, Ahmedabad, India

Mitraja Bais and Mansi Sathyanarayan Rao

#### Essence of Crafts

Crafts can be classified according to the material, working methods, techniques and even by the type of object produced. The various diverse crafts of India have played an integral role in shaping the society, culture and identity of its peoples for centuries, and continue to do so in the present time. Due to their strong association with indigenous communities, crafts were associated with and limited to the rural regions of India for a long period of time. Among indigenous communities, crafts found an expression, copious or scant, in the many items of traditional material culture including objects of everyday or ceremonial use, immediate build environments and even costumes and adornments for people or domesticated animals. Kamaladevi describes crafts as the indigenous creation of the ordinary people, a part of the flow of events of the common life, not cut off from the main stream (“India’s Craft Tradition” 81). Craft was a way of life, passed on from one generation to another by means of oral traditions. Among community-based craft practitioners such as potters, carpenters, metal smiths and weavers, knowledge and skills were passed on by master to the apprentice or pupil. Among families, elders taught domestic craft skills such as stitching and embroidery to the younger generations. In both these scenarios, there was an emphasis on learning through practice; for the quality of inspiration which transmits skills and competence can hardly be taught. It has to be cultivated by experience (Chattopadhyay “Crafts and the Future” 10). As a general practice, a pupil would start apprenticing at the age of 13–15 and continue learning and practicing for at least 15–20 years to be able to receive the title of a master craftsman. In present times, this long duration of apprenticeship is one of the primary reasons for shift in

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L. Joubert (ed.), *Craft Shaping Society*, Technical and Vocational Education and Training:

Issues, Concerns and Prospects 35, [https://doi.org/10.1007/978-981-16-9472-1\\_11](https://doi.org/10.1007/978-981-16-9472-1_11)

interest among younger generations of crafts people; they prefer formal education and office jobs over working laboriously in their family workshops.

Traditional Indian crafts and design have a long-standing history that dates back to ancient civilisations of Mohenjo Daro and Harappa. However, not going that far in the timeline, reviewing the position of the craft sector in the past few decades, it is evident that several factors have affected the growth of this sector. These include industrialisation, limited product range and competitive markets, to mention a few. In her essay *Catalysing Craft: Women who Shaped the Way*, Ritu Shethi fittingly describes how Mahatma Gandhi's call of *swadeshi* and *swaraj* to his fellow Indians created a radical shift and eventually led to the rise of the Indian craft sector (168). Later in the essay, she recounts the downfall of the craft sector—from the 1980s onwards, [as] government institutions became less responsive to the needs of craftspeople (173) and how this led to the question of equipping and empowering craftspeople for the changing times. In the early 1900s, Gurudev Rabindranath Tagore's innovative and far-sighted initiatives vitalised and reformed education through the setting up of the Visva Bharati at Shantiniketan in Bengal (181), followed by Kala Bhawana in 1919, where crafts were introduced into the curriculum, resulting in the revitalisation of traditional crafts.

## Formal Design Education

Design as an activity in India is as old as its culture, but as a modern profession it started only in the late 1950s, barely a decade after India became (in 1947) an independent nation and the largest democracy in the world (Balram "Design in India: The Importance of the Ahmedabad Declaration" 1). While sincere efforts were being made to revitalise traditional crafts, there was also a focus on rapid scientific and technological development after Independence in 1947. Based on Macaulay's foundations of basic education, higher education in India adapted the Western models. Design education was the latest to arrive in India. Several educational institutions in India offered courses in various fields of design such as commercial art, architecture, craft design and engineering design. Among them, National Institute of Design (NID) was one of the first major full-fledged industrial design institution to be established in India on the basis of the India Report's recommendations (Balaram "Design Pedagogy in India: A Perspective" 14–15). Reaffirming this assertion, Ashoke Chatterjee states that the NID was the first attempt by any developing country to use the design disciplines inherited from the Bauhaus as a tool for national regeneration ("Design in India: The Experience of Transition" 5).

Formal design institutions in India adhere to a curriculum or course structure that imparts knowledge building through theoretical subjects as well as allows individuals to explore their creativity by learning on their own through studio exercises, individual guidance and group discussions. Much of the design education in India is project-based; students are encouraged to take an empirical, intuitive approach to design problems and to experiment freely with new forms, new materials and

processes and to develop original, creative thinking (Balaram “Design Pedagogy in India: A Perspective” 17). Along with this, an emphasis is laid on documentation and research of traditional art and craft practices. Though these practices carry within themselves an enormous wealth of knowledge and skills, they are not tangible owing to the oral nature of knowledge transmission and this makes documentation and research all the more essential.

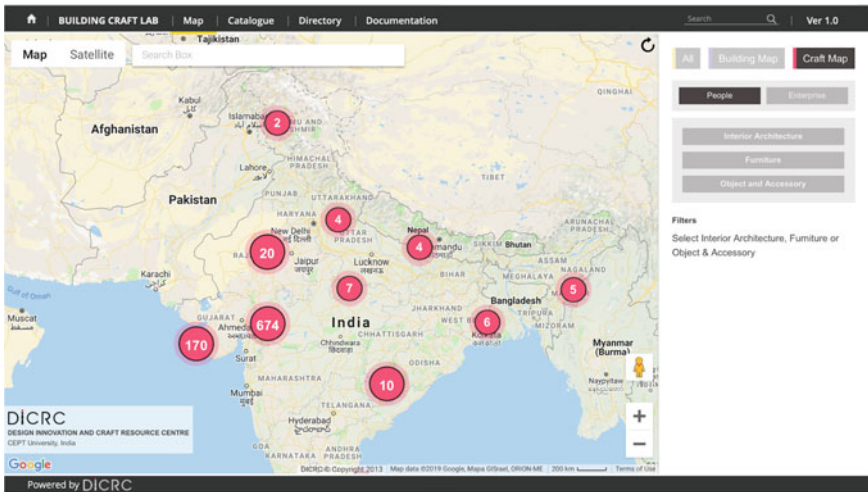
At this point, it is important to address the fact that before the establishment of formal design education, craftspeople were principal designers as well as makers. Introduction of design education has played a considerable role in shaping a new India. However, as much as it has strived to embrace traditional craftspeople and practices, there remains an apparent disparity between individuals trained through formal design education and the orally trained traditional craftspeople. While illiteracy is the primary struggle for craftspeople, designers lack the dexterity possessed by craftspeople as a result of years formal design institutions and continuous efforts are in process to establish ways in which designers and craftspeople can work together in the long run.

## **Design Education and the Crafts**

Most Indian crafts can be considered living traditions. It is imperative to understand the craft processes through documentation and research to enable application of the traditional knowledge to contemporary design needs in innovative ways. Balram appropriately describes it as leaping from past traditions to future aspirations; connecting traditional materials, forms, techniques and wisdom to the world’s future materials, techniques, forms and needs (“Design Pedagogy in India: A Perspective” 21). In present times, an increasing number of design institutes, organisations and practitioners not only promote crafts but also work alongside craftspeople to meet contemporary design requirements using traditional craft skills. One such organisation is Design Innovation and Craft Resource Centre (DICRC)—a Centre of Excellence under CEPT Research and Development Foundation (CRDF), the research arm of CEPT University, India. DICRC was established in 2011 by Faculty of Design, CEPT University and has since been a frontrunner in research and development of traditional and vernacular building crafts of India. The main aim of DICRC is to identify, understand, research, reposition and re-engage crafts and craftspeople in building and habitat sector. Its major activities are to conduct research, documentation, organise programmes, workshops, projects related to crafts and to integrate them in the current Interior-Architecture education as well as practice.

## Craft Directory

Along with the standard practice of research and documentation, DICRC has developed innovative approaches to support craft education. One of them is Real Time Visual Mapping (RTVM). RTVM is a unique mapping software developed by DICRC for mapping traditional built-forms and crafts. The software runs on tablet data entry system and is accessible using mobile technology. It allows documentation and data collection of crafts and craftspeople, including but not limited to realtime geographical location, images and other relevant details (materials, craft techniques, products, etc.) (Fig. 11.1). Information thus collected is then uploaded to a unique online open-access platform—Building Craft Lab (<http://buildingcraftlab.dicrc.in/>) in the form of Craft Repository and Craft Directory. At present, the Craft Directory comprises of nearly 900 craftspeople and craft enterprises across India. The idea behind recording and sharing this data in real time is to connect craftspeople and craft enterprises to a larger mass of people who could use their services. Most data is recorded using the RTVM is collected at craftspeople’s actual workspaces, by means of field visits. However, a small portion is collected at National Craft Fair, organised once a year by the Government of Gujarat. The National Craft Fair provides a great platform for designers to interact with craftspeople from across the county. During the National Craft Fair of 2014–2016, DICRC organised craft seminars where in distinguished design professionals as well as practising craftspeople shared their knowledge, experiences and challenges faced while working with and within the craft sector. Apart from seminars, educational initiatives undertaken at DICRC include lectures, exhibitions and craft awareness programmes. The main



**Fig. 11.1** Craft directory: interactive craft map indicating geographical location of craftspeople. *Image credit* DICRC CEPT University

aim of the educational initiatives is to generate awareness about craft and furthermore to build long-term relationships with the craft community. These initiatives comprise of various interactive and knowledge-sharing sessions for people willing to learn in-depth about the building crafts. These sessions are organised in coordination with craft communities, academicians, scholars, entrepreneurs and professionals working with crafts. Seminars, lectures, field visits to various craft clusters or organisations and knowledge sharing through exhibitions are integral components of this programme. The core idea behind each educational session and activity is to evolve the most conducive platform for exchange of knowledge between and for craftspeople, designers, architects, professionals and students.

## **Craft Innovation Workshops**

Enabling design innovation is one of the core values at DICRC. On one hand, the centre has established a strong association with local as well as national craftspeople, owing to continued association crafts and craftspeople, over the years. And on the other, the centre regularly engages with design students, professionals as it is based in CEPT University. This unique positioning has led to various interesting craft and design collaborations. The Innovation and Development wing at DICRC promotes traditional crafts and craftspeople by creating opportunities for traditional craft communities to collaborate with design students and professionals to foster products for the contemporary markets.

DICRC's Craft Innovation Workshops are based on bringing together traditional craft practices that are embedded with an inherent empirical knowledge, and formal design education to create innovative prototypes through collective knowledge of craftspeople and design participants. Each workshop focuses on a specific material and craft technique. The workshops are categorised as SMC (Space Making Craft) or SNC (Surface Narrative Craft) workshops based on the type of materials used; SMC's include materials such as bamboo, wood, metal, glass, etc., whereas SNC's deal with surface crafts including traditional art forms such as Gond, Mata ni Pachedi, Madhubani, etc. Each workshop is meticulously planned before being publicly announced (Fig. 11.2). The research team of DICRC identifies and locates master craftspeople, craftspeople and communities that form the core of the entire workshop. Master craftspeople, along with, academicians, researchers, scholars, designers, industry experts collaboratively evolve the design brief and modules for each workshop. Keeping in consideration the materials, its craft techniques and the framework for the workshop, the duration is fixed which ranges from 3 to 15 days. Once the basic framework and detailed schedule is set up participants are invited by means of print and online media.

The craft and design participants work together in groups for the process of co-creation. Knowledge building is given prime importance and hence, several lectures, field visits, site visits and brainstorming sessions are organised during the course of the workshops (Fig. 11.3). The objective of design innovation workshops is to



**Fig. 11.2** Craft innovation workshop—Earth craft workshop: a group of design students and earth craftspeople pose with their innovation prototype in the background. *Image credit* DICRC, CEPT University



**Fig. 11.3** Craft innovation workshop—metal craft workshop: design students and metal craftspeople visit a metal craft (repoussé and chase) workshop as a part of field visits. *Image credit* DICRC, CEPT University

develop new sets of ideas through Craft–Design Process by bringing diverse people together which in turn will help in uplifting the value of crafts in society. These workshops expose design student to hands on craft techniques and craft processes that help cultivate the value of traditional hand skills among the younger generations. To the craftspeople who are orally trained, they provide a glimpse of formal design education, design software and critical thinking skills. Moreover, the workshops reinstate the fact that interdependence of craft and design education is imperative for the success of both these disciplines. The innovative craft–design outputs that are generated during the workshop are fed into craft and design practices lending new perspective to the craft field. Till now, DICRC has conducted SMC workshops based on bamboo, wood, metal, glass and earth, as well as several SNC workshops in association with Gond and Mata ni Pachedi artisans.

Each workshop is thoroughly documented and catalogued with all detailed information. The data is further processed for dissemination. The information about craftspeople is categorically stored thus contributing as a resource for craftspeople directory. This becomes a basis for networking and connecting craftspeople with production units, design professionals and organisations.

## **Craft Innovation Studio**

Craft Innovation Studio is DICRC's initiative to promote crafts and facilitate co-creation among experts in the field of craft, education, design, marketing and private as well as government enterprises. The intention is to invite design interns and fellows to develop innovation in crafts and/or innovation through crafts by helping them network with local craftspeople, organisations, institutions and industries. The aim of this programme is to develop a Craft–Design Product or a system through the Craft–Design Process (Figs. 11.4 and 11.5).

Craft Innovation Studio is based on the idea of synergetic innovations and is usually focused on a particular craft, community or material. Ideas with reference to the chosen craft form are discussed through brain storming and interactive sessions; these take place at DICRC as well as the craftspeople's workshops. Craft demonstrations, market explorations and field visits are arranged to gain an in-depth understanding of the craft form. The programme provides interns and fellows with a unique opportunity to work in association with craftspeople, often carrying out hands-on explorations at their craft workshops. This aids in gaining a wholistic understanding of the craft and craft process. The ideas and systems thus formulated are developed further by employing the skills and knowledge of the craftspeople resulting in significant design innovations or product development. The tangible outputs are connected to the market with the help of individuals and organisations already established in the market. Each programme is conducted over a period of 4–16 weeks and is open to design professionals, master craftspeople, scholars, researchers, entrepreneurs and students from the field of Craft, Design and Architecture.



**Fig. 11.4** Craft innovation studio (2014)—narrative ceramics: example of a prototype created by Ceramist and Fellow David Gray (from Scotland) in collaboration with traditional Gond artisans—Kaushal Prasad Tekam, Shambu Shyam and Kalabai Shyam (who is a national award winner) from Madhya Pradesh, India, and facilitators—Clay Club, Ahmedabad. *Image credit* DICRC, CEPT University



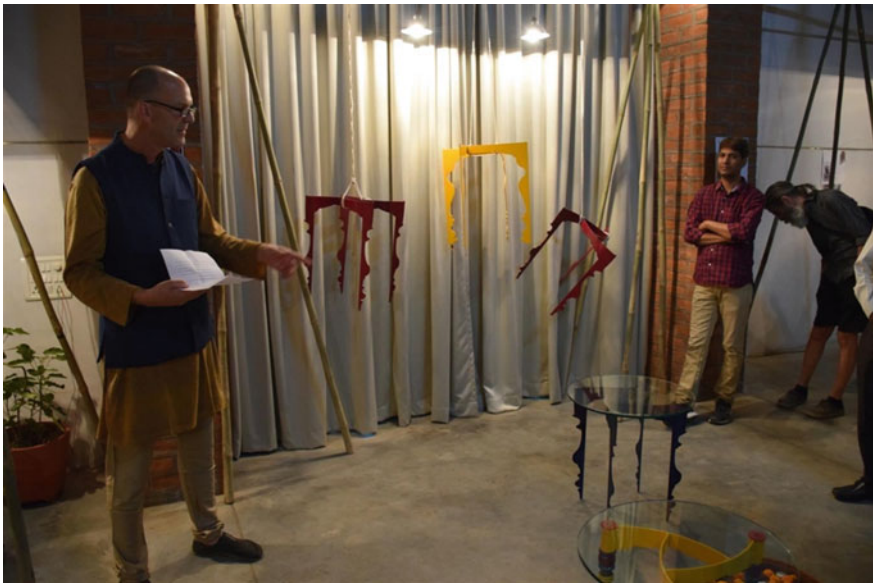
**Fig. 11.5** Craft innovation studio (2014)—narrative ceramics: example of a prototype created by Ceramist and Fellow David Gray (from Scotland) in collaboration with traditional Gond artisans—Kaushal Prasad Tekam, Shambu Shyam and Kalabai Shyam (who is a national award winner) from Madhya Pradesh, India, and facilitators—Clay Club, Ahmedabad. *Image credit* DICRC, CEPT University



The primary intention of Craft Innovation Studio is to bring and utilise design and design thinking to create new sets of innovation in crafts and craft practices. Designers and craftspeople work together to bring new values to both the fields—craft and design. Each project is thoroughly documented and the output is disseminated through various print and online medium.

## Conclusion

It would be apt to state that India has a unique advantage when it comes to craft and design. It possesses a wealth of traditional crafts and crafts communities, as well as, a large number of design institutions, many of which are internationally recognised. The value of traditional Indian crafts lies in its empirical knowledge as well as the sinfulness of its craftspeople and craft communities. While formal design education has the advantage of critical thinking and technological advancements. There are several successful examples of craft and design collaboration that demonstrate the strength of both the fields and their capacity to foster significant innovations that could benefit both sector in the long run (Fig. 11.6).



**Fig. 11.6** Craft innovation studio (2016): fellow Prof. Chris Martin addressing the audience at the exhibition of his furniture prototypes created in collaboration with various craftspeople (wood, metal and glass) during the craft innovation studio (2016)

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# Chapter 12

## Crafting Higher Education in the UK: Tensions Between Policy and Practice



Lauren England

### Introduction

This chapter explores tensions between UK policy and craft higher education (HE). Reflecting on recent creative industries (CI) and education policies, and research on craft HE, it seeks to present the implications of growing economic and employability agendas. The chapter begins by discussing the current HE environment, referencing recent policy and government proposals that influence creative HE. From this, contradictions are highlighted in the simultaneous advocacy for the CI as an economic growth sector and devaluation of creative educational pathways. Findings from research conducted at four craft HE providers in England is then used to highlight key tensions between policy and practice from the perspective of educators. The chapter concludes with reflections on how economic arguments could be used pragmatically by the craft sector, and a call for further research into the value of craft and the impact of arts education disinvestment.

### Crafting Context

Craft's popularity and position in the UK's political consciousness has waxed and waned over the years. Frayling (2012) has been sceptical of the differing viewpoints of policymakers regarding crafts training models (Higher and Further Education and apprenticeships), highlighting a lack of unilateral support. Jakob and Thomas (2015) also note the importance of personal investment in advancing the craft agenda, both among craft sector stakeholders and policymakers who provide an 'open ear' within the walls of Westminster. The waning of craft's political zeitgeist could then have

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been predicted by changes in the cabinet in 2012, the escalation of economic growth rhetoric in the cultural and CI agenda (Flew & Cunningham, 2010) and the rising supremacy of STEM over STEAM (Last, 2017).

Craft has also had a complicated relationship with national measurements of economic value. The UK's CI are heralded as a high growth sector, contributing £92 billion Gross Value Added (GVA) to the economy and supporting two million jobs (BEIS & DCMS, 2018). Creative occupations have also been championed as being more “future-proof” and at a lower risk of automation (Bakhshi & Mateos-Garcia, 2014). However, in 2014, the DCMS proposed to remove Craft from the classification of CI due to difficulty in measuring the sector's diverse economic activities. The Crafts Council lobbied against this and were successful in securing Craft's position in the CI classification by evidencing a £746 m GVA contribution of crafts businesses, rising to £3.4 billion GVA including occupations outside of craft industries (TBR, 2014). Subsequent research also highlighted that craft skills and knowledge have a strong economic impact and significant potential to drive further growth and innovation in other sectors (KPMG, 2016). This economic value is accompanied by wide-ranging social benefits (Schwarz & Yair, 2010), including health and well-being (Yair, 2011a), something which has in part been acknowledged in the development of social and arts and craft prescribing (Romer, 2018). However, in garnering political support such findings appear to carry less weight than evidence of economic growth.

Championing growth and job creation potential rather than the delivery of great culture and creativity (Garnham, 2005; O'Brien, 2013), UK cultural and CI policy illustrates the extent of neoliberalism's hold over politics, society and the economy. The UK's Industrial Strategy (BEIS, 2017) and CI Sector Deal (BEIS & DCMS, 2018) are resolutely aligned with the knowledge economy (Howkins, 2002; Leadbeater & Oakley, 1999) and although the Sector Deal did acknowledge the need for skills and talent development, attention was given to digital business and improving digital and computing skills—‘the UK's world-class creative industries, which cover film, TV and video games, are growing at twice the rate of the economy as a whole and are heavily reliant on STEM skills’ (BEIS, 2017: 104). The continual emphasis on the importance of STEM skills for the future of the CI, coupled with a failure to address, or even acknowledge the decline in arts education, represents a fundamental flaw in political understanding (Creative Industries Federation, 2017) of the diverse sectors that fall under the banner of CI. It also negatively impacts the talent pipeline (Bennett, 2018; Last, 2017).

## Education

HE produces human capital for all sectors including the CIs (Comunian et al., 2015; Connell, 2013) and this role is acknowledged by government (BEIS & DCMS, 2018). HE also remains a popular route into craft careers (Crafts Council, 2016; Crafts

Council et al., 2012; Hunt et al., 2010) and HE providers are critical to the development of the overall craft sector, particularly in the provision of infrastructure, formal training, access to research and development resources that facilitate innovation, funding and employment (teaching) opportunities (Schwarz & Yair, 2010; Yair, 2011b). Comunian and England (2019) also identify the role of HE in preserving and disseminating craft practices in challenging economic climates. Changes in infrastructure, funding, policy and research agendas therefore pose a significant threat to the sector (Yair, 2011b).

University politics and wider government education agendas have long influenced craft (Candlin, 2001; Yair, 2011a). A New Labour drive to increase participation and access across UK HE in the late 90s (Kettley, 2007) saw previously independent Art Schools merged with university faculties (Banks & Oakley, 2016; Orr & Shreeve, 2017). While bringing craft into the HE system elevated its status to an academic discipline (Houghton, 2013), it also introduced regulation and academic frameworks where ‘university bureaucrats and senior managers demand that the art school mirror the organisational structures, curricula, and prudent use of space that are the conventions in other disciplines’ (Buckley & Conomos, 2009: 24). It is therefore important to consider how contemporary craft has evolved within the HE system and the challenges it subsequently encounters when faced with policies and decision-making based on economic rationality. In this chapter, it is the current educational environment of ‘conservative policy and market-orientated educational reform’ that is explored.

## Participation and Provision

In 2012, higher rate fees were introduced and arts degree applications subsequently declined (Banks & Oakley, 2016: 50)—there was a  $-16\%$  drop in applications between 2011 and 2012 (UCAS, 2018). While the numbers recovered to a certain extent, there has been continuous decline in applications since 2016, exacerbated by a demographic decline in the university-age population (Universities UK, 2017). Table 12.1 illustrates the decline in participation in all craft and core craft subjects (i.e. glass, ceramics, jewellery, textiles, furniture, metal crafts, etc.) at undergraduate level between 2011/12 and 2014/15 (last available data).

While this chapter focuses on undergraduate degrees in HE, it is also important to consider other areas of decline in primary and secondary craft education as this directly impacts recruitment for creative degree programmes. A disinvestment trend in arts education can be observed across the UK associated with the decline in uptake of arts subjects in schools, the introduction of educational performance frameworks, perceptions of the value of arts education among pupils and parents and a political emphasis on STEM over STEAM (Cultural Learning Alliance, 2017; Last, 2017).

**Table 12.1** Craft HE participation

HE participation	All crafts subjects			Core crafts subjects		
Year	Student numbers	Year-on-year change		Student numbers	Year-on-year change	
2011/12	18,300	–	–	7310	–	–
2012/13	17,710	–590	–3%	7610	300	4%
2013/14	17,050	–660	–4%	6650	–960	–13%
2014/15	16,350	–700	–4%	6010	–640	–10%
2011–2015	–	–1950	–11%	–	–1300	–18%

Source HESA/Crafts Council (2016)

**Table 12.2** Craft HE provision

HE provision	Crafts all			Crafts core		
Year	Courses	Year-on-year change		Courses	Year-on-year change	
2011/12	503	–	–	235	–	–
2012/13	441	–62	–12%	212	–23	– 10%
2013/14	450	9	2%	207	–5	– 2%
2014/15	414	–36	–8%	213	6	3%
2015/16	407	–7	–2%	196	–17	– 8%
2011–2016	–	–96	–19%	–	–39	– 17%

Source UCAS/Crafts Council (2016)

Data on national GCSE participation indicates a –25.6% decline in arts entries<sup>1</sup> over the last 5 years (Ofqual, 2018) with the greatest reduction in Design and Technology (–42% decline over the same period). Reduced funding and pressure on HE providers to ‘raise staff-to-student ratios and reduce hours of practice and study’ (Warwick Commission, 2015: 48) is also linked with a decline in craft and other specialist creative courses at HE level, as illustrated in Table 12.2.

This all points to a shift away from material and equipment intensive teaching, and thus a reduction in the focus on 3D learning. There are connections here with the ontological separation of the head and the hand (Guéry & Deleule, 2014), and hierarchical value systems that have been applied to different types of education, in which manual activity is devalued in the rise of the knowledge economy (Gibson & Carr, 2018). Ashley-Smith (2016: 122) suggests the discouragement of manual skill development in education is not so much a conscious act as ‘a mixture of risk aversion, class discrimination, academic snobbery and economic opportunism’. The full, long-term impact of this decline in arts education on the craft sector, wider CI and the economy remains unclear, although there has already been negative effects on the

<sup>1</sup> Art & design; Design & technology; Drama; Media/film/TV studies; Music; Performing/expressive arts.

HE system (Last, 2017). It is therefore important to challenge the entanglement of craft practice and education in broader agendas for HE and training reform.

## Marketisation and Neoliberal Agendas for HE

As the CI agenda has turned towards economic value, so has the public and political debate around HE, primarily over what represents “value for money”. So far this has emphasised the cost of going to university and the return on investment for students (graduate premiums in salaries), which has been critiqued for its blunt approach without consideration of sector or geographical economic variations (Hunt, 2018). This represents growing ideological conflict between the role of HE institutions as spaces for learning and development against demands for immediate ‘graduate success’ determined by salary and tax contributions. The latter was manifested in the agenda for the Post-18 Education Funding Review, aka Augar Review (2018–19) (DfE, 2018).

The shift towards marketisation and economic rationality has been well documented (Brown & Carasso, 2013; Lynch, 2006; Molesworth et al., 2010; Speers & Wilson, 2018). Today’s universities are preoccupied with reputation management (Lynch, 2015), cost efficiency, targets, performance measures and being seen to deliver “value for money” (Nixon, 2004), while increased global competition and sector growth creates additional pressures for adaptability and resilience. The neoliberal agenda—to ‘reform institutions, systems, subjects, and behaviours to render them instrumental for capital accumulation’ (Speers & Wilson, 2018: 524, see also Harvey, 2007)—appears to have consumed HE (Olssen & Peters, 2005), resulting in an educational system which has been “hollowed out” (Cribb & Gewirtz, 2013).

An emphasis on economic value has given rise to an instrumentalised HE system which ‘can be reduced to an economic production function’ (Olssen & Peters, 2005: 324)—in this case, getting a “good job”. While this politically charged environment impacts the HE sector as a whole, the emphasis on “value for money” disproportionately disadvantages arts and social science courses that are classed as “low value” if considered from a purely economic perspective. There is of course a debate to be had about what constitutes a “good” job. Suggestions have been made that the fees for arts degrees could be reduced to account for their relatively lower graduate outcomes compared to STEM subjects (Shipman, 2018). This would bring the UK funding system more in line with the Australia where there are already differential fees for HE subjects (Hillman, 2018).

Increased market logic and financial challenges have already resulted in course closures for some craft disciplines or their amalgamation with other subjects (Crafts Council, 2016; Partington, 2010). There has also been the loss of specialist equipment, workshop space or staff reduction, trends mirrored in Australia (Luckman et al., 2019). A key issue for crafts courses in the context of the Augar Review is that they tend to have both high material, equipment and space costs and lower than average graduate salaries, making them economically inefficient by standard measurements.

Graduate outcomes, as reported in surveys such as Destinations of Leavers of Higher Education (DLHE) survey or Longitudinal Employment Outcomes (LEO) data, also pose a problem for craft; there is a lack of accurate data on creative graduates, particularly those in early-career self-employment and portfolio careers (Hunt et al., 2010), a trend which is prominent in craft. Such measurements therefore tend to reflect negatively on creative courses when using the data to determine value for money. In the wider context of creative careers, consideration should also be given to the varied employment structures and trends between sectors, the prevalence of portfolio working (Ashton, 2015; Bridgstock et al., 2015), and unpaid or low-paid work as a pathway into further employment (Gill & Pratt, 2008; Warwick Commission, 2015). Arguably, greater consideration should be given to addressing the precarious labour environments in which creative graduates are seeking work (Gill & Pratt, 2008; Luckman, 2013), rather than demanding better market outcomes from universities.

## Tensions Between Policy and Practice

Having outlined the environment in which UK craft education currently resides, in this section, I draw from interviews with 15 craft educators (lecturers, programme leaders and technicians) from four undergraduate degree programmes in England (London, South West, West Midlands and North East) to identify tensions between these policies and the practice of delivering craft education.

## Declining Student Numbers

Declining student numbers (as illustrated in Table 12.1) and a challenging recruitment market was a key concern for educators. There were a number of factors associated with this: a lack of uptake of arts subjects in school, the costs of going to university, a lack of encouragement to pursue a creative pathway from teachers, careers advisors and parents and heightened employability concerns among prospective students and their parents. As identified by an educator in London, lower student numbers meant less money coming in through tuition fees to support the high cost of delivery and maintenance (workshop space, equipment, materials, etc.):

money counts a lot now. And there are less and less students coming in. Because a lot of students are now looking at, it is nine thousand pounds, could I get an apprenticeship instead?

It was also seen to impact selective recruitment capacity, particularly for institutions without a prominent national or international reputation or those located outside of London. While the closure of once well-respected courses nationally was lamented, some institutions with highly specialised courses or facilities (i.e. glass-blowing or furniture making) noted they had benefited from the closure of competitor



courses in the student market. This does however create issues in regional provision and equal access craft education across the UK.

## Marketisation and Rationalisation

The employability agenda was identified as influencing the curriculum in the centralisation of targeted professional development training

I think it's just become more professional. [...] I think all those things create pressure for colleges, universities, and impact obviously greatly on the development of the curriculum. (Educator, South West).

Although approaches vary across the institutions, it was noted that professional development had steadily become more formalised, increased in credit weighting and been introduced earlier in the programme Educators saw this as an improvement and a way of demonstrating the viability of creative pathways as a counter to negative perceptions of creative graduate outcomes.

However, the restructuring of the curriculum, combined with cuts and efficiency savings made in response to reduced government funding and market uncertainty, has contributed to a reduction in skills and workshop-based training. While making remained central to programmes and educators' interests, there were signs that the supporting infrastructure (workshop space, equipment and machinery, technical staff and advanced skills training) was being limited through the downsizing, subject amalgamations and staff work-loading. This negatively impacts the advanced development of haptic skills and material knowledge required both for craft practice and the application of craft knowledge to other creative and non-creative sectors (KPMG, 2016).

## The Value of Creative Education

Overall, there was a sense that creative education (primary upwards) was being systematically devalued, and that the debate around "value for money" perpetuated negative messages regarding the viability of creative careers

they're stressing science, engineering and maths and technology. And they're um really degrading I think the arts and the creative industries. (Educator, London)

The political and wider social spreading of these under-nuanced and purely economically driven ideas of value were perceived as influencing prospective students' choice to study (or not study) a creative subject at university, and subsequently exacerbated the challenges in student recruitment discussed earlier. This was also associated with limiting the perceived transferability of craft skills, both by students and potential employers outside of the CI, thus reinforcing hierarchical divisions between different types of knowledge and education (Gibson & Carr, 2018).

## Incubation Periods and Graduate Outcomes

The expectation of immediate graduate-level employment as an outcome from a craft degree (from politicians, students and parents) was seen by educators as a somewhat contradictory as it failed to account both for existing employment conditions, and for the time required to establish a professional creative practice. As illustrated below, based on their own professional experience educators reflected that there is a significant incubation period in which creative graduates negotiate the practicalities (studio space, suppliers, access to finance, etc.) of professional practice.

I mean they can't all get jobs in the industry, a lot of them don't want to, a lot of them want to make and survive independently by having a job that might supplement or subsidise material costs, um, for the time it takes for them to really establish themselves. (Educator, West Midlands)

This has long created issues in submissions to the graduate destination survey (DLHE) for creative subjects which negatively reports such incremental development and takes income as a proxy for value. By such standards, creative HE may be unfairly judged as failing students without consideration of sector specifics and the incubation period involved in developing a professional creative practice.

## Conclusions

While across the arts and cultural sector there is an aversion to overtly economic objectives, it must be acknowledged that the UK's HE system and cultural and CI policy are currently governed by neoliberal logic. Both sectors could try to avoid economic associations and champion the non-fiscal, cultural value of craft and education, but this would be in direct competition with government agendas and therefore unlikely to gain the support needed to halt or reverse the disinvestment trend in creative education or achieve recognition of creative value beyond GVA contribution.

It is not my suggestion that the craft or education sectors entirely realign their arguments to match the economic agenda in order to exert influence over policy (although such advocacy has been shown to be effective, i.e. retaining craft in the CI definition by demonstrating a £3.4 billion GVA contribution). Rather I argue that the economic argument could potentially be turned on itself to champion craft's cultural value through a demonstration of its indirect fiscal benefits. For example, the argument that HE leaders need to invest in creative education and high-quality making infrastructure could carry more weight if framed in relation to the development of haptic skills and material knowledge that is both central to creative practice and highly transferrable (KPMG, 2016). This would frame an investment in making as supporting cultural development, the wider CI and manufacturing in the UK. Such investments could also give an advantage in the increasingly competitive student recruitment market. This pragmatic approach may however be unpopular with those wishing to draw a hard line between creative practice and economic activity.

Additionally, there is a need to both improve our understanding of constitutes graduate ‘success and how it is measured, and broaden our understanding (among students, their parents, educators, careers advisors, employers and policymakers) of the potential applications craft knowledge and the skills developed during creative degrees (Bridgstock et al., 2015). By exploring opportunities for such applications, we may see greater returns both creatively and economically.

Further research is also required to capture the breadth of craft’s contribution—cultural, social and economic, and to fully understand the impact of disinvestment in creative education on the creative economy. Such findings would form a key evidence base to address the tensions between policy and practice. However, in order to influence the agenda long-term, we need more advocates for creative education and craft making policies rather than working against them.

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# Chapter 13

## The Impact of Creative Learning on Young People's Wellbeing



Maurice Galton and Ros McLellan

### Problems of Terminology Associated with Creativity

In one primary school in the New Territories of Hong Kong, the most popular lunch club involves the pupils copying out the one thousand characters, which, in Mandarin, are used in various combinations to give meaning to words. When they complete the activity, they start again. The School Principal, who often joins the club, is an acknowledged expert in this form of calligraphy and has presented his work at various exhibitions in Mainland China as well as locally. The parents often refer to him as 'that famous artist'. In other parts of Asia, notably India, there are individuals who spend a lifetime drawing, painting or sculpturing a representation of the Buddha. Just like the Principle of that Hong Kong primary school, if asked why they repeat the same representation over and over again, they might reply, 'To make a better one'. For these artists, therefore, the goal of their creative effort is to strive for perfection.

This is not so in the UK and in other developed countries. The essential components of creativity are said to comprise of 'an imaginative activity', which as a minimum involves the production of 'outcomes which are both *original* and of *value*' (our italics). This emphasis formulated in a report, *All our Futures*, prepared by Professor Ken Robinson (1999:30) for the National Committee for Cultural and Creative Education (NIACCE) has become firmly ensconced in most later publication on the topic. In England, The Qualification and Curriculum Authority's publication, *Creativity, Find it, Promote it* (QCA,2004) adopted an almost identical definition with the emphasis on originality and its entrepreneurial qualities. The latter's inclusion was, in part, an attempt to give increased priority to the arts within the National

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Curriculum at a point in time when manufacturing was in serious decline and greater economic reliance was being placed on developing innovative approaches within the service industries. The emphasis on originality comes in part from Howard Gardner's exploration of the links between creativity and the three key intelligences associated with the arts (musical, bodily kinaesthetic and spatial), where creativity involves problem-solving in a specific domain in a way that produces initially novel outcomes (Gardner, 1999: 116). Clearly, our Hong Kong School Principal would struggle to obtain artistic recognition within such a framework. Rather might he be regarded as a craftsman, someone skilled at making things, a technician, an artisan (Collins English Dictionary and Thesaurus).

But the above interpretation is not uncontested. As a contribution to this debate, the organisation, Creativity, Culture and Education (CCE) commissioned a number of reports covering aspects of both creativity and learning. One contribution to these debates about creativity and creative learning has been that of Sefton-Green (2008). In seeking to stimulate debate, he sets the ideas of the artistic community against the more general theories of learning which he classifies under the umbrella of either behaviourist or constructivist traditions, including socio-cultural elements, which involves 'possession of a specialised discourse, together with a capacity to reflect and critique and to offer abstract analysis' (2008:18).

Sefton-Green draws on the work of Fleming (2008) to pose the question of whether there exists a singular arts-based theory of learning or whether there are several arts-based theories dependent on the individual domain and concludes that whatever the particular approach taken among the family of arts learning traditions there are 'generic connections with social cultural traditions of learning,' citing Eisner (2002) and Egan (1997) in support of this claim. This also accords with the theatre director, and overseer of the cultural promotions at the 2012 London Olympics, Jude Kelly's definition of creativity as *flexibility of the mind* when speaking at the 2002 NUT/NCA conference on the subject. Her view is not too dissimilar from Craft's (2000) notion of creativity as *possibility thinking* allied to imagination. As such, this approach contrasts with the more frequently quoted definition with its emphasis on the creation of an original product that is perceived by others to be of value. Kelly's view of creating has been described elsewhere as '*aesthetic intelligence*' (Raney, 2003:149). Interviews conducted in West Midlands' secondary schools by Trotman (2008) suggested that what these Year 10 and 11 students most valued were opportunities to engage in possibility thinking that gave free rein to their imaginations rather than the outcomes of the creative act with its emphasis on originality and entrepreneurial potential.

The distinction is important because it makes a difference how one goes about improving the capacity of individuals to develop as creative thinkers. Where the emphasis lies on the creation of unique and useful outcomes then there is a tendency to advocate specific programmes or drills, a skill-based approach, designed to promote lateral (De Bono, 1990) or critical (Halpern, 1998) thinkers or even more popular, though controversial, packages, such as *Brain Gym*. Where the emphasis is placed on developing 'flexible minds', there is less immediate concern with outcomes and greater emphasis is laid on teaching overarching, generic strategies that enable pupils



to re-construct existing knowledge in ways, which allows them to accommodate in fairly rapid fashion new information and ideas. However, Banaji et al. (2010) regard the above distinction as an oversimplification because the strategic model of learning suggests that developing the capacity for reflective thinking will inevitably lead to creative outcomes. In its simplest form, the model does not account for the differences between 'great' and 'pedestrian' forms of artistic expression. Craft (2000) attempts to solve this dilemma by introducing the notion of '*Big C*' and '*little c*' to contrast the differences between the creativity displayed by artistic genius and the general population. A school's task would be to develop the latter version of creativity. Negus and Pickering (2004:159), however, worry that in cultivating '*little c*' teachers may pay less attention to exceptionality and settle for the ordinary at the expense of the gifted child. Gardner (1999:117) also adopts the notion of '*Big C*' while acknowledging the possibility of mid and small-scale levels of creativity. He argues, however, that to understand the concepts involved in the operation of creativity, one should focus on the actions and thoughts of the expert performers.

### *Creative Learning as Developing Expertise*

The literature relating to expert performance enables the definition of creative learning to be extended beyond Sefton-Green's dichotomy so that the knowledge and skills needed to create 'the extraordinary' also need to be part of a teachers' repertoire. For Ericsson (1996:43), individuals can be taught to 'circumvent basic information processing limits by enhanced anticipation.' Berliner (1994) using Dreyfus (1986) stage theory, based on studies of expert musicians and chess grandmasters, notes that experts differ from competent performers mainly in the way they go about solving unfamiliar problems. Whereas competent individuals work through their list of previously acquired maxims (rules) until they find one which meets the present circumstance, experts tend to be improvisational, rather like jazz musicians, and to address problems by seeking to uncover underlying meaningful patterns, which suggest one kind of strategy rather than another.

This is not simply part of an intuitive process as suggested by Claxton (2000:40). According to Atkinson (2000:70), intuition operates at a tactical, moment by moment level and is mainly the product of experience, whereas expertise is strategic in that it involves not only the opportunity to put our intuitions into practice but incorporates a 'feedback' mechanism whereby evaluation of how things worked out and consideration of how things can be improved upon in future are key elements. This is very similar to Alexander (Patricia not Robin) et al.'s. (1991) definition of metacognition as having knowledge of one's cognitive processes, which involves both automaticity (the development of a range of thinking strategies such that the choice of the most appropriate one to meet a particular set of circumstances becomes automatic) and 'executive control' (self-regulation).

The question that then arises concerns the extent to which expertise, when defined in this way can be taught. Gardner (1995) and Noice and Noice (1997) are of the

opinion that inherited talent is the main ingredient of expertise so that geniuses are 'born not made'. However, Ericsson (1996:43) rejects this view, citing numerous studies from various domains such as athletics, chess and music. He argues that the key determinants are motivation to practice for extended periods and a capacity to acquire from experience the ability 'to circumvent some basic information-processing limits' by enhanced 'anticipation based on predictive advanced cues'. Berliner (2001) takes up a position similar to Ericsson. He points out that even those like Howard Gardner who place greater emphasis on the role of talent still recognise the necessity for deliberative practice in developing expertise. Thus, it is likely, Berliner argues, that the context and deliberative practice are more important than personal characteristics. Berliner cites in support of this view the fact that expert ice hockey players and their coaches each separately listed the desire to become an expert (motivation) followed by good coaching and practice as the main determinants of success. Talent was only rated sixth of the twelve nominated factors.

In a later paper, Patricia Alexander (2004:12) argues that since students will rarely leave school as experts in any subject domain, it is the process of transformation into experts through the stages of *acclimation*, *competence* and *proficiency* that are most relevant. At the acclimation stage, pupils begin to grasp the elements of *strategic knowledge* (Shulman, 1986), which help constitute a domain (the forms of legitimate knowledge, what counts as evidence, ways of establishing the validity of a proposition etc.). But because these pupils lack the ability to distinguish between accurate and inaccurate (or relevant and tangential) information they are hampered in their thinking, which, therefore, operates at a surface level. At the competence stage, pupils' domain knowledge is more comprehensive and principled and a mixture of surface and deep level strategies are used. The final transformation towards proficiency and expertise is marked by a shift away from these 'surface level' thinking strategies towards those which are of a 'deep processing kind' and a capacity to engage in *problem finding* as well as problem-solving.

The Qualifications and Curriculum Authority while arguing strongly that creativity is not to be viewed solely as arts-based, nevertheless suggests that the arts have a particular important role to play in its development (Qualifications and Curriculum Authority (QCA), 2009). The idea that there is a set of pedagogic principles that are associated with specific subjects mainly derives from the work of Shulman (1986, 1987). Alexander's (2004) notion of Metacognition allied to growing expertise for Shulman, however, would, in part, be discipline-based in that pupils would come to an understanding of what it was to think like an artist, historian, scientist etc.

It is easier to see the force of Shulman's argument when dealing with subjects, such as science, where there is a linear progression from one concept to another. In physics, for example, to grasp the concept of *density* one must first understand the difference between *mass* and *weight* in order to master the concept of *force* before moving on to the idea of *pressure* or *upthrust*. The process by which one seeks proof through scientific enquiry is also generally agreed. In dance or drama, it is less clear what might constitute legitimate knowledge or what kinds of evidence might be used to distinguish between an excellent and competent outcome although in dance,

for, example, there are 'forms of knowing' such as what constitutes 'mirrors' and 'canons' in which the performer uses when creating a complete routine. There is also considerable debate about the weight, which should be given to technical competence when set against the emotionality in making such assessments.

Shulman's notion of pedagogic content knowledge does carry with it undertones that it is most effective when the teacher controls the classroom discourse. The knowledge base of teaching (Shulman, 1987) requires teachers to 'transform the knowledge s/he possesses into forms that are pedagogically powerful and yet adaptive to variations in ability and background presented by the students'. This is clearly easier to undertake when classes do not have too wide an ability range, and when pupils do not exercise too many choices with regard to subject matter and procedures. These, however, were not the conditions reflected in recent studies of artists working alongside teachers, particularly at primary level where for the most part, whatever their medium, they adopted a common approach in fostering mainly generic, strategic thinking skills (Galton, 2010; Hall, Thomson, and Russell, 2007). Specialist knowledge and techniques were kept to a minimum and only introduced when it enabled students to develop their own ideas.

## **The Nature of Wellbeing**

Interest in wellbeing has mushroomed in the past couple of decades, driven mainly by new thinking in the fields of economics and psychology. Although there has been little theoretical work that directly links wellbeing and creativity, there are synergies between these two distinct fields, which become more evident when the available empirical studies have taken into account.

In the aftermath of World War II, wellbeing was often closely linked to economic prosperity as the main indicator of people's happiness. More recently, researchers have begun to demonstrate that economic indicators alone cannot accurately reflect the progression and condition of societies. For instance, Myers (2000) demonstrated that whilst personal income had grown in real terms between the mid-1950s and 1998 in the USA, the percentage of people indicating that they were very happy had remained approximately constant. Analysis of data from other countries has produced a very similar picture (Easterlin, 1995) suggesting that personal wealth cannot be equated with wellbeing and that indicators such as GDP might not capture a country's level of development adequately.

The Beyond GDP conference in 2007, which brought together influential bodies including the European Commission, the European Parliament and the OECD, can be seen as a seminal event in raising this issue in policy circles. Nicolas Sarkozy subsequently hired the Nobel prize-winning economists, Joseph Stiglitz and Amartya Sen to lead a Commission on the Measurement of Economic Performance and Social Progress (Stiglitz et al., 2009), which made bold recommendations with substantial policy implications. In criticising indicators such as GDP as measures of quality of life, a key message was:

The time is ripe for our measurement system to *shift emphasis from measuring economic production to measuring people's well-being*. (p. 12)

And recommendation 10, in noting that it was possible to collect valid data on subjective as well as objective (economic indicators) wellbeing, states:

Quantitative measures of these subjective aspects hold the promise of delivering not just a good measure of quality of life per se, but also a better understanding of its determinants, reaching beyond people's income and material conditions. (p. 16)

In the UK, the economist Richard Layard has been most vociferous in calling on governments to measure their citizens' subjective 'wellbeing' alongside GDP (e.g. Layard, 2005). Layard talks about happiness in terms of how one feels one's life is going, i.e. whether one is experiencing a 'good life' (Bailey, 2009) and has argued that there are seven factors central to happiness. Ranked in order of importance these are (Layard, 2005, pp. 62–72) family relationships, financial situation, work, community and friends, health, and then personal freedom, and personal values. He has since collaborated with Judy Dunn (2009), a developmental psychologist, to produce *The Good Childhood Inquiry*—an investigation that looked at children's lives and experiences in the new millennium in relation to family, friends, lifestyle, values, schooling mental health and inequality. Parents were found to be the most important influence on children's lives but schools also played a key role. Layard's work demonstrated the importance of wellbeing for society but it also pointed to something of its complexity. A clear distinction is made between objective wellbeing, assessed in terms of economic indicators, and subjective wellbeing, which refers to people's perceptions of their wellbeing, and these would both appear to be a multi-faceted in nature as they encapsulate different aspects and domains.

In extending ideas about wellbeing the part played by positive psychology is crucial. According to its originators, Martin Seligman and Mihaly Csikszentmihalyi, its purpose was.

to begin to catalyse a change in the focus of psychology from preoccupation only with repairing the worst things in life to also building positive qualities. (Seligman & Csikszentmihalyi, 2000, p. 5)

Inherent in this aim is a concern to understand issues such as what makes individuals satisfied with their lives, what brings them happiness, and how we can best conceptualise and hence influence this wellbeing. Although there still are differences when it comes to definitions, scope and operationalisation/measurement, there is a shared agreement that *subjective experience*, rather than any form of objective indicator, must be captured, hence people need to be asked directly about what they are experiencing. Positive psychologists are primarily concerned with the concept of *subjective* rather than objective *wellbeing*.

The conceptualisation of subjective wellbeing can be traced back to a review on the correlates of happiness (Wilson, 1967). Wilson noted that little progress had been made in understanding happiness since the ancient Greek philosophers and referred specifically to the work of Aristotle, who had given consideration to what it means to 'live a good life'.

Initially, the terms happiness and subjective wellbeing tended to be used interchangeably, however, there was agreement that subjective wellbeing comprised more than just momentary moods or emotions (i.e. is more than just feeling happy at any given moment in time) (Diener et al., 1999). These writers regarded subjective wellbeing as:

a broad category of phenomena that includes people's emotional responses, domain satisfactions, and global judgments of life satisfaction... We define SWB as a general area of scientific interest rather than a single specific construct. (Diener, et al., 1999, p. 277)

Wellbeing, therefore, comprises two main components, affect and life satisfaction, which have been identified as distinct constructs using specialist statistical techniques (Lucas et al., 1996). Affect is broken down into positive and negative emotions, with subjective wellbeing being experienced when there is a preponderance of the positive over the negative (Diener, 1984). The life satisfaction component of subjective wellbeing is a cognitive evaluation of how satisfied an individual is with their life.

Research based on the conceptualisation of subjective wellbeing outlined above has generally been classified as taking a *hedonic* approach, as the focus is on considering what makes life pleasurable and makes people feel good (Kahneman et al., 1999). Hedonic approaches depend on what the person themselves thinks would make their life 'better' rather than any objective determination of what others think *ought* to make their life better. Recent research, however, has suggested that the pursuit of hedonic pleasures such as material goods ultimately does not make people happy (Kasser et al., 2007; Ryan et al., 2008) so what people think will make them happy ultimately may not bring happiness.

### *Eudaimonic Approaches to Wellbeing*

As hedonic approaches to wellbeing have been seen to be limited (Vitterso, 2004) alternative conceptions as to what constitutes the 'good life' have been sought. Ancient philosophers had made a distinction between *hedonic* and *eudaimonic* wellbeing. For example, Aristippus of Cyrene posited that pleasure is the sole good in life (i.e. a hedonic perspective on wellbeing and resonant with the theoretical ideas discussed above) but Aristotle rejected this view in his book *Nicomachean Ethics* and argued for eudaimonia as an ethical theory for living where eudaimonia is 'activity expressing virtue' (Aristotle, 1985, p.284 cited in Waterman, 1993). Eudaimonia, therefore, provides a different basis for conceptualising wellbeing.

Contemporary philosophers have explored these ideas further, arguing that eudaimonism requires people to recognise and live in accordance with the daimon or 'true self' (Norton, 1976). The daimon refers to an individual's potentialities and as this represents an ideal of excellence or perfection, this provides meaning and direction in life, and clearly links to the ancient Greek notion of virtue and what is meant by pursuing a virtuous life. Waterman (1993), therefore, argues that eudaimonia is associated with personal expressiveness and self-realisation, and whilst these are likely

to be correlated with hedonic enjoyment, he was able to demonstrate that these two different conceptions of happiness are distinct in empirical work.

A measure of the growing interest in eudaimonic approaches to wellbeing can be seen in the relatively recent special edition of the *Journal of Happiness Studies* devoted to this area (Deci & Ryan, 2008a). However, although work on subjective wellbeing has dominated, there has been a longstanding interest in eudaimonic approaches. Both Seligman and Csikszentmihalyi have done important work in this area. Seligman, in his influential book 'Authentic Happiness: Using the new Positive Psychology to Realize your Potential for Lasting Fulfilment' (Seligman, 2002), talks, as the title suggests about *authentic happiness*, argues that there are three routes to happiness, namely living *the pleasant life* (which enables an individual to experience high levels of positive emotion and gratification—i.e. a hedonic conception of wellbeing), living *the good life* (which enables one to experience absorption in activities, engagement and flow), and finally living *the meaningful life* (where one deploys one's strengths in the pursuit of something greater than oneself). Developing this further, Peterson and Seligman (2004) have identified 24 character strengths organised into six virtues (wisdom and knowledge, courage, love, justice, temperance, transcendence) that represent characteristics of positive functioning associated with authentic happiness.

Csikszentmihalyi is well known for his work on Flow Theory (Csikszentmihalyi, 1975, 1990, 1992, 1996, 2002). His initial interest was in the intense concentration artists displayed when working, leading him to identify the phenomenon termed *flow* after the analogy of flowing water used by one artist in describing the passage of time. The state of flow is characterised by absorption in an activity to the exclusion of anything else representing an optimal state of intrinsic motivation where a person is functioning at their fullest capacity (Csikszentmihalyi, 1990). It is the notion that the individual is functioning optimally that reveals that this is a eudaimonic perspective on wellbeing and indeed Csikszentmihalyi not only equates 'flow' with happiness but also indicates that it is necessary to allow creativity to flourish. Flow can be achieved in undertaking structured activity where there is a balance between the challenge of the task and the level of skill needed to tackle it: individuals then feel in control of what they are doing, are able to completely concentrate and engage in the task autotelically (i.e. for the task's sake because they are interested in it and not for some external reason). Typically in these circumstances, people are not only intrinsically motivated but experience distortions in the passage of time (i.e. time flies). Many activities can induce flow, particularly those associated with leisure time which we engage in autotelically, such as the performing and creative arts, but these can include some aspects of work, so would have implications for the educational context. The fact that creative activities can induce flow, and flow is a manifestation of wellbeing is of particular interest as this demonstrates a link between creativity and wellbeing. The 'Wow' days where pupils across year groups were allowed to choose and pursue a whole day of activities under the direction of a creative practitioner, as described by McLellan et al. (2012) in their study of creative initiatives in school's appear to be a good example of putting these ideas into practice to promote eudaimonic wellbeing through flow experi.

A final eudaimonic approach to wellbeing is that brought to bear by Self-Determination Theory (SDT) developed over the past 30 years by Ed Deci and Richard Ryan (Deci, 1975; Deci & Ryan, 1985, 2002, 2008b). This well-developed and empirically supported theory of wellbeing provides the bridge between creativity and wellbeing.

### *Self-determination Theory*

At the heart of SDT lies the ontological belief that '*all individuals have natural, innate, and constructive tendencies to develop an ever more elaborated and unified sense of self*' (Ryan & Deci, 2002, p. 5). SDT therefore seeks to explain human development, and because of its focus on self-actualisation, in recent times it been conceptualised as a theory of psychological wellbeing. However, it was originally conceived as a theory of motivation. We suggest that creative learning can be seen as a process of developing expertise and that motivation to practice is crucial for developing the required competencies (Ericsson, 1996). SDT equates intrinsic motivation (which is contrasted with different forms of extrinsic motivation) and eudaimonic wellbeing, thus providing a link from creative learning to wellbeing.

The developmental process at the core of SDT is premised on the notion that humans have innate psychological needs. Deci and Ryan postulate that there are three universal psychological needs: *competence* ('feeling effective in one's on-going interactions with the social environment and experiencing opportunities to exercise and express one's capacities' (Ryan & Deci, 2002, p. 7)), *autonomy* ('being the perceived origin or source of one's own behaviour' (Ryan & Deci, 2002, p. 8)) and *relatedness* ('feeling connected to others, to caring for and being cared for by those others, to having a sense of belongingness both with other individuals and with one's community' (Ryan & Deci, 2002, p. 7)). Healthy development, and the experience of intrinsic motivation, i.e. experiencing eudaimonic wellbeing, depends on the fulfilment of these needs and humans have the capacity or 'will' to choose how to do this (Deci, 1980). Self-determination is 'the process of utilising one's will' (Deci, 1980, p. 26), i.e. choosing how to act to satisfy one's needs.

However, it is not always possible to be self-determining to satisfy one's needs. By the early 1970s, a number of studies (for instance the well-known study by Lepper et al., 1973) had started to show that intrinsic motivation could be undermined by environmental contingencies. This leads to the development of cognitive evaluation theory (CET) (Deci, 1975), which examines how social-contextual features such as rewards and feedback affect the core needs for competence and autonomy. If someone is acting to gain a reward this can undermine their sense of autonomy as they may feel to some extent that their behaviour is controlled by the external factor of wanting the reward (Deci & Ryan, 2008b)), and this then undermines intrinsic motivation. Negative feedback can have a detrimental effect as it compromises the need for

competence. Further research has shown that threats of punishment, deadlines, pressurised evaluation, imposed goals and surveillance can also reduce intrinsic motivation (Ryan & Deci, 2000). Conversely, the provision of choice, acknowledgement of feelings and opportunities for self-direction can enhance intrinsic motivation as they facilitate autonomy, whilst positive feedback that is seen as informational enhances competence (Deci & Ryan, 2008b).

More recent research, which has increasingly been conducted in real-world settings, has focused on the effect of interpersonal climate on intrinsic motivation. An accumulating body of evidence dating back to the early 1980s (see for example, Deci et al., 1981) has demonstrated that climates that feel pressurising and controlling undermine intrinsic motivation, whilst those that feel supportive and informational have the opposite effect. Interpersonal climate is influenced by other actors in the situation, and this has inspired a large body of research focusing on the concept of autonomy support, described by Deci and Ryan as:

Autonomy support involves one individual (often an authority figure) relating to target individuals by taking their perspective, encouraging initiation, supporting a sense of choice, and being responsive to their thoughts, questions and initiatives. (Deci & Ryan, 2008b, p. 18)

If an individual feels that another has offered this type of support they are more likely to believe that they can be self-determining in their behaviour and hence experience eudaimonic wellbeing. Hence, in educational contexts, research has focused on the role of the teacher in creating an autonomy supportive climate for students.

Obviously, the issue of importance is individual's perceptions of autonomy support rather than actual support offered per se. Empirical research strongly indicates that positive perceptions of autonomy support correlate strongly with intrinsic motivation, engagement, learning and performance outcomes (see for instance, Reeve et al., 2004; Vansteenkiste et al., 2004). Findings from a number of such studies have led Deci and Ryan (Deci & Ryan, 2008b) to conclude that '*the importance of autonomy-supportive teachers and classrooms cannot be overstated*' (p. 19).

In SDT, the need for relatedness is also critical although current work has generally not taken place in educational settings. However, an accumulating body of research outside SDT looking at school belonging suggests that this is important for wellbeing and academic outcomes (Goodenow, 1993; Goodenow & Grady, 1993; Juvonen, 2007; Smith, 2006). A recent SDT-based study suggests that peer-related belonging and teacher-related belonging operate in different ways in relation to engagement (Van Ryzin et al., 2009), which clearly merits further investigation.

## **Eudaimonic Approaches to Wellbeing and the Links with Creativity**

In the period, 2002–2011, relevant work was carried out in England and Wales, sponsored by a body known as *Creative Partnerships*, whose aim was to bring about 'a transformation in the lives of children and families through experiences of creative



learning'. When the Arts Council was unable to continue the funding because of the climate of austerity, the organisation continued the work as a charitable trust, *Creativity, Culture and Education* (CCE). In all, some 4195 schools have taken part in these programmes involving some 90,533 teachers working alongside 6483 creative individuals over an extended period, typically on most days during a school term or for 1 day a week over the course of the year. Creative individuals were known as *Creative Practitioners* because they included, filmmakers, photographers, dancers as well as artists such as the more typical literary and fine art specialists.

The key link between SDT approaches to eudaimonic wellbeing and creative learning appears to be the development of a climate, which promotes intrinsic motivation. Csikszentmihalyi (1990) not only equates 'flow' with happiness but also indicates that it is necessary to allow creativity to function and flourish.

The notion that creating is associated with fun is also a dominant theme in the literature. The research suggests that 'play', in particular, receives less and less attention as children progress through the school system: teenagers are not encouraged to play because they are seen to be entering the adult world where play is not necessary (Nayak & Kehily, 2007). Yet playfulness and being allowed to play have been shown to be crucial for stimulating creativity (Ekvall & Ryhammar, 1999). Together with playfulness, the notions of 'fun' and 'laughter', are seen by these authors as essential in promoting a climate requiring students can be encouraged to be given time to explore their ideas, are challenged to take risks and given the freedom to choose ways of working. Threats to this autonomy arise from a regime that regards having fun as detrimental to learning and instead imposes predetermined goals, strict deadlines, operates regular surveillance and threatens punishments for those who fail to conform.

Three studies sponsored by Creative Partnerships illustrate how the above conditions can be realised within school settings to promote creativity and wellbeing. The first of these has to do with the nature of the school ethos. Bragg and Manchester (2011) contrast the 'competitive' school ethos, the result of the 'market-orientated' educational reforms, with a climate which underpins democratic, participative structures. They characterise the work of Creative Partnerships in schools as one of '*additionally*' in that the various programmes 'enhanced practice and helped it to develop in ways that it might not otherwise have done'. They describe ethos of Creative Partnership schools as '*considerate*', in that the care, discipline and relationships that exist within the school went 'beyond mere tolerance in stressing more strongly the need to respect students' cultures and life experiences and in seeing these as a potentially positive contribution to their learning or to a creative process rather than as something to be ignored or supplanted'. Such schools were also '*convivial*' in that they encouraged a sense of fun and enjoyment within the learning process and 'legitimised' collegial working relationships between teachers, between pupils and between teachers and pupils. Finally, Creative Partnerships contributed to the *capacious* element of a school's ethos in promoting the idea of flexibility and diversity in both teaching and learning, what Bragg and Manchester (2011) describe as '*room for manoeuvre*'.

A second element in promoting creativity and wellbeing involved the development of *Youth Voice* and, in particular, its impact on young people's roles in governance, in relationships and in the co-construction of learning. Bragg, Manchester and Faulkner (2009) conclude that Creative Partnerships helped raise the profile of young people's participation in schools by insisting from the outset on student involvement in all decision-making concerning the choice of activities and the selection of creative practitioners.

The study by Thomson, Jones and Hall (2009) affords our second example. They concluded that Creative Partnerships had promoted shifts in classroom practice, which allow greater pupil autonomy and which extend beyond the areas of the curriculum where creative practitioners had been deployed. Thomson et al. identified five different kinds of pedagogy; *default* pedagogy, creative *approaches*, creative *skills*, *exploratory* pedagogy and *negotiated* pedagogy, which they described as general 'types' and not exact examples. Traces of default pedagogy were present in all schools studied. This approach tended to plan lessons around the achievement of specified outcomes, favoured the transmission mode of teaching, and mainly relied on tests to determine the extent to which the prescribed outcomes were achieved. Default pedagogy was mostly used in situations where schools were under external pressure to improve academic performance. Creative Partnership schools, however, tended to adopt more *creative approaches*. Although specified outcomes were still demanded, experiential learning was promoted and creative practitioners spent time extending students' background knowledge and raising issues through a mix of extended class discussion and outside visits. This contrasted with the *creative skills* approach where use was made of specific commercial packages or schemes, which were said to promote 'creative thinking'.

*Exploratory pedagogy* was the dominant practice, particularly in early childhood settings where emphasis was placed on children's prior experiences when setting learning goals. Children were also often allowed to choose the activities they wished to undertake and time was set aside for the teacher and the pupil to reflect on the outcome. Finally among older pupils, *negotiated pedagogies* involved students and teachers working together to determine learning goals (derived from broad curriculum frameworks), and in determining the 'success' criteria for assessment purposes. Students could introduce their own ideas as long as these were related to the success criteria.

In the final study to be cited, McLellan, Galton, Steward and Page (2012) attempted to examine the nature of these exploratory and negotiated pedagogies by observing differences in practice between schools who had been involved with Creative Partnerships over several years and those who had not undergone the experience. One aspect of choice involved teachers giving pupils the responsibility for organising the classroom space. In one of the schools, a Year 5 [10 year-old children] mathematics' teacher, told her class:

This is what I'd like, [moving 2 tables and an OHP to the corner of the room] the rest is up to you. We need some tables and chairs around and we must be able to access our equipment. We've got 15 minutes to get it sorted [this included storing the artifacts from the previous day's work].

Pupils also could generally choose who to sit with and how to work (individually, pair or group), although in mathematics, the classes were arranged by ability. The teacher who took the top group set them a challenge because.

You can do lots of things that I teach you, but what you seem to find very difficult is to apply what you know to new situations.

The class was set the task of making a scaled down (1 in 5) model of a soccer football pitch. They were provided with a diagram with the dimensions marked out in yards, a trundle wheel, set squares, tape measures and meter rulers. The class spent 10 min practising converting yards to meters using a calculator. The field note records that the teacher briefed the class as follows,

Quickly sit. I'm not going to tell you how to use the wheels. Why have I given you a set square?

Pupil 1: To fix the right angles

Miss K: You also have to make a circle. It's got to be in the middle and the same diameter. You've got a tape. I'm not going to tell you how to work it out

Pupil 2: Can we work in pairs?

Miss K: There's quite a lot to do. Lets' get our coats on and out we go.

The field notes describe a somewhat chaotic remainder of the session in which no group of pupils completed the task. Some took advantage of marked white lines on the tennis and net ball courts to construct two sides of the pitch at right angles without needing to use the set square. However, by starting to map out the football pitch at this position, they failed to notice there was insufficient space to mark it out fully on a flat surface, and continued to move the trundle wheel up the adjacent grassy bank. Other groups didn't move the wheel in a straight line (using the set square and meter rule in combination) so the opposite sides were unequal.

However, the purpose of the lesson became clear (although not observed) when at break, the teacher explained that in the next session the class would be discussing 'what problems they encountered, where they went wrong and what they could have done to overcome their problems'. Thus, in many ways the sequence concerns 'strategic learning', which it has been argued, is a key element of creativity (Alexander, 2004).

In another of the CP schools, there was an open day in which the pupils presented their work [in this case various copies of Anglo-Saxon artefacts recently discovered locally] (Fig. 13.1).

There was ample evidence that the project had an impact on the pupil's confidence and independence. Two examples can be cited to support this conclusion. In the first case, three pupils were required to thank the local town Mayor who opened the exhibition. All three short responses, unrehearsed, and it appeared to the observer, spontaneous, had different points to make and even used different introductions.

Even more impressive was the second example. In the afternoon, after the visitors had departed, it was the turn of the other year groups to visit. In a corner of one of the exhibition rooms, Year 5 pupils had set up an area where visitors could learn how to make some of the smaller artefacts, such as bracelets, daggers etc. The reception



**Fig. 13.1** A CP school's models of treasure-trove artefacts

class [aged 5] was observed when engaged in these activities. There were 30 children clamouring for attention and yet an atmosphere of total calmness and order prevailed. At no time, it was necessary for teachers to intervene. As the creative practitioner remarked:

You don't really need teachers. Do you?

All the CP schools seemed to a greater or lesser extent to share the following common features. First, over time, a positive joint working approach developed between teachers and CP practitioners. They not only planned together, but regularly discussed learning. Teachers took an active role in sessions, and engaged in post-lesson reflective discussion. These conversations between practitioners and teachers seem particularly powerful in building teacher confidence to 'have a go'.

Second, there was a greater focus on learning processes rather than learning outcomes. More value was placed on the development of thinking skills, emotional literacy, communication skills, problem-solving and working together. Third, when outcomes were considered the emphasis tended to be on joint products rather than individual ones. These could be a performance or an exhibition or a joint work of art. The emphasis on a shared product was important in helping pupils (and teachers) to feel part of a school and in a wider sense the local, national and international community. One school worked with the nearby Zoo on an Evolution Project, while another exhibited their work about the Anglo-saxon treasure hoard in an adjacent City Cathedral alongside the genuine artefacts. Such links helped the schools become better known and created a greater sense of school connectedness (McNeely et al.,

2002)—strengthening relationships and a sense of common purpose between pupils and teachers. Bragg and Manchester (2011) also cite connectedness as a common characteristic of CP schools.

The comparison schools also had certain features in common. While they actively took steps to ensure that the environment enhanced hedonic wellbeing by reducing the chances of incidents of bullying, loneliness etc., they adopted different ways of doing this. Thus, one school had strict rules of ‘good walking’ designed to reduce incidents of pushing and shoving on the way to and from the playground to the classroom. Pupils had to walk with their hands behind their backs, their heads held still and eyes to the front. At another school, play monitors, Year 6 [aged 11] pupils, were appointed, whose task was to organise games at lunch and break times and to converse with isolates. In contrast, the Creative Partnership schools seemed to rely more on feelings of school connectedness to create a problem-free environment. Thus, there was less supervision of play areas, less rules and less use of extrinsic rewards and sanctions.

In the non-CP schools, pupils gained confidence largely through the approval of others. Being praised in assembly, performing in front of parents or in the community were emphasised by pupils as events which made them feel ‘good about themselves’. Although the CP schools also celebrated individual (and group) successes in front of the whole school, teachers and pupils referred more often to the positive feelings engendered when solving a problem without the teachers help,

Interviewer: What do you want teachers to do?

Y2 [aged 7] Pupil: I want them to [can't get the words out quickly enough] I just want to get on with my work...to do it myself. If the teachers are helping it's not our work. We need to learn.

The comparison schools tended to regard the work in Literacy and mathematics as distinct from efforts to create a curriculum, which was more interesting, enjoyable and relevant to the pupils. While all schools (CP and comparison ones) had introduced a more topic based, practical and more active approach, pupils in the latter schools distinguished between *normal* and *fun* lessons. The former consisted mainly of literacy and maths lessons while fun lessons were more hands-on activities. In the CP schools, teachers appeared more comfortable in opening up the whole curriculum to more creative ways of learning.

Finally, in the comparison schools, there was less a sense of shared vision about teaching and learning. While teachers did endorse similar ideas during interview to those of their CP colleagues, there was little evidence that this gave rise to consistencies in practice across year groups, or indeed between classes within year groups. For example, two parallel Y5 classes in one school shared a joint topic on the wars between Sparta and Athens. In one lesson, ‘Spartan’ pupils were told to design and make various bits of equipment (helmets, swords and shields) to wear in a mock battle that was to take place in the following week. Pupils were allowed a complete choice in the matter of design and were only limited by the choice of materials available. However, in the adjoining Year 5 classroom, ‘Athenian’ pupils were also making

swords and shields but here the teacher had designed templates so that every piece of equipment would be similar.

When Creative Partnership activities were observed, there was substantial evidence of students enjoying and engaging in what they were doing. At one CP school, for example, the range of activities linking the school to the local community and to outside arts organisations (The National Gallery, The National Theatre etc.) was also designed to widen pupils' horizons and enable them to work alongside teachers and creative practitioners in ways that fostered a collegial rather than a competitive approach to learning. CP schools also sought to extend pupils' awareness of 'connectedness' across countries and continents with links to schools in the Czech Republic) and Uganda and other parts of Europe.

The above accounts have, therefore, tended to reinforce the ideas advocated by Deci and Ryan (1985) in their development of self-determination theory (SDT) and suggest a relationship between creativity and wellbeing as shown in Fig. 13.2. The range of creative initiatives described in the previous pages all seek, in one way or another, to foster pupil autonomy, self-regulation, 'possibility thinking' and the willingness to take risks in one's learning when the tasks undertaken retain a high degree of ambiguity. SDT suggests that autonomy, in particular, is enhanced when pupils have an element of choice in what they do and how they approach tasks, when teachers acknowledge pupils' feelings and where opportunities are offered for self-direction. It is less likely to occur when there are imposed goals, deadlines, surveillance and rewards and sanctions are the prime means of motivating pupils. Such conclusions link with the work of Amabile (1996) who argues that in pursuit

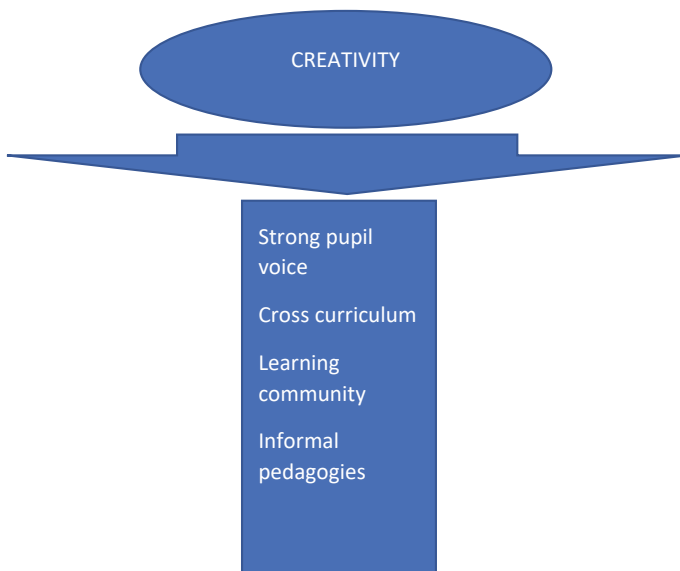


Fig. 13.2 Links between creativity and wellbeing

of creativity social factors such as 'connectedness' are key to promoting intrinsic motivation and are more readily changed than personality traits or cognitive ability. All the CP schools, in contrast to the comparison ones, appeared to have displayed these qualities in abundance in promoting both creativity and eudaimonic wellbeing.

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**Professor Maurice Galton** University of Cambridge was the former Dean of Education and Continuing Education at the University of Leicester, who joined Homerton College in 1999 and subsequently the Faculty of Education in 2001 as Associate Director of Research.

Professor Galton conducted large and small scale research studies, mostly in UK primary and lower secondary schools. One aspect of these studies was the careful documentation of classroom practice and the way it changes over time. He is best known for a series of classroom studies (Observational and Classroom Learning Evaluation (ORACLE) began in the mid 1970s and which continued with a replication study two decades later. In the 1980s he was consultant for the Council of Europe on the Innovation in Primary Schools Project.

Galton undertook a number of evaluation studies for the then Teacher Training Agency (TTA) on links between research and classroom practice; for the UK Department of Education on transfer and on the relationship between grouping, group work and personalised learning; and for the National Union of Teachers (NUT) on teachers' workloads and the effects of inclusion policies.

Between 2002 and 2006 Professor Galton co-directed a £1 million study on Grouping and Group work for The Teaching and Learning Research Programme (TLRP) and completed a study of the pedagogy of resident artists in schools for Creative Partnerships and the Arts Council of Great Britain. He also carried out a review for the Nuffield Foundation on the effects of transfer and transition from primary school on pupils' wellbeing. Professor Galton had considerable experience of Hong Kong schools, and was consultant to the Council of Europe (1982-87), National Curriculum Council (1989) and the National Council for Educational Technology (NCET) (1995-98). In the Faculty's Centre for Commonwealth Education he collaborated on pedagogical initiatives in South Africa and Malaysia.

**Dr. Ros McLellan** University of Cambridge PhD in Science Education (King's College, London). MPhil in Psychology of Education (Cambridge) PGCE in Secondary Mathematics (Cambridge) MA in Social and Political Sciences, specialising in Social Psychology (Cambridge). McLellan taught psychology and mathematics in the secondary schooling sector for a number of years before joining the Faculty. Her background is in psychology and she is a graduate member of the British Psychology Society. She has always been interested in student motivation and her Masters and Doctoral projects were in this area. In recent years, she has also worked on a number of projects focusing not only on achievement motivation but also on student wellbeing, mathematics anxiety, and creativity. Ros enjoys working collaboratively with schools to develop and refine strategies that make a real difference to teaching and learning in the classroom and is interested in teacher learning. She coordinates the long-standing SUPER network which is a partnership between the Faculty of Education and local schools that conducts research together that mutually benefits all partners. This work has led to collaboration with a network of schools in Kazakhstan where colleagues from the SUPER network helped to foster teachers' professional learning. Other partnership work in Kazakhstan involved a capacity-building research project focusing on student

wellbeing. McLellan is currently a British Educational Research Association Council member and co-convenor of the European Educational Research Association Network 8: Health Education.



# Chapter 14

## Learning Crafts Through Educational Research Projects—Reflection from Thailand



Disaya Chudasri

### Significance of Traditional Craftsmanship to Thailand

Traditional craftsmanship is one of the seven domains that represent the Intangible Cultural Heritage of Thailand (ICH) (Intangible Cultural Heritage, 2019).

These are the skills and knowledge involved in craftsmanship, in selecting materials and methods to create crafts which reflect the identities and socio-cultural development within their own communities. (Intangible Cultural Heritage, 2019).

A variety of traditional craftsmanship includes textiles and textile products, basketry, lacquerware, pottery, metalwork, woodwork, leatherwork, costume accessories, folk arts and other kinds of products (Intangible Cultural Heritage, 2019). Traditional craft practices are meaningful to local communities in many aspects, for example, it builds on tacit knowledge and skills, local wisdom relating to the particularities of places, personal identity and group identity. Traditional craftsmanship is a critical component for Thai art and culture, which contributes to the national identity, branding and Soft Power of Thailand (Panpiemras, 2012 in the interviews by Chudasri).

Soft Power is a means for a country to succeed in world politics, in ways that a country is able to persuade others to do what is needed for mutual benefit without force or coercion. It describes and evaluates the comprehensive national strength, including culture, political values and foreign policies (Nye, 2004). The value of traditional craftsmanship is very high, however, traditional crafts production is currently in steep decline. This decline has been affected by expansion of industrialization and globalization for trade of mass-produced goods. A number of people have migrated from villages to urban areas for job opportunities and a modern lifestyle, which

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can provide a lucrative income. Therefore, resulting in declining numbers of skillful craftspeople.

Many young people are not willing to consider crafts production as a career option. Few young people are being trained, whereas many craftspeople are over 50 years of age. Traditional craftsmanship is at risk of being lost in the near future if there is no immediate action to support the inheritance of traditional craftsmanship between experienced craftspeople and the younger generation. The author claims there must be an approach to which traditional craft practices can co-exist in harmony in a world shifting rapidly towards urbanization and a modern lifestyle. Disaya Chudasri asks the question, ‘what can we do to help support the sustainment of craft communities?’.

## Seeking Opportunities for Educating in the Crafts

Disaya Chudasri has been teaching in the College of Arts, Media and Technology (CAMT) at Chiang Mai University (CMU) in Thailand since 2009. Previously, Disaya worked as a senior designer for more than 10 years in design companies in Thailand and Australia. She dealt with a variety of commercial projects, involving graphic design, packaging design, corporate identity and branding for clients in Thailand and abroad.

Disaya gained a Ph.D. in design from Lancaster University, United Kingdom, in 2015. During these studies, she investigated traditional craft of Northern Thailand, mainly handwoven textiles in relation to sustainability principles and identified potential areas for which design can contribute to the future viability and sustainment of craft communities (Chudasri, 2015). In 2015, Disaya resumed work as an instructor in the Undergraduate Program of Animation and Game in CAMT, CMU. Her main responsibilities include: (i) teaching; (ii) doing research; and (iii) providing academic service, enabling students’ development and *supporting Thai art and culture*.

Disaya is responsible for teaching courses, including: (i) Modern Life and Animation (since 2009–2010 and 2015 to the present); (ii) Marketing for Design (since 2017); and (iii) Digital Movie for Commerce (since 2018). Currently in CMU, there are only a few specific courses available for learning art and craft. This type of course is being replaced by new courses involving computer programs and digital technology. In this situation, Disaya wondered how she could attract people to make positive contributions to the sustainment of craft community enterprises. Available resources included her experiential knowledge in design and additional areas of related expertise and teaching courses to develop her research opportunities along with students and craft community enterprises. These collaborations have supported her teaching and learning activities and attract funding from colleges and CMU.

## An Approach to Educating in the Crafts

Research and education are critical platforms that the author utilizes in order to attract people from multiple generations to engage with craft community enterprises. The author meets with groups of craft community enterprises and inquires about their needs for design interventions to identify potential areas for design, research project and collaborations. Design tasks and the co-design process are an effective strategy for collaborating with people from multiple generations in craft-related activities. This strategy was utilized in four projects that the author implemented between 2015 and 2018.

### *Educational Projects*

- Project 1: Enabling the 21st Century Skills through (craft in) animation making (2015–2018).  
*Research projects.*
- Project 2: Website design and development for Cotton Farm, a textile enterprise in Chiang Mai province (2016).
- Project 3: The creation of a digital mobile game for the Elephant POOPOOPAPER Park, Chiang Mai province (2017).
- Project 4: The creation of a booklet, card game and animation about traditional textile patterns for weaving communities of Long district, Phrae province (2018).

Information about Project 1 is explained further in the next section. Further information about Project 2 is available in the Design Journal (see references: Chudasri & Saksrisathaporn, 2017). Further information about Project 3 is available in conference proceedings (see references: Na Lumpoon & Chudasri, 2017, 2018). Further information about Project 4 is available in a conference proceeding and a journal article (see references: Chudasri, 2019; Chudasri, Walker & Evans, 2020). Collaborators and participants in these projects can be broadly classified as the core group and supporting group. The core group involved collaborators who were engaged in the main tasks for the projects. They included the project leader (the author), undergraduate students (who joined in taught-courses or research projects), and craft community enterprises. The supporting group involved participants who were deemed to be potential users (target customers) of the designing/developing items. They participated in activities for research and development, such as game testing and survey and they provided feedback on the designing/developing items. The supporting group included teachers and students from local schools, university students, families and tourists.

### ***Project 1: Enabling the 21st Century Skills Through (Craft in) Animation Making (2015–2018)***

Chiang Mai University encourages instructors to use the 21st Century Skills and active learning, based on a framework from the Partnership for the 21st Century Learning (P21) and the Common European Framework of Reference for Languages: Learning, Teaching, Assessment (CEFR). The author adopted this concept into practice of teaching a General Education course, namely Modern Life and Animation. This course includes three objectives. First, students are taught to understand the evolution of animation, types of animation, animation process and *basic* techniques in animation production. Secondly, students can create pictorial artwork for presentation to effectively communicate their ideas to other people. Thirdly, students can present ideas about how animation can be applicable in daily life with new media and technology. Teaching and learning activities of this course were adjusted to enable ‘innovation skills’, including Creativity and Innovation, Critical Thinking and Problem-Solving, Communication, Collaboration—so-called the 4Cs (P21, 2007). CEFR was determined as part of the required ‘communication’ ability.

#### ***Developing Learning Activities***

This course is open every first and second semesters for undergraduate students from various faculties in Chiang Mai University. A semester lasts 15 weeks, which involves three hours of teaching per week. Each teaching slot lasts 1.5 h. After mid-term, students have to do a group project of making animation, comprising of 3–5 people. Between 2015 and 2018, the project themes were usually set in relation to ‘raising people’s awareness of sustainable behavior’, likewise an open theme was set in a semester (Chudasri, 2016, 2018a). Learning activities during these weeks involved information searching, group discussions, articulating ideas and areas of interest, preparing a project proposal, storytelling, storyboarding, drawing pictures and/or making objects, taking photographs, using computer programs or mobile applications for animation making, and project presentation.

Students have different abilities and levels of skills, such as in storytelling, drawing, using computer programs. Therefore, it is flexible for them to choose any production techniques and tools as long as they can handle the project and come up with animated items according to the project requirements. For example, students can choose to produce a short, animated movie (1 min) or animated scenes or animated stickers for digital applications. They may use different animation techniques, such as stop-motion, 2D-computer animation, or a mix-methods. Live-action video footages can be incorporated as long as there are animated items in the movies. From submission between August 2015 and April 2016 that covered four classrooms with 104 students in total, the author observed that a number of students chose stop-motion technique for animation making over 2D- or 3D-computer animation and they felt



**Fig. 14.1** Objects made from clay and papers for animation making. © Disaya Chudasri

incompetent to drawing pictures (Chudasri, 2016). Stop-motion is a technique by which objects or living creatures (such as toys, dolls, clay figures, papers, household appliances, trees and human beings) are manipulated with incremental changes and are photographed, resulting in image sequences.

Moreover, students used their craft skills to work with various materials such as clay and papers to create objects and communicate their ideas in animation making (Fig. 14.1). These observations led to an idea to incorporate craft in learning activities and questions were addressed (Chudasri, 2018a). How can learning art and craft be incorporated in the group project for animation making? What craft activities/enterprises are attractive to students?

### ***Incorporating Craft in Learning Activities***

This idea was implemented in two semesters between January and April, 2017 and 2018. The project theme and project briefs were similar to the previous semesters. However, students were required to incorporate craft activities and crafted objects in animation-making according to their story. Prior to conducting the animation projects, the author discussed with students about their interest and how to incorporate craft activities in animation making and determine feasibility of classroom management (Chudasri, 2018, pp. 533–534). Additionally, the author discussed with craft enterprises and set a schedule for the management of craft activities. The Cotton Farm Limited Partnership and the Elephant POOPOOPAPER Park managed craft activities in 2017 and 2018, respectively. Their websites ([www.cottonfarm.co.th](http://www.cottonfarm.co.th), [www.poopoopaperpark.com](http://www.poopoopaperpark.com)) were a vital tool, which the author used to persuade the students. The author asked students as follows:

In 2017, do you want to learn making tie-dyed fabrics? If not, what are craft activities that you want to do? In 2018, do you want to learn making papers in the Elephant POOPOOPAPER Park? If not, what are craft activities that you want to do?

This was followed by a question:

Would you be available for 1 day on Saturday or Sunday for learning craft?



**Fig. 14.2** Right: Students engaged in a-day trips of learning craft in 2017, 2018. © Disaya Chudasri

Students were given 10–15 minutes for discussion and answering. For both semesters, the majority of students wanted to do craft activities. Day trips for learning crafts were set in both semesters in order to assist students in making crafts and taking photos (image sequences) for use in animation making.

In 2017, this idea was implemented with students in two classrooms, covering 67 students in total (Chudasri, 2018a). A day trip was set for visiting Cotton Farm’s garden space located in Mae Jo district, Chiang Mai province. Cotton Farm Limited Partnership is a local enterprise that works with local weavers and artisans in order to produce handwoven textiles and handmade textile products. Sixty-two students wanted to do craft activities and agreed on making tie-dyed fabrics, stitch work, making paper art (Origami) and cooking Thai food (Chudasri, 2018a). Each group of students was required to choose just one craft option out of the four. Participants in this trip included all 32 students from Classroom 2, 6 students from Classroom 1 and 5 student-helpers. Other students in Classroom 1 requested to manage craft activities by themselves because their schedules were very tight with medical studies and other businesses.

In 2018, a similar project was implemented and a-day trip was set for visiting the Elephant POOPOOPAPER Park in Mae Rim district, Chiang Mai province. This park is an outdoor museum that demonstrates a traditional method for papermaking from fibrous materials derived from animal dung. The company focuses the 3Rs concept (Reduce, Reuse, Recycle) to help cut down the amount of waste in local areas. Ten students from one classroom, plus two student-helpers visited this park and learnt a traditional method of papermaking. (Fibrous materials were cleaned up and dried out for use in demonstration.) (Fig. 14.2: right).

## **Collaborations and Contributions Enabling the Sustainment of Craft Enterprises**

Collaborations happened between people from multiple generations from the beginning to the end of project-based learning. Collaborators included the instructor

and students; the instructor and craft enterprises; craft enterprises and workers; the instructor, student-helpers and the students; the students' group members and with other groups; the students and other people such as their families, relatives and friends (for example, when they seek information and opinion towards crafting and animation making); and the instructor and the funder.

Their contributions came in various means, such as financial support, materials and tools, learning spaces, knowledge, time, discussion and constructive feedback and permission. For example, the funder provided financial support enabling the 21st Century Skills and active learning. The craft enterprises provided learning spaces, materials and tools for making crafts and they gained income from this event management and the sale of products. Local artisans exchanged their knowledge with young students, while they were making crafts. They felt happy and relaxed with visitors and felt a sense of socialization. Students came up with short movies according to the project requirements. The author received permission from students, whose movies were selected for a display on the website ([www.designineducation.com](http://www.designineducation.com)). More people knew about these craft enterprises and helped spread information about them, assisting the craft enterprises to have more customers. For example, people from other colleges and faculties brought their students to learn crafts with these enterprises. A student-helper from the Faculty of Humanities invited the craft enterprise to be a guest speaker in a seminar about ecotourism in Chiang Mai.

## Outstanding Movies That Incorporated Crafts in Animation Making

From several movies submitted in April 2017 and 2018, three movies were selected as outstanding ones that incorporated crafts in animation making. These movies are displayed in Design Showcase in the website: Design in Education ([www.designineducation.com](http://www.designineducation.com)). These movies are entitled Toey Toon, MED Bag and the Invisible Trees. The author launched this website in order to showcase outstanding works of the former students. The project can help enrich students' understanding on project requirements, expected outcomes and their can-do attitude (Fig. 14.3).

**Toey Toon** is a short movie produced by a group of three students from the Faculty of Medicine. They attended a-day trip to Cotton Farm's garden space. Besides fabrics provided by the Cotton Farm, the students brought their old clothes for tied-dyes (Fig. 14.4).

Story – 'Neena was worried that she didn't have new clothes to wear for dating. Suddenly the three angels appeared and showed her that old clothes can be remade into new ones! The angels took her to the Cotton Farm, where Neena learnt tied-dyes and has remade her old clothes into new ones.' (Chudasri, 2018b)

**MED Bag** is a short movie produced by a group of three students from the Faculty of Medicine. They did not join in a day trip, but they managed craft activities by

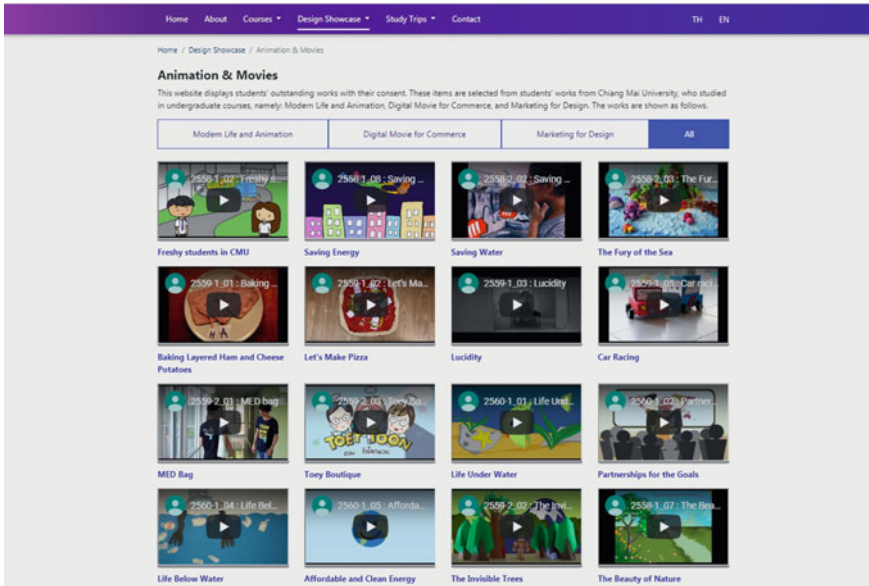


Fig. 14.3 Showcase of students' outstanding works on [www.designineducation.com](http://www.designineducation.com). © Disaya Chudasri

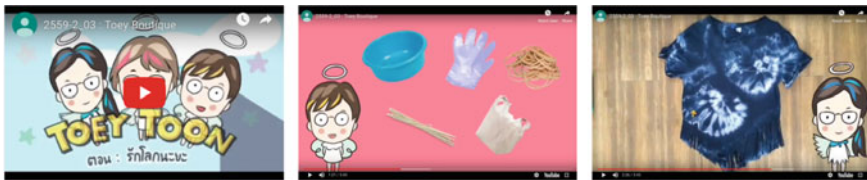


Fig. 14.4 Toey Toon—remaking old clothes with tied-dyes. © Disaya Chudasri

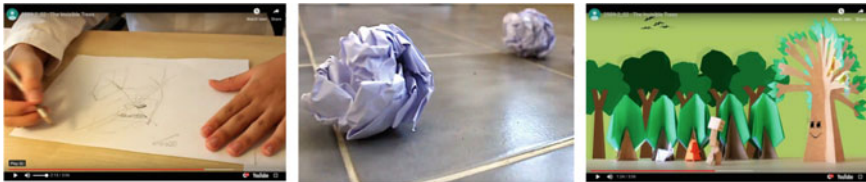
themselves. Students researched how plastic bags and waste from grocery shopping could be recycled. They found a simple way to do it with just an iron. They collected several plastic bags and ironed them together, so they got a thick plastic sheet, which was durable enough to make a hand-carry bag. And they contacted a local shop for sewing the plastic sheet into a new bag (Fig. 14.5).

Story – ‘Ae invited some friends over on his birthday party. He woke up the next morning and found a lot of rubbish, especially plastic bags. He researched on how to turn plastic bags into something useful. Later that night when he fell asleep, a miracle happened. The wooden puppet appeared and showed how plastic bags can be reused. Ae woke up and saw a carry bag in new shape, which is quite thick and strong. He is very happy and cannot wait to tell his friends’ (Chudasri, 2018b)





**Fig. 14.5** MED Bag—recycling plastic waste into a new bag. © Disaya Chudasri



**Fig. 14.6** The Invisible Trees—using two sides of papers. © Disaya Chudasri

**The Invisible Trees** is a short movie produced by a group of three students from the Faculty of Medicine. They did not join in a day trip, but they made paper crafts by themselves. (Fig. 14.6)

Story – ‘Moss was using and quickly throwing away a lot of papers in working on a project. That night, he dreamed of his childhood surrounded with green trees. He woke up and realized that many trees had been destroyed as quickly as a number of papers are throwing away. So he sets his mind to use both sides of each papers.’ (Chudasri, 2018b)

## Conclusion

Traditional craftsmanship is a critical component for Thai art and culture and contributes to the national identity, branding and Soft Power of Thailand. The value attributed to traditional craftsmanship is very high, however, it is currently fading away from the minds of many younger people. Scholars’ responsibilities are not only about teaching and doing research. They are also expected to provide academic service, enabling students’ development and *supporting Thai art and culture*. Although there are only a few specific courses available for learning art and craft in higher education, there is an opportunity for action.

Research and education are critical platforms that can attract people from multiple generations to enabling the sustainment of craft communities and contribute to it through various means. The author discussed an education project, which craft activities were incorporated in learning activities of a General Education course, namely Modern Life and Animation. Design tasks and the co-design process in animation

making are an effective strategy for collaborating with people from multiple generations to engage in craft-related activities. Digital technology, such as digital cameras, applications on smartphones were used in the making of the animations. This project-based learning helped enable the required ‘innovation skills’, including Creativity and Innovation, Critical Thinking and Problem-Solving, Communication, Collaboration (4Cs). As mentioned previously, these requirements were established according to Partnership for the 21st Century Learning (P21, 2007), and the Common European Framework of Reference for Languages: Learning, Teaching, Assessment (CEFR) which is now determined as part of the necessary skill sets including ‘communication’ ability.

**Acknowledgements** The author would like to thank Chiang Mai University International College of Digital Innovation (ICDI), who provided funding for developing learning activities and the website as well as native English speakers, who helped motivate English communication in the classrooms. Special thank must go to every student who studied in the course: Modern Life and Animation in Chiang Mai University between 2015 and 2018; Premruedee Kullasu and staff from Cotton Farm Limited Partnership; Kanokrat Sukonthamarn, Michael Flancman and staff from the Elephant POOPOOPAPER Park; Caleb Loressen and Mark Thompson from ICDI.

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**Dr. Disaya Chudasri** is a lecturer in the College of Arts, Media and Technology, Chiang Mai University, Thailand. Previously, I worked as a designer in design companies over ten years and dealt with several commercial projects. I am confident that this empirical knowledge, i.e., packaging design, corporate identity design and branding can contribute to education and research. I am keen to develop platforms for exchanging knowledge and skills in design with young students, enterprises and those from other disciplines. My research interests are extending into design for education ([www.designineducation.com](http://www.designineducation.com)), design for sustainability, design and culture, art and craft, marketing and design, and knowledge management. Disaya has published several articles in international journals, books and conference proceedings.

**Part VII**  
**The Digital**

# Chapter 15

## Towards Digital Craft



Paul Loh

### Introduction

With rapid developments in computational software and increased accessibility of computer numerical control (CNC) tools such as the CNC router, 3D-printer, laser cutter and robotic manipulator arm, the making process is increasingly aided by digital technology, often referred to as digital fabrication. When digital fabrication comes to be in the mix with architecture, design and craft, scholars and practitioners describe the artefact that is created as a form of digital craft (Kolarevic, 2008; Marble, 2010; Self & Walker, 2011; Ponce de Leon, 2011; Harris, 2012). But what defines the craft in computational design and digital fabrication? The term ‘digital craft’ implies a relationship between craft and digital fabrication. It also indicates an intimate connection between the material and its production, as well as the tooling and making techniques. Several authors claim these to be the critical ingredients in contemporary design processes (Marble, 2010; Kolarevic, 2008; Kolarevic, 2003).

In this chapter, I shall anchor my discussion on digital craft around two theoretical frameworks. The first is David Pye’s notion of workmanship, and the second is Lambros Malafouris’s theory of material engagement. Here, craft is explored as a form of tacit knowledge that is practised. An essential component of the knowledge used in the making process is often categorised as tacit (rather than explicit) knowledge, which can be difficult to capture (Frayling, 2011; McCullough, 1997; Sennett, 2009). Glenn Adamson (2007) describes craft as only existing in motion and emerging. When it comes to the ‘digital’, however, the information as explicit knowledge is often declared at the start. Daintith and Wright (2008) define digital as ‘operating by, responding to, or otherwise concerned with the use of digits (as discrete units) to represent arithmetic numbers’. While design information in architecture,

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design and craft can be discretised and expressed as numeric data, the physical matter remains in the realm of the continua. As Peter Downton (2003) suggests, ‘the domain of the analogue is continua; the digital is the area of the discrete’. Here, I highlight the contradiction in the term ‘digital craft’. Namely, ‘digital’ refers to the discretisation of information, and craft (of the material artefact) refers to the continuum of action. In order for craft to be discussed as digital craft, the hypothesis here is that both tacit and explicit knowledge must co-exist during the making process, and there are specific dialogues and negotiations that happen between these pieces of knowledge.

I propose two strategies for negotiating the digital and the tacit, each accompanied by a case study: a robotically carved table, and a CNC-milled reception desk. The case studies reveal how the marking of the tool and the integration of tacit knowledge in a digital workflow enables the makers to embed the digital in the making process. However, these layering and superimposition techniques are only the beginning of digital craft. Through a third project titled ‘Mapping the Stack: self-portrait of the internet’, I shall discuss how, in the future, machine learning can begin to emulate particular craft techniques to create new and unique artefacts. Here, we are confronted by the uncomfortable scenario where automation begins to challenge the authenticity of craft (Kettley, 2016; Fuchs et al., 2015). Here, the authenticity of craft refers to the authorship of making (Loh et al., 2016b, pp. 201–202). Malcolm McCullough (1997) suggests that the authenticity of an object lies in the process of the making activity, which includes the intellectual property surrounding the object. Kettley (2016, p. 168) suggests that authenticity in craft lies in the thinking and ‘the maker as a skilled connoisseur of technique, a master of material’.

This chapter concludes by reflecting on how these strategies set up a framework in which digital technologies can cast a more critical lens on the nature of making in contemporary craft practice.

## Theoretical Background

McCullough (1997, p. 24) first identified the term ‘digital craft’, drawing a parallel between the practice of using a computer and traditional craftsmanship. McCullough uses the term to describe the tacit skill in using the hand and mind to manipulate digital data and information on the computer. He also draws a similarity between computation design and craftsmanship, comparing the use of prototypes and grammars in computational design to pattern books used by traditional artisans. He asks, ‘if the tightening loop between design and fabrication does indeed give people a renewed sense of workable material, responsive process, and mastery over form-giving enterprise, then is that a renewed form of craft?’ (McCullough, 1997, p. 189).

Unfortunately, the reading of digital craft in architecture is often limited because the word ‘craft’ is used as an analogy to draw parallels between craft production and digital fabrication techniques. As numerous authors have pointed out, the debate around the level and nature of technology harnessed in craft production is not new

(Adamson, 2007, 2013; Fuchs et al., 2015; McCullough, 1997; Sennett, 2009). However, there remains a gap in the knowledge of what contemporary craft practice can bring to digital fabrication as a discourse or, more precisely, the mechanism that allows digital fabrication projects to be understood as a form of craft.

To extend McCullough's argument of digital craft, we must consider two other theoretical positions of making. The first is David Pye's concept of 'the workmanship of risk', which is used extensively in current architectural and design discourse to qualify digital fabrication as craft production (Kolarevic, 2008; Marble, 2010; McCullough, 1997; Self & Walker, 2011). In his seminal book, *The Nature and Art of Workmanship*, Pye suggests that high risk in the *making* can yield positive design opportunities. In other words, through taking risks in working with the material, tools and techniques, the craft can be pushed to its limit, and new knowledge can be generated (Charny, 2012, pp. 36–37). One can argue that the contradiction in making with CNC tools is precisely that almost all outcomes are predefined in the digital model, and therefore, the act of making is inherently low risk. How can making with digital techniques negotiate this contradiction?

The second theoretical position to consider is Lambros Malafouris's (2016) theory of material engagement, which is useful in analysing the causality and effect of making. Based on actor-network theory and in the field of archaeology, Malafouris positions making as an active knowledge-seeking activity. Here, he proposes that both the materials, the tools and the makers have agency in the production of the artefacts. Malafouris's theoretical framework considers the tools (both digital and manual) as part of the agency of making and is useful for our discussion on digital craft.

### *Pye's Notion of Workmanship*

I have previously re-examined Pye's concept of workmanship in my other writing (Loh, 2019; Loh et al., 2016a, 2016b, 2016c). Here, I will highlight a few critical arguments that are useful for our discussion. The fundamental reason for many authors to align digital fabrication with Pye's writing is because he was a craft practitioner. Unlike other authors who had written on the topic of craft in the twentieth century, Pye's writings reflect his practice. Hence, the semantics of craft was absent from his writing. Instead, he chose to focus on understanding the making process and its relation to design intention.

Pye (1995) proposed the idea that craft is about workmanship and technique. Within workmanship (be it good, bad, rough or precise) lies an intimate relationship between the design intention of the designer and the execution of the work. To make an accurate judgement of workmanship is to understand how closely the design is aligned with the executed object. Here, Pye described a 'sliding scale' relationship; for example, good workmanship is where the physical object is aligned with the design, and bad workmanship is where the executed object is far removed from

the design intention (Loh et al., 2016a, 2016b, 2016c). This sliding scale model is relevant, as it allows us to evaluate workmanship in relation to design intention.

Pye is known for his articulation of the terms ‘workmanship of risk’ and ‘workmanship of certainty’. While they are set up as a dichotomy, Pye’s writing suggests that it is intended as another sliding scale model. In his critique of mass production, he emphasises the lack of risk in workmanship. Similarly, he recognises that at various stages of work, there are different levels of risk. For example, in a mass production scenario (from a product design point of view), there are high levels of risk at the preparatory stage in terms of tooling, e.g. preparation of tools mould. Once the procedure is refined through an appropriate tooling process and establishment of control over the material (using mould or jig), the level of risk is typically reduced. This coincides with the economic requirements of mass-produced artefacts: lower cost, repeatability and controllable production. According to Pye, most craft practice leans towards the risky end of the spectrum with a certain level of control and dexterity in the process.

### *Material Engagement*

Lambros Malafouris provides another reading of making as a knowledge-generating activity. He approaches making from an archaeologist’s point of view, and his argument is primarily based on observation of artefacts; in other words, working backwards to understand the nature of what it means to engage with the physical material. I have highlighted two critical arguments below that are relevant to our discussion.

First, Malafouris (2016, p. 118) points out that ‘material signs do not represent; they enact. They do not stand for reality; they bring forth reality’. For example, a speed bump on the road is not just a sign for cars to slow down. The very physical reality—that is, the height and shape of the speed bump—conditions the deceleration of any moving vehicle. Any driver ignoring the material sign will feel the impact of the consequence. The intention behind the speed bump is outlined in its shape, material and location; that is, the material form speaks of its design intention.

Secondly, Malafouris argues that as the material form has intent, it also has agency; a quality that is not only limited to human activity but can be satisfied by a material in-so-far as the material (tools and technology included) can become an extension of the person. He highlights the role of the material agent through the making of an axe head, using the knapping technique on flint. The act of knapping, he argues, is an exercise of multiple agents at work; for example, the hand of the maker, the knapping stone, and the stone being knapped. Each subsequent strike of the flint determines the angle of the next strike. He suggests the making of the axe head is not the traditional notion of a preconceived image of the axe head within the flint, but rather an iterative negotiation of materials. He states, ‘There are no fixed agentive roles in this process; instead there is a constant struggle towards a “maximum grip”’ (Malafouris, 2016, p. 176).



The words ‘agent’ and ‘agentive’ should be differentiated to make the argument more precise. An agent is defined as ‘any element which ... makes other elements dependent upon itself and translates their will into a language of its own’ (Malafouris, 2016, p. 286). Agency or agentive capacity is the capacity of an agent to act or to deliver information and knowledge. As Nafus and Beckwith (2016) observe, ‘knowledge comes not just in the planning, but in the doing’. Referring back to knapping an axe head, the agents include the hand and mind of the maker, as well as the knapped stone and the stone being knapped. The agency is the know-how of the activity action through the knapping technique. The various agents deliver specific pieces of knowledge or information that facilitates the process.

As the maker actively engages with the material to produce the form through the act of making, the process of making is an enacted embodied engagement. Malafouris suggests the form of an intended object is not external but learned and sustained as an idea and developed through the making process as an explicit ‘sense of agency’ of the maker. That is, the making process contains the intentionality of the maker expressed through the agency of tools, and material is shaped in the process of the activity. He posits, ‘intention no longer comes before action, but it is in the action’ (Malafouris, 2016, p. 140).

## Digital Craft: Case Study Projects

Both theoretical frameworks discussed above propose dialogue within the making activities, from the interaction of tools to the sensorimotor of the maker’s body. The interaction or exchange of agency is critical. Here, I suggest that the digital can intervene and formulate a new relationship as digital craft.

From my design practice experience and over 10 years of teaching on digital fabrication in architecture school, I observe several strategies that one can deploy to enhance the exchange of agency between the digital and the tacit. I will explore two of these strategies in detail through case study projects; both developed through my design practice LLDS/Power to Make.

### *Lily Table: Re-Imaging Tooling*

The Lily table utilised machine tooling as drivers for the design. The table, composed of 39 layers of plywood laminated together, is CNC-milled with a robotic arm (see Fig. 15.1). The conventional method is to digitally model the surface and use the CNC software to achieve the smooth surface as a representation of the digital model. In this project, we want to challenge this convention and explore the potential of the tooling, in particular, the cutting shape and how it may affect the outcome.

We experimented with several router bits with differently shaped profiles. Each profile delivered different effect, and some tooling was not appropriate to use as it



**Fig. 15.1** Robotic milling of the Lily table using the Core Box tool bit. *Credit* Photography by LLDS

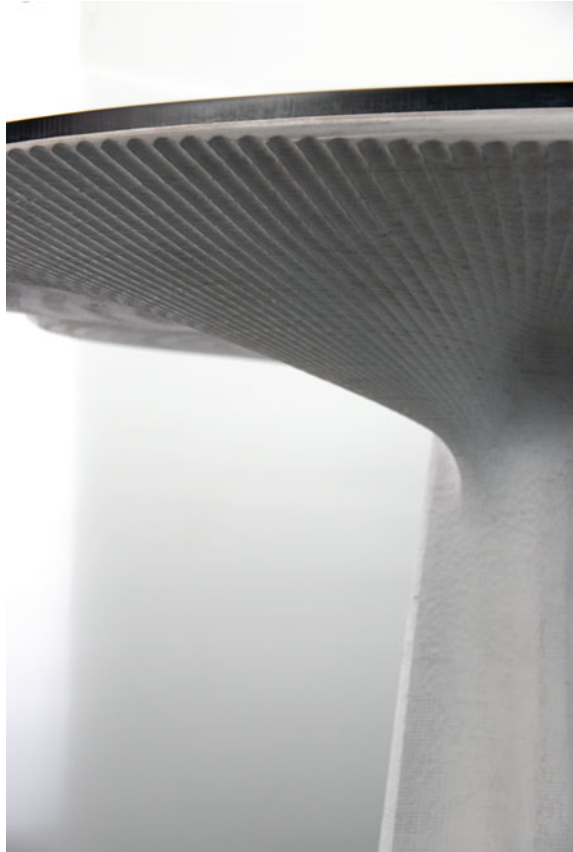
either gouged the surface (a local over cutting of material) or could not reach the full depth of the complex surface. For the Lily table, we used the Core Box tool bit as it produces a fluted pattern across the surface. To CNC-mill the table, the complex shape of the table is divided into a series of lines using a parametric software that allows us to manipulate and determine the path of the tool, commonly known as toolpath. The toolpaths converge in areas where the surface has extreme curvature, resulting in areas of smoothness towards the base of the table and a more pronounced fluted profile when the toolpaths fan outward (see Fig. 15.2).

### **Strategy: Tooling and the Digital**

Pye discusses how the markings of the tools in an artefact can demonstrate a level of craftsmanship in making. In his writing, he relates the marking of tools on an artefact as a demonstration of ‘free and rough’ workmanship. He attributes this effect as ‘the workmanship of risk’ (Pye, 1995, pp. 42–44). Other authors following Pye’s observation have proposed that the higher the level of risk, the closer the object is to being craft (Kolarevic, 2008; Marble, 2010). Tool markings left on a material’s surface are often seen to authenticate the craft of an object.

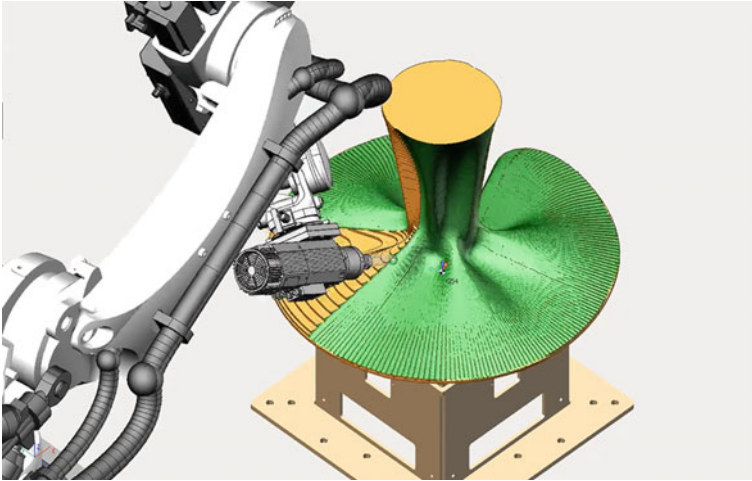
When we consider the Lily table against Pye’s notion of craft, one could argue that the Lily table conforms to the authentic nature of craft. The intricacy of the surface texture produced by the robotic milling process is highly varied with hardly any repetition. It resembles the work of a skilled craftsman carving timber with a chisel over several weeks, and yet in reality, the outcome is the result of 16 h of robotic milling (see Figs. 15.3 and 15.4).

**Fig. 15.2** Lily table showing variation of texture across the surface. *Credit* Photography by LLDS



When we analyse the computational strategy of using the tooling to create the artefacts, the integration of tacit knowledge of the tool and the digital information of the design as a set of toolpaths demonstrates a renewed understanding of making. Here, I suggest that risk of workmanship that Pye stipulated is inherent in the strategy in-so-far as the material outcome is not a predetermined surface but a predictable set of aesthetics with intentionality.

While the Lily table is a custom object, technically, we can reproduce it on demand. How do we consider the one-off or limited nature of craft objects against the reproducible nature of a piece of digital craft? The Lily table is associated with a parametric model, in which the width, height and several other parameters can be adjusted. With each iteration, the outcome in both the final geometry and surface patternation is different. Here, I suggest that digital craft provides another means of evaluating craft as limited edition or one-off artefacts. Instead, digital craft objects should be seen as a continuous set of material production within the repertoire of the maker (Loh, 2019; Loh et al., 2016a, 2016b, 2016c). This mode of working can also be observed in contemporary craft practice such as the ceramic work of Gwyn Hanssen Pigott,



**Fig. 15.3** Simulation of robotic milling demonstrating a predictable set of aesthetics with intentionality. *Credit Image by LLDS*

**Fig. 15.4** The Lily table.  
*Credit Image by LLDS*

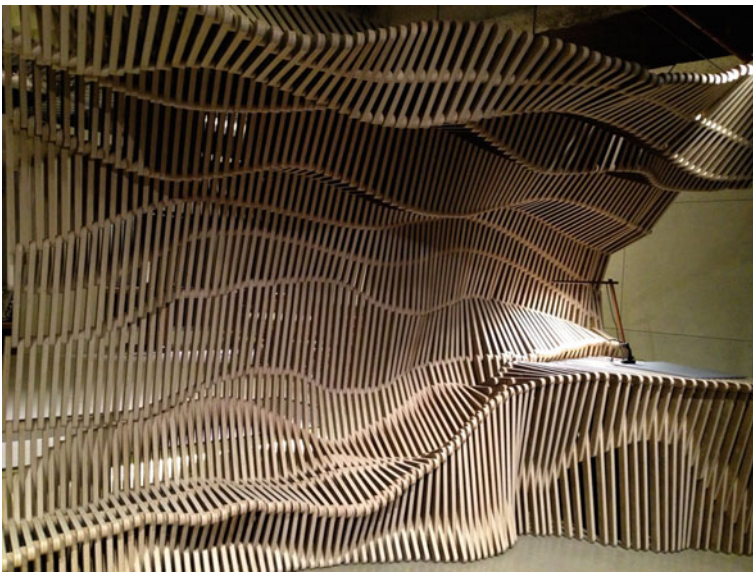


which is a significant example (Loh, 2019, p. 307). The computational model that structured the Lily table could be argued to be a piece of physical evidence that captured such a repertoire.

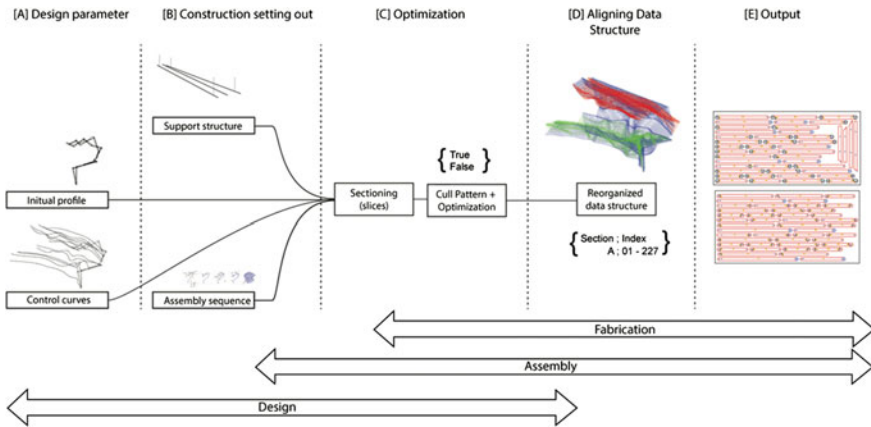
### ***GPT Concierge Desk: Procedural Approach to Making***

The GPT concierge desk is an architectural scale piece of furniture developed in collaboration with BVN Architects. The design is composed of 1,600 unique pieces of CNC-milled 18 mm thick plywood to form a seamless undulated surface that in part becomes seating and, in some areas, raised to form a desk and ceiling (see Fig. 15.5). The project developed what we called a smart-assembly procedure which was successfully applied to several projects by LLDS/Power to Make (Loh et al., 2016c). The procedure overlays the fabrication and assembly process as part of the digital fabrication process (refer to the workflow diagram in Fig. 15.6). In other words, it tries to systematically translate complicated tacit procedure of the assembly process into a defined rule set or algorithms. On a practical level, the integrated workflow makes the assembly of what is otherwise a complicated task feasible and reasonably easy to build. More importantly, the workflow imparts a methodology for the integration of tacit knowledge into the digital medium.

The complexity of the concierge desk lies in the assembly sequence of the parts. The structure is further complicated by the fact that the entire form is hung from

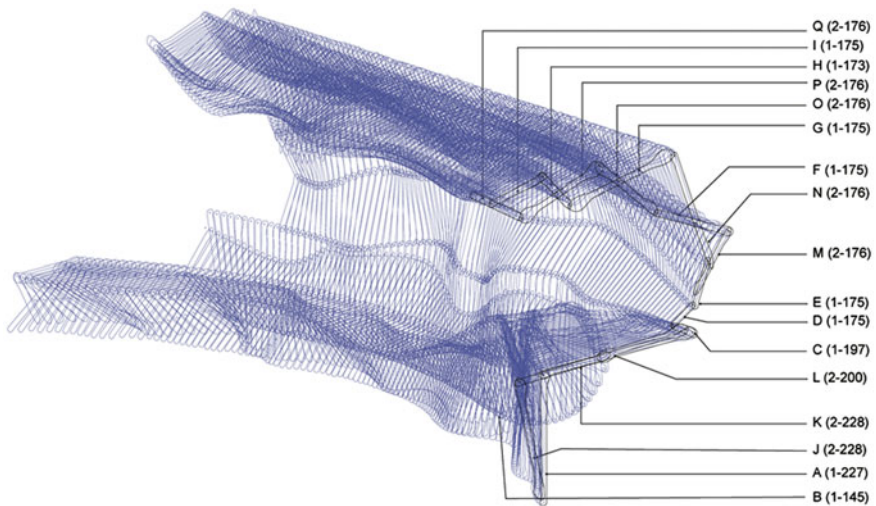


**Fig. 15.5** Concierge desk for GPT group. *Credit* Photography by LLDS

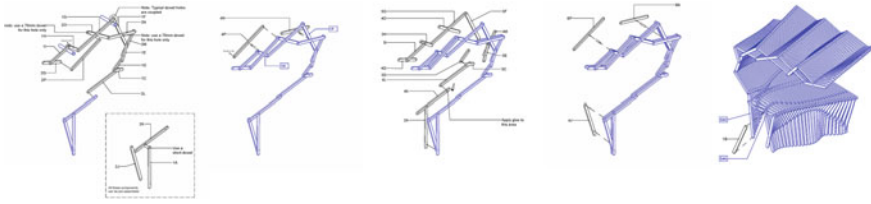


**Fig. 15.6** Digital workflow for the Concierge desk from design to fabrication. *Credit* Image by LLDS

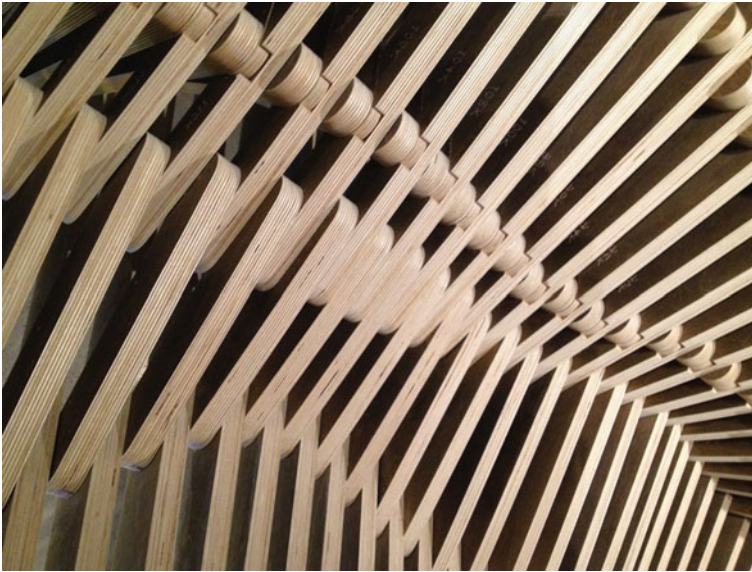
the ceiling with two metal struts, and alternating parts are omitted to create a visual pattern across the surface. The assembly needs to be robust, and each component is fixed at a minimum of two positions to triangulate the structure. The entire structure is sectioned vertically; 228 section in total (see Fig. 15.7). The assembly procedure in Fig. 15.8 demonstrates the complexity in the hit-and-miss sequence to achieve the visual pattern across the surface. To avoid misalignment of parts, each horizontal segment of the structure is also indexed (see Fig. 15.9). The indexing of the sections allows the assembly team to ensure that all the components that belong to the section



**Fig. 15.7** Indexing of Concierge desk for assembly. *Credit* Image by LLDS



**Fig. 15.8** Assembly procedure of Concierge desk. *Credit Image by LLDS*



**Fig. 15.9** Joinery detail of Concierge desk. *Credit Image by LLDS*

is grouped together and assembled from ground to the ceiling following the alphabet order of the horizontal segment (from A to Q, in Fig. 15.7). The above strategy is developed through several prototypes. Lessons learned from the prototypes are used to inform the strategy and shaped the digital workflow.

### **Strategy: Assembly and Workflow**

Malafouris suggests the form of an intended object is not external but learned as an idea. The design developed through the making process is a clear sense of agency of the maker. How can the shaping of a digital workflow (Fig. 15.6) constitute such a learned process?

In the concierge desk project, I suggest that the incremental learning and translation of tacit knowledge from the various prototypes to the digital workflow begin to

describe the learning process of the maker. While the form of the design is driven by a set of freeform curves in space, which allows the design team to manipulate at will, the geometry is constrained by the assembly logic described in Sect. 3.2. The explicit sense of agency of LLDS is evident in the setting up of computational script and the digital workflow from design to fabrication and assembly. While the feedback from tool to the sensorimotor of the maker in craft is far more immediate (Malafouris, 2016) than in the digital fabrication procedure discussed in this project, the level of material engagement remains consistent in both processes of making. The latter merely translates and synthesises the tacit information into a digital workflow.

## *Discussion*

The two strategies described above attempt to establish how tacit knowledge can construct a dialogue with digital information. Through designing with tooling and translating making procedure into digital workflow, we begin to understand how craft can be digital.

The implementation of digital technology and tools on the material does not necessarily imply the formation of digital craft. We often witness the wilful manipulation of material using CNC technology. Of course, any geometry is possible given an abundance of resources, but one must ask, has the maker or designer understood the material? Has the digital technique and (most importantly) the digital making process considered the various aspect of workmanship? Lastly, how can this knowledge inform and drive the physical outcome through the computational method? All these questions suggest a feedback process from the making to the design that creates a sense of agency (of the maker) that is bestowed onto the artefact to warrant it as a piece of digital craft—a sense of authenticity.

## **Challenges of Craft in the Post-Digital Age**

In the previous case studies, we observe how the traditional concept of craft is challenged by technology on three levels: the issues of one-off and limited production, the markings of tools as a representation of authenticity, and lastly, the learned and sustained process of making. I have argued that digital process can negotiate these challenges to formulate new territories as digital craft. With recent advancements in technology and the emergence of AI, craft could be further challenged in the future.



## ***What Happens to My Painting?***

We recently investigated the use of AI in design. *Mapping the Stack: self-portrait of the internet* was investigated through a design studio at the University of Melbourne coordinated by the author in collaboration with the Architectural Association Visiting School, directed by Mond Qu. Led by Andrea Savard with six Undergraduate and Master-level students from the Melbourne School of Design, the project set out to explore the use of AI to map the vast internet megastructure. The project was conducted over the course of 2 weeks, and was intended as a demonstration of an early phase exploration using AI in design. Frank Burrige, a Master-level student lead the team in coding and setting out the AI workflow. The outcome is a series of digital ‘self-portraits’ of an internet search auto-generated using an AI script (Fig. 15.10).

The AI script first searched for metadata in the form of ‘tags’ or keywords associated with images via the Google™ Images search engine. Tapping into Google™ Vision AI, the software identified objects in approximately 2,000 downloaded image samples, which were used to generate a new image based on the machine learning process. The team used DeepAI.org’s text2img application program interface (API), to create new images based on the knowledge the software has acquired. The outcome is a set of auto-generated ‘paintings’ that considers the bias inherent in the search engine and VisionAI. For example, as Burrige observed, when training the software to recognise the objects in an image there is a bias towards human figures, as VisionAI is better at identifying humans than it is with other objects. Hence, the image tends to have a human-like impression, akin to Francis Bacon’s paintings (see Fig. 15.11). There are several limitations in this project developed from the constraints of the software API; for example, the image generated cannot be read back to its original search terms. Nevertheless, the project demonstrates the ability and potential to use AI in creating new content; in this case, painting-like images.

## ***Discussion: AI and Digital Craft***

I open this chapter boldly with the question: what is the future of craft (concerning technology)? In this section, I would like to reflect on how emerging technology such as AI can begin to disrupt our understanding of craft, and what it means for digital craft in the future. The AI project sets out an uncomfortable precedent. If AI can search and reconstitute new and unique images based on sampling techniques and machine learning process, then can it be applied (in the near future) to craft techniques, such as wheel throwing in ceramics? If this is possible, then what are the implications for craft?

In the Lily table, we observed that multi-axis robotic milling could produce craftsmanship on both the aesthetic and technical level. If craft is a form of learned and

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Item no.: 1 |Franks-MacBook-Pro:~ frank$ googleimagesdownload -k "accidental megastructure"

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Starting Download...
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peer>
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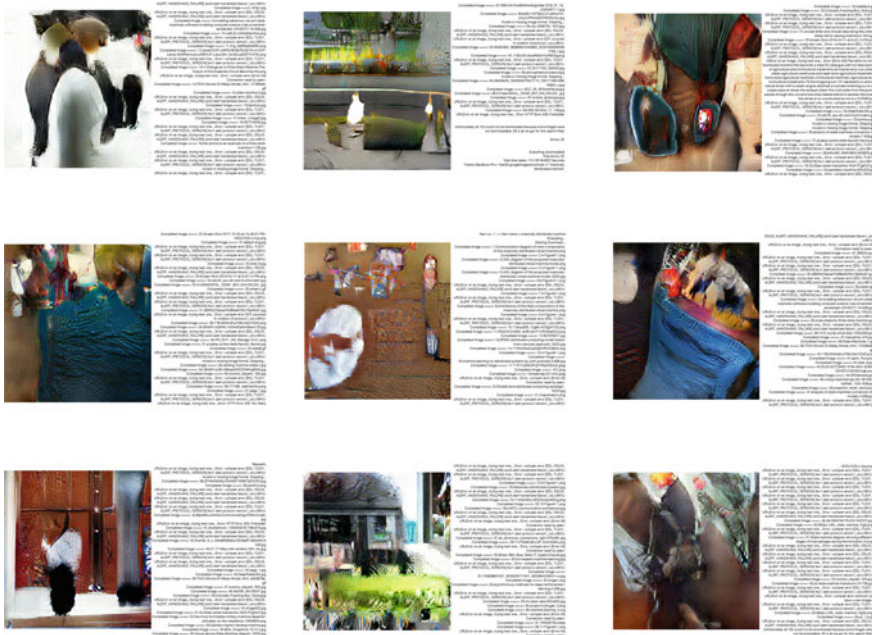
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all we got for this search filter!

Errors: 32

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puts/output.jpg' \
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> https://api.deepai.org/api/torch-srgan

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**Fig. 15.10** AI code for *Mapping the Stack: self-portrait of the internet*. Credit Image by Frank Burridge



**Fig. 15.11** A series of digital ‘self-portraits’ of an internet search auto-generated using an AI script. *Credit* Images by Frank Burridge, Sophie Gearon, Jiatong Li, Jinru Lyu, Cristina Napoleone and James Oberin

sustained practice, then can such learning also be sustained through AI? This reading fundamentally challenges the authenticity of craft on two levels.

First, the AI project implies the replacement of the cognitive capacity of the maker and (in digital craft) the designer, by machine learning. Once AI can associate techniques with outcomes (whether as images or movement), then the AI can potentially be trained to build on the technique through circular logic (Adamson, 2007, pp. 70–78) and what Adamson (2007, p. 72) called the mental skill or know-how. If one aspect of the authenticity of craft is the learned process of making, then AI has directly challenged the authorship of the maker, and more precisely, his or her workmanship; the application of the technique to making as defined by Pye (1995, p. 51).

Second, the AI project already demonstrated the ability and potential to make new artefacts or self-configure parts, in this case, the organisation of similar pixels that form contents based on the associated metadata of the sample images. While the ability to make tools and useful objects is typically associated with the *Homo Faber*, the AI project points towards a future of self-organisation through artificial intelligence where machines can make decisions based on learning of a particular pattern or behaviour. Machine making could one day be coupled with machine learning to create novel objects. So, does this mark the end of craft?

Not quite, in my opinion (though future research may prove me wrong), there is one aspect of craft that remains a difficult line for technology and AI to cross; namely, the intent of the maker and designer. Both Pye and Malafouris emphasise the importance of intent during the making process; an essential governing factor in design even if the outcome is emerging. While a machine can learn habits and behaviour patterns to make judgements, it is much harder to learn or establish intentionality through codes without resorting to copying or mimicry. While intent can be studied (Pacherie, 2006), there is complex feedback in the design decision-making process we sometimes call intuition, which often drives the creative process leading to an emerging working method, techniques and sometime re-working based on aesthetics (Loh, 2019; Malafouris, 2016)—a territory that warrants further research.

## Conclusion

In this chapter, we examine how we can construct a dialogue between craft and digital technology to create a meaningful relationship that qualifies as digital craft. Two strategies are put forward as a means to translate tacit knowledge into digital codes or algorithm. The first utilised tooling to drive the digital design, and in the process, refined aesthetics emerge from the tooling process. The second aligned assembly knowledge into the digital workflow. It can produce complexity, as observed in traditional craft objects. More importantly, it creates feedback that is learned by the maker to improve his or her craft. The feedback process creates a sense of agency of the maker over the digital procedure. Through case studies, I demonstrated that digital craft could begin to challenge the authenticity of craft in its various form, from the one-off and limited edition to the marking of the tool on a craft object, and lastly, the learned and sustained process of making as a knowledge-generating activity.

Artificial intelligence further challenged the renewed relationship between craft and the digital. Through an AI project, we begin to question the authenticity of contemporary craft, and several uncomfortable questions are raised on the future of craft. I proposed a more radical rethink of where future craft lies with the relentless technological advancement of our society. With the emergence of AI and cognitive-driven technology, it is now more vital than ever that we, as academics and practitioners of craft, begin to reconsider the craft theories of the twentieth century in relation to technology. I call for a renewed understanding of craft as digital craft in the twenty-first century.

**Acknowledgements** The projects conducted in practice LLDS/Power to Make are designed and fabricated in collaboration with David Leggett and supported by the dedicated team of staff, namely, Ryan Huang for the Lily Table and Marc Micuta for the GPT Concierge desk. *Mapping the Stack: self-portrait of the internet* is a result of Studio led by Andrea Savard with Frank Burrigge, Sophie Gearon, Jiatong Li, Jinru Lyu, Cristina Napoleone and James Oberin. The project is part of the Architectural Association Visiting School directed by Mond Qu and coordinated by the Author. I want to thank all the students for their participation in the subject.

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# Chapter 16

## Chiang Mai Digital Craft: A Case Study of Craftsmanship's Knowledge Representation Using Digital Content Technology



P. Sureephong, S. Chernbumroong, and B. Tolmar

### Introduction

Chiang Mai is the largest city in Northern Thailand and the country's second most important city after the capital, Bangkok. This city is also home to prosperous craft industries. Ceramics, textiles, woodcarvings, silverwork and laquerware are of primary importance and have a long history. More recently, furniture and decorative items made from rattan, bamboo, mango wood, recycled teak and Asian rosewood have gained popularity both locally and overseas. Over ten million visitors visited Chiang Mai in 2019, of which 70% were Thais and 30% foreigners (Bangkok Post, 2020). The attractions include historic sites, cultural ceremonies and handcraft shopping. In recent years, the tourists, particularly from China and Western countries, visited Chiang Mai and spent over 750 million US dollars. Handcraft products were accounted for 30% of the tourists' shopping expenses (A Survey of Cultural Tourism by Social Research Institute, 2006). There is no doubt that handcraft products are attractive and a significant source of Chiang Mai's income.

The products also show original design and a unique style, which are displayed in attractive showrooms throughout the city. The craftsman's skill and knowledge are valued as it is involved from the start of the design and production process, playing a crucial role in Thailand's overall creative economy (Wikipedia, 2015). Chiang Mai crafts are one of the main factors improving the value of economic goods and services overall (Howkins, 2001). However, the value of the product, its workmanship and the

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maker's skill is not always conveyed. The importance of online selling, e-commerce and marketplaces are key for improved sales, but many local companies cannot afford the digital technology required for a larger scale, higher budgeted business.

The aim of the project "Chiang Mai Digital Craft" is to use digital content to preserve the added value of products and their delivery to the customer. Moreover, the positive results of the project would provide good international collaborations between the United Kingdom and Thailand. In this paper, we present the project in three main areas. Firstly, the background area will provide the general information related to project. The second area is the framework, which illustrates the development process of each part of the project. Thirdly, the results will be presented.

## **Background**

### ***Chiang Mai Digital Crafts***

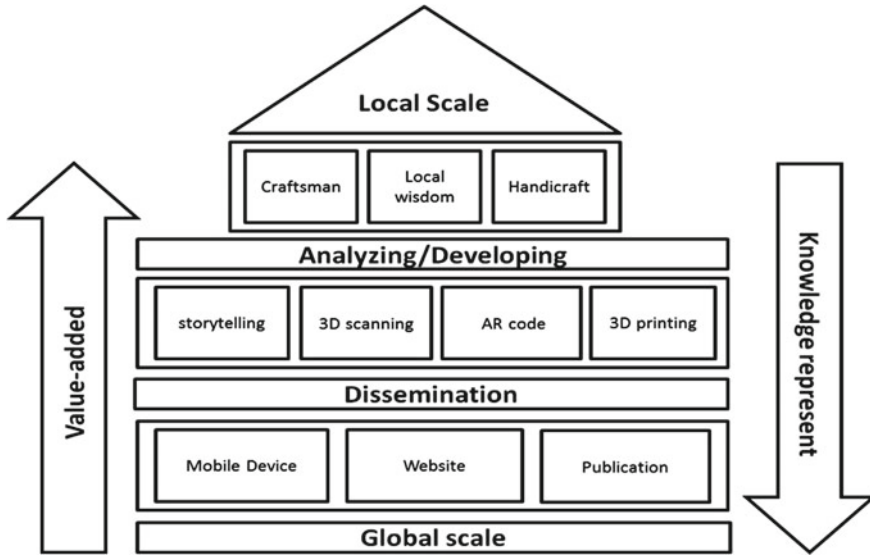
The project Chiang Mai Digital craft was formed by the cooperation between the British Council and Thai partners, namely, the Chiang Mai Creative City Initiative (CMCC), the Technology Development Center for Industry (TDCI), the Northern Handicrafts Manufacturers and Exporters (NOHMEX) and the College of Arts, Media and Technology (CAMT), Chiang Mai University. The aim was to give support to Chiang Mai's creative crafts by establishing channels and materials to propagate them, and by raising their competitiveness through knowledge and technology exchange. Additionally, the project laid stress upon such references as tourism, arts, heritage, culture and digital content. To reach these goals, this project focused on the implementation of new digital technologies as a key to enhance the competitiveness of SMEs in Chiang Mai's creative industry. The project encourages the collaboration between the participating countries (Thailand and United Kingdom) by the exchange of knowledge, best practices, expertise and technology in the field of the creative economy. The wider public has been involved in the project by disseminating the results on seminars, meetings, workshops and publications.

## **Methodology**

### ***Project Framework***

The project Chiang Mai Digital Crafts consisted of three main phases. In the first step, a preliminary assessment has been executed to gain a better understanding of the current situation. The preliminary assessment was based on a SWOT analysis. In the second step, the website 'handmade chiangmai.com' has been created. This





**Fig. 16.1** Project framework

website was dedicated to promote the crafts online supporting Chiang Mai’s traditional craftsmen with state of the art, digital technologies. The third project phase focused on digital production design and the exploration of the various possibilities that the application of different 3D technologies has to offer for the crafts industry. 3D technologies with the potential to boost the competitiveness of craft products have been investigated, applied and tested in this phase. Figure 16.1 illustrates the project framework.

### ***Development Process***

#### **Phase 1: Preliminary Assessment**

As an introductory step, a SWOT analysis has been executed to get a clear picture about crafts in Chiang Mai. This analysis later functioned as a guideline to define the further project phases and their operative activities. The results of the SWOT analysis are shown in Table 16.1.

**Table 16.1** SWOT analysis results

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Chiang Mai is a city with long tradition, fine skills and great expertise regarding crafts</li> <li>• The products show original design and unique style and there are also attractive showrooms throughout the city</li> </ul>	<ul style="list-style-type: none"> <li>• Production capacity was found to be insufficient. In many cases, there is a lack of in-house design expertise, and a lack of digital media and e-commerce know-how such as branding expertise</li> <li>• There is a concern about copyrights and the security of internet transactions. The local use of e-commerce is turned out to be very low</li> <li>• High postal cost for small batch international orders is an obstacle of competitiveness</li> <li>• There is a lack of contemporary product development inspired by local traditions and cultural heritage</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• The relatively low price of local products has the capacity of profit margin growth if supported by good branding</li> <li>• Topics such as the contemporary application of traditional techniques provide compelling stories to tell as regards the city, the companies and the products</li> <li>• Potential of the growing foreign retail/B2C market and growing domestic market</li> <li>• Growth on the market of cultural products</li> <li>• Growing demand for products with authenticity and high design quality</li> </ul>	<ul style="list-style-type: none"> <li>• Concerns over copyrights</li> <li>• Internet transaction safety and security issues regarding e-commerce</li> <li>• Strong competition from China and Vietnam, particularly as regards quality and price</li> <li>• The local workforce typically associated with crafts is subject to urbanization trends and migration, following the global tendencies</li> </ul>

**Phase 2: Digital Story-Telling Through an Interactive and Content Rich Website**

As the SWOT analysis made it clear in which direction to go, the next project phase was dedicated to the creation of the website ‘handmade-chiangmai.com’. The concept behind the website was based on the recognition of some of the difficulties related to the crafts industry in Chiang Mai. Although the city looks back to a long tradition of crafts production with high expertise, producers had disadvantages in meeting the demands of the twenty-first century markets and its customers in terms of branding, product design, distribution channels, online media presence and the use of digital technologies. The website aimed to function as a role model for crafts producers, emphasizing the importance of online media presence with high-quality visual contents.

For the participants of the project, it was also very important to create a hub of stakeholders in the crafts industry in order to reveal the synergies of such a cooperative network. One of the many arguments for the website was that it can potentially function as such a hub, bringing producers together allowing them to reach out for each

other, recognizing themselves as representatives of the same tradition and culture, revealing and articulating their common values and interests, and also allowing the visitors or potential customers to find everything at the same place, let it be information on culture, crafts, production methods, products or crafts tourism-related information.

When trying to solve the above-mentioned problems related to the crafts industry of Chiang Mai, great stress was laid upon storytelling, allowing the site to give its visitors an insight to local traditions and history, craftsmanship, production techniques, skills and knowledge, as well as local communities and lifestyles.

## The Website Creation Process

As an early step of the Chiang Mai Digital Crafts project, some of the subsectors of the crafts industry have been selected to be represented on the website with rich multimedia content. The following aspects were taken into consideration in the selection process: significance, uniqueness of the subsector, storytelling potential, availability of entrepreneurs, businesses, and artisans to participate in the online content production, just as the suitability for the next project phases. As a result of the selection process, wood, ceramics and textiles were selected to be presented online. The list has later been expanded by three new subsectors as follows: metals, paper, soaps and oils.

The idea was to display a few companies related to each selected subsector on the website. The next step was the company selection. The management committee of the project set up a set of guidelines together with the project team for the selection as shown in Table 16.2.

As the final step of the website creation process, having all the sectors and companies selected, the production team created the visual content. The key elements of the visual content are the story-telling videos and the product photographs. Find out more about such content under the Project Output chapter.

**Table 16.2** Guidelines of the company selection

Selection criteria
• Distance from Chiang Mai
• High-quality (traditional) craftsmanship and finished product lines
• Authenticity/use of local materials and resources
• Ability to access the people behind the production
• Story-telling potential: history/heritage/manufacturing process
• Willingness of the business owner to participate

### ***Phase 3: Digital Design and Production***

3D technologies allow realistic experiences in virtual environments. With the fast-growing popularity of e-commerce platforms, this characteristic of 3D technologies potentially delivers competitive advantage. Realizing their growing importance, this project aimed to seek for 3D technologies that can be implemented for an enhanced crafts design. The SWOT analysis as a preliminary assessment method of the project clearly indicated that producers in the crafts industry of Chiang Mai tend to lack knowledge on digital media and product design. Such deficiencies result in an incapacity of revealing the full market potential of the products. It was a substantial goal of the project to let the craftsmen realize the importance of product design and to make them recognize the possibilities of digital technology applications. During the project Chiang Mai Digital Crafts, the following 3D technology solutions have been investigated together with their possible ways of implementation in the crafts industry: 3D printing, 3D scanning/360° capturing and digital craft engine production.

#### **3D Printing**

3D printing is a process whereby solid 3D objects are produced from a digital file. Unlike most traditional machining techniques 3D printing is based on an additive process. Additive manufacturing techniques use virtual illustrations of (CAD) or (AMS) softwares and convert them into thin, virtual, horizontal cross-sections. Corresponding to these virtual cross-sections, the 3D printer lays down successive layers of liquid powder or sheet metal until the shape is complete. This process can create almost any shape of various geometric features. The end product is almost identical with the virtual illustration.

#### **3D Scanning/360° Capturing**

A 3D scanner is a device that analyzes a real-world object or environment to collect data on its shape and possibly its appearance (i.e. color). This collected data can then be used to construct digital three-dimensional models. This technology is very useful to display products in a virtual environment, e.g. in an e-commerce website. 360° capturing allows viewers to observe the captured objects in 3D, from any angles. This technology makes it possible to reveal the important characteristics of objects without their real presence.

## Digital Craft Engine Production and Integration

In addition to 3D printing and 3D scanning techniques, the project also investigated the following methods for product presentation and promotion: visualization via mobile devices (Android, iOS), interactive mini books, postcards, Japanese flags and name cards.

The interactive mini book, for example, contains an AR code. Users need to download the project's application to their mobile devices first and then point their cameras on the AR code. The 3D images of products or informational videos will then pop up on the user device. The postcards, representing another example of product design possibilities, were designed to be informational and aesthetic at the same time giving contact information and some product pictures.

## Project Output

As already stated before, in the second phase of the project, the website [www.handmade-chiangmai.com](http://www.handmade-chiangmai.com) has been created. With its premium design, high-quality visual content, and outstanding functionality it managed to bring the online representation of the local crafts industry to a whole new level.

## The Content

The website content is basically divided into two parts: there is a general overview of Chiang Mai's rich heritage of crafts, its markets and communities, key designers and region-specific design styles etc., and there is a section for creative crafts tourism providing information on courses and other related programs. The website represents the most prominent craft sectors of the city as follows: wood, textiles, ceramics, metals, paper, soaps and oils. All sectors are represented by rich multimedia content. Historical information is complemented by pictures and videos. In each sector, there are some key companies introducing themselves by story-telling videos. The main menu gives access to five subgroups of pages as follows: crafts, products, general project information, information on the crafts community and a directory of producers. This website allows the visitors to have a better understanding on crafts, and to better appreciate these products of rich tradition and sophisticated craftsmanship. It helps to promote Chiang Mai's creative industries, particularly the crafts and tourism sectors by integrating creativity, technology and wisdom. It is an important step towards the innovative development of the traditional crafts sector and towards the implementation of new and innovative digital technologies.

## Story-Telling

Seeking effective means to deal with the problems related to the crafts industry of Chiang Mai, in the website production great stress was laid upon storytelling, allowing the site to give its visitors an insight to local traditions and history, craftsmanship, production techniques, skills and knowledge, as well as local communities and lifestyles. These videos can be considered as great achievements as they have primary importance in reaching the goals of the whole project: to propagate local crafts by revealing the rich traditions and fine craftsmanship behind the products. The videos aim to ensure that the audience gains new aspects of crafts in Chiang Mai in terms of history, traditions, skills and local knowledge, products, and communities. By showing the stories behind the products in a visually aesthetic way, these videos make a great contribution to customer engagement. All the subsectors are presented in different videos, and also some of the companies have videos to introduce themselves. As mentioned before, the core of the concept was to tell the story behind the product in order to strengthen the brand and broaden the business opportunities by revealing the rich cultural heritage and expertise behind each item. The video content consists of interviews with the designers, producers, suppliers and other stakeholders, and of recordings of the manufacturing process and products. The production team worked with the involvement of experts from the UK to ensure the highest quality of the output: images and videos.

## Results

When trying to evaluate the results of the project Chiang Mai Digital Craft first of all we have to understand the special nature of the crafts industry and the distinguishing characteristics of the sector. The classic terms of economics like profit maximization, market extension, increase of profit margins etc. do not seem to have the potential to sufficiently describe the crafts markets as they by-pass some of the most crucial elements.

Talking about the crafts sector of Chiang Mai as a whole, first of all we need to bear in mind that this is not just a competitive market sector. Being a source of income is only one of the many functions that can be linked to crafts. It is not just a profession in the classic way of sense but it is a lifestyle. It should not be ignored that craftsmen represent a traditional lifestyle where cultural heritage is preserved as values, knowledge and skills are passed over from generation to generation. Therefore, the key aspect of the crafts sector is sustainability in contrast with short-term economic goals like the growth of sales. Sustainability means finding the balance between the rich traditions of the past or the aim of value and culture preservation and the free emergence of modern influences, the capability to meet contemporary needs. And of course, sustainability has its strong environmental and social references. Using natural resources in a sustainable manner is of primary importance in

the crafts industry representing a traditional lifestyle based on harmony with nature. Nature is the supporting background from which human creativity can emerge thus it is something to be respected and protected and not to be exploited by short-term profit interests. As already mentioned, craftsmanship is passed from generation to generation, which gives the social dimension a great significance. Sustainability, in terms of social conditions, means that the craft sector should remain attractive for the young generations, and it should cope with the challenges of rapid changes in modern societies.

There is one more important thing about craft producers that influenced our decision on how to evaluate the project and this is their size and administrative abilities. In the craft sector, the companies represented can be considered as small entrepreneurialships, basically family businesses. These small businesses usually have a very limited administrative capacity, which means that it is very hard to quantify the effect of certain measurements. With other words, there are no statistics available on such indicators as sales or profit growth of a certain business period.

Given the above-mentioned characteristics of craft companies such as the presence of important features outside the range of classic economics and the lack of statistical input for economic analyses, we decided that the assessment will be based on deep interviews with some companies involved focusing on their own experiences regarding the project. This method seemed to be suitable to have a better understanding on how these small companies feel about the project, to detect the most successful areas of the project, as well as the weaknesses and the future possibilities of our initiative. In contrast with a strict business analysis, the deep interviews allowed the companies to reveal their great heterogeneity and their common values and benefits at the same time. We forsook the strong explanatory power of statistical analyses in favor of individual opinions and personal aspects which we believe are of utmost importance in the crafts sector so strongly rooted in the life of local communities. In addition to the above-mentioned deep interviews, our evaluation incorporates the analysis of the website “handmade-chiangmai.com”. This analysis covers two aspects such as the yearly comparison of visitor frequency and the website content extension.

### *Deep Interviews*

The deep interviews were designed to cover three main topics as follows: general impressions about the project, website-specific experiences and questions related to digital technologies. In the first part—general impressions—the aim was to understand how the crafts community feels about our project, how it is seen from the inside of the crafts sector, how much they understand the goals of the project and how much can they identify themselves with these goals. The questions related to the website “handmade-chiangmai.com” tried to identify those benefits associated with the presence on the site, any sensible changes in business that can be linked to the website, or new possibilities that might occur as a result of being one of the

companies showcased on the site. Finally, the third group of questions referring to digital technologies focused on the technological impact of the project on craft businesses. In this third part of the interviews, we tried to figure out if there have been any innovations in design, production or marketing at the companies interviewed applying some of the digital technology solutions presented during our project.

### ***General Impressions***

As regards the general impressions on the project, we can say that the feedbacks were really positive. In this initial part of the interview, such questions have been given to the participants like: “Do you think that joining the project delivers benefits to your company?” or “Does it improve the recognition of your company/products?” All of the companies interviewed absolutely agreed that the project was beneficial for them and for the whole crafts community. They pointed out that bringing together craft businesses of various profiles in one project really managed to reveal their common interests becoming much stronger together as one community with the same goals. This community-building power of the project has a great impact on sustainability, which is, as we saw before, the most significant and most critical characteristic of the sector. It was also claimed that the presence of numerous craft businesses in the same project opened up new channels of networking eliminating the distance between participants. They also widely agreed that the project had a positive impact on the participating companies’ recognition.

Furthermore, our survey found that it is widely accepted among the companies that a better understanding from the client side on the company profile, the production, the products and traditions—all the information which we can describe as the story behind the product—provides a better position on the market.

We also asked questions about some more concrete, measureable benefits that can be linked to the project such as an extension in sales or access to foreign markets. Although there was no direct evidence of the correlation between project membership and sales growth, none of the participants took it as a poor result of the project. Many of them pointed out that as they have a very strong limit in production volumes, they are not primarily interested in rapid growth or in reaching new markets. What really matters to them is the ability to fully inform the customers about their activities and they also want to be easily accessible for those looking for quality manifested in fine craftsmanship.

### ***The Website Presence***

In the second part of the interviews, we focused on the website-related experiences. Again, there was an absolute consensus on the fact that being represented on the website is generally beneficial for the companies. It has been revealed that it is



the production of the story-telling videos in which companies consider to be the biggest and best measurable achievement of the whole project. Many companies found different ways to use these videos in their own business activities outside the project. They used it to improve the content of their own websites and added it to presentations for clients or on conferences. They see these videos as a very effective way to communicate their values, to find connection with clients open for their rich traditions, doing it in an extraordinary visual quality. The participants also agreed that the content of the whole site is meaningful, well-organized and very attractive. They were also satisfied with the accessibility associated with the website. They pointed out that the site has a very good position in craft-related search results, and that a significant number of clients get to know about them through the website. As some of the companies also provide creative crafts tourism services, they found it very helpful that the “handmade-chiangmai” website has a subsection dedicated to it, because promoting such services is highly beneficial for the whole creative crafts community as it helps to reach out for people and to educate them, making them dedicated to crafts.

Beyond these concrete benefits linked to the website presence, some of the companies claimed that the website became a source of inspiration for them. With its top quality visual content, it functions as a role model for crafts businesses. Many companies decided to improve their own websites or showrooms after looking at the website realizing the importance of quality visual communication.

### ***Digital Technologies***

The last part of the interviews concentrated on the digital technologies. First of all, we tried to find out if this project allowed companies to get to know some of the possibilities that digital technologies can offer. We wanted to know if they are more familiar with such possibilities as a result of the project. We found that the workshop organized for the companies showcasing digital technologies was quite effective in a way of sense that all the companies interviewed still remembered the highlighted technologies such as the 3D scanning, 3D printing or the mobile device visualization using AR codes.

It was also commonly agreed that the utilization of such 3D technologies can deliver benefits to the crafts companies, for example by improving the package design or website content. When asking about accessibility, the interviewed companies agreed that these technologies are quite easy to access and could be affordable. However, many of them pointed out that the small company size and the very limited labor force available strongly limit their possibilities of digital technology applications.

Finally, we found that none of the companies interviewed has applied any of the showcased digital technology solutions in their own businesses. The common reason for this was the above-mentioned lack of surplus labor and that the companies felt

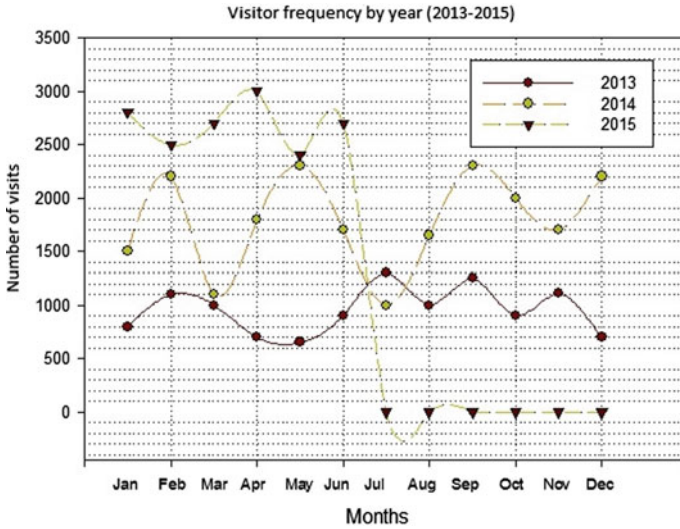


Diagram 16.1. Yearly distribution of visitor frequency

that they have other development priorities or they simply felt that their product and company profile are not really suitable for the application of digital technologies.

### Visitor Frequency

As discussed, our project assessment also contained some website statistics analysis. Diagram 16.1 shows the visitor frequency by year between 2013 and 2015.

The graph illustrates that, in 2013, the number of visitors per month was around 1000 in average, reaching its maximum in July, around 1300 visits. The next year saw a big increase in the number of monthly website visits, with an average around 1700. In 2014, the strongest months in terms of visits were February, May, September and December exceeding 2000 monthly visits, while with 1000 visits, July was the least visited month of the site that year. The tendency of fast-growing visit numbers continued in 2015. In the first 6 months, the number of average monthly visits exceeded 2600, which is 2.6 times as much as the average of 2013. April reached 3000 visits, a record visit number in the website history.

### Website History

Outside the deep interviews and website analytics, we had one more way to evaluate our project results. We took a look at the history of our main outcome, the

website “handmade-chiangmai.com” from the beginning to the present. Here is the summary of our findings: when the website was launched, it originally presented nine companies. The number of companies involved has been significantly increased since the launch that clearly demonstrates the strong interest of companies active in the creative crafts industry. Currently, there are 9 companies in the wood sector, 16 companies in the textiles sector, 7 companies in the ceramics sector, 5 companies in the metal sector, 6 companies in the paper sector and 4 companies in the sector soaps and oils. Totally, there are 47 companies represented on the website right now, which is more than 5 times as much as initially displayed.

### ***Limitations and Future Directions***

After summarizing the results, we would like to point out some of the barriers related to our project goals, and we would also like to outline directions in which our project can be extended in the future.

#### **Limitations**

We could see that the website “handmade-chiangmai” was highly successful but less attention was paid to the digital technology innovations. During our interviews, we heard about crafts businesses that applied some of these technologies, but the number of such companies remained low. It is also clear from the interviews that these small companies simply don’t have the capacity to apply these technologies. It is very common that they don’t improve their websites for example because they have no staff to deal with online orders. This problem of limited labor also means strong limits in business improvements let it be a website development, a new package or product design. Outsourcing could be one solution to this sort of barriers but that requires a very effective network and strong cooperation of related businesses.

When talking about unique products of creative crafts businesses, we must mention the problem of violating copyrights. Unless copyrights are effectively protected, investing in branding means high risks for the companies. This sort of protection requires a strong crafts community, which is aware of any violations and an effective supervisory authority. Moreover, online businesses also need to face with the security issues of online transactions. Online shopping has many advantages and e-commerce is constantly growing worldwide, but there are still strong concerns about the safety of online transactions and these concerns keep back a number of customers from online purchases. Small crafts companies with more limited budgets available for their website development and security measurements are particularly vulnerable and exposed to internet security risks.

Last but not least in terms of limitations, we need to speak about the low participation in e-commerce of locals. Many of the small creative crafts businesses don’t have a company website so even if they can come out with a unique product, they don’t

have the right channels to connect with potential customers. This drawback again points in the direction of sustainability, as the involvement of new generations in the craft production also means the involvement of knowledge on new technologies.

### **Future Directions**

Finally, let's talk about those directions in which our initiatives could be extended. We can assert that the global present tendencies provide a supportive background for the development of the local creative crafts businesses. The market of cultural products is broadening and there is a growing demand of products with authenticity and high design quality. Still, without projects fitting into a well-designed development plan, these proper conditions won't automatically result in a prosperous crafts industry.

### **E-commerce**

The most obvious possible direction of our current project is the further development of the website. Initially, it was designed to function as an e-commerce website, which idea had later been abandoned. Now many of the companies represented on the site claimed that it would be really beneficial to allow visitors to even buy products through the website. Turning the site to be an e-commerce website generating profit wouldn't only mean that the companies could sell more. That source of income could be also invested in the further development of the site adding new services etc. and a marketing budget could also be separated, making targeted advertising campaigns possible.

### **Sustainability**

We emphasized the importance of sustainability many times in our paper, and we would also like to refer to it when talking about the future directions. After having the interviews with the stakeholders, we strongly believe that the key objective is to make the creative crafts production as a life form attractive to the new generations. The tendency of urbanization, migration from rural areas to big cities and the abandonment of traditional lifestyles all mean great threat to crafts. It is the new generation of craftsmen who can get the necessary—technological, for instance—innovations through and make the crafts businesses meet the twenty-first century market needs. If it is about digital technologies, we need to seek for their potential to make craft attractive for the next generation, showing that it is not an outmoded activity but an appealing lifestyle with limitless possibilities of creative innovations.

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**Part VIII**  
**The Digital and a Dying Art**

# Chapter 17

## The Fading Art of Handwriting: The Choice Between Computer Typing and Handwriting



Stefan Popenici

My objective is to test to what extent  
my hands already feel what my eyes see

Auguste Rodin

In 2011, The New York Times published an intriguing article that opens with a brief observation:

For centuries, cursive handwriting has been an art. To a growing number of young people, it is a mystery (Zezima, 2011).

Data show that, across the world, the ubiquity of technology impacts on the capacity of many children and adults to handwrite or even decipher their own handwriting. But this short note is also referring to the current trend of (and debate over) the demise of cursive handwriting. Considered by many as an obsolete reminiscence of the past in the age of technology and computers, cursive writing is left out from school curriculum in different countries in the world. Computer typing—it is said—is now what new generations should learn rather than the useless mastery of handwriting or on the time-consuming art of calligraphy. In an era that favors technology and digital solutions, entire school systems in the world scrap handwriting in favor of computer typing.

For example, Finland, with one of the best-rated educational systems in the world, began removing cursive writing from the school curriculum from 2016. Representatives of the Finland National Board of Education underlined that this change will reflect how typing skills are more relevant than handwriting.

Minna Harmanen was quoted at the end of 2014 by the Finnish publication Savon Sanomat in saying that fluent typing skills are an important national competence, so

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texting and typing should replace school lessons in handwriting (Herdberg, 2014). As mentioned before, this change follows a broader trend in the world.

In the United States, the Common Core State Standards Initiative—released in June 2010 and adopted by almost all US states—does not require to learn handwriting or even mention activities related to this. However, these curriculum standards explicitly indicate requirements related to the mastery of computer typing. Common Core indicates that children from grade six upwards should be able to demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting. As a result, many states dropped altogether the requirement to teach cursive handwriting and most children in the United States learn only keyboard typing in schools. In Switzerland, the decision-makers in education publicly announced the intention to eliminate handwriting from the classrooms as soon as possible. Swiss cantons will decide if ‘Schnürlischrift’, the cursive writing, will be eliminated from school curriculum.

In few words, we can note that different countries in the world adopt this trend and we can expect only a more rapid expansion. In Australia, there are voices that are passionately advocating against cursive writing classes as part of school curriculum. For example, Nicola Yelland, Professor of Education at Victoria University, presents a set of arguments in support of the idea to drop handwriting altogether from children learning activities and school curriculum claiming that in teaching, cursive handwriting is an outdated waste of time.

An article published in ‘The Conversation’, Nicola Yelland notes:

We have moved into the 21st century with new technologies permeating every aspect of our lives. No-one would think to ask the textile industry to go back to using the Spinning Jenny, an antiquated machine that enabled the production of textiles, or decree that a laundry go back to washing clothes by hand. But they think it’s okay to ask teachers to concentrate on industrial revolution basics (Yelland, 2015).

It remains quite unclear why the author considers that handwriting is one of the ‘basics’ of the Industrial Revolution. Of course, cursive writing can be considered a pillar of the Roman Empire or a basis for the ancient Greek culture and other cultures that are much older (e.g. the Dead Sea scrolls were most likely written during the period from about 520 B.C. to 70 C.E.). Regardless of its accuracy or sense, this note opens our discussion to an important aspect of this debate, also mentioned by Zezima in the above-quoted observation, that for centuries, cursive handwriting has been an art (Zezima, 2011). Cursive writing and literacy is a relatively recent achievement in the human evolution, a spectacular advancement of our civilization. As the erudite scholar George Steiner observed, thousands of years of orality precede the written word and the art of reading. Steiner takes note that the ephemeral existence of reading and writing is just a brief glimpse in the history of humanity. In this perspective, we find Homer immediately next to Flaubert or Camus, and ancient myths next to Shakespeare’s plays. Homer is weaving on the mythological material that was maintained for thousand of years before him only in oral narratives, as part of collective traditions. It is important to remember here that neither Socrates nor Jesus ever published, and their use of written texts is scarcely mentioned, if ever by



Plato or in the Scripture. In twenty-first century, we can find that oral traditions still maintain the identity of many communities and ancient cultures around the world, that have little or no use of the written word.

Even when the written word becomes an ineluctable part of social life we can see that it was for centuries a set of skills reserved to a small minority, mainly clerics and some few representatives of the upper class. The slowly expanding elite with the capacity to read and write maintained privilege and prestige also with the wealth of knowledge gained through literacy. In more recent times, literacy and schooling still stay as a privilege reserved to a small minority. It is estimated that only 200 years ago just a bit over 10% of the world population was able to read. In 1870, over three quarters of the world's people still had no access to schooling, and less than 20% of the world people was able to read. There were—as we still have today—significant gaps between regions, but literacy was still limited. In Europe—and its extensions in North America and Oceania—over half of the population had attended school in 1870, while in Africa and South-East Asia, over 90% of the population was illiterate (Zanden et al., 2014). In the last years, statistics indicate that—even with significant inequalities between world regions—literacy rates for adults and youths continue to rise. According to data published in 2014 by the UNESCO Institute for Statistics, global adult literacy rate is over 84% (and 89% for youth), while 40% of world countries have literacy rates of 95% or higher.

The ability to read and write is a recent achievement for humanity and the idea to drop handwriting in favor of typing may look like a natural step in the evolution of human culture, a move towards a new stage in human history: the era of digital solutions. As technology is revolutionizing the world of education, curriculum and learning dynamics are also remodeled in and outside classrooms. The Washington Post published in 2013 the analysis 'Cursive handwriting is disappearing from public schools', an article focused on the trend of replacing cursive with typing in curriculum. The article quotes various practitioners and decision-makers, such as Patricia Granada, principal at Eagle View elementary in Fairfax County, who is saying that cursive is increasingly becoming obsolete. Michael Hairston, president of the Fairfax Education Association, the largest teacher's union in the county, indicates that cursive is 'a dying art', while Steve Graham, Professor of Education at Arizona State University and one of the top U.S. experts on handwriting instruction, claims that the truth is that cursive writing is pretty much gone, except in the adult world for people in their 60 and 70s (Shapiro & Voisin, 2013).

It seems that even the debate on the necessity to teach children cursive is less relevant now, as the future clearly belongs to the keyboard. Proponents of the idea to remove entirely handwriting from school learning experiences give the impression of being certain that the near future will not have ideas and notes written on paper. Moreover, even those bits written on paper will not be written by hand, but printed from computers. Books are already turned into e-books and e-readers can keep libraries of many hundreds of volumes that are easily accessible, just few clicks away. Some of these new books come with spectacular interactive features, with sound and video. It is argued often that the printed book is dead and even the personal signature with pen on paper is now replaced by the electronic coding of humans' fingerprints. This

is a part of the arguments in favor of leaving handwriting aside and focusing on the future. But it is not all as simple and clear as it seems. First, we have to look at data and see if all prefer digital mediums in favor of print on paper.

At the end of 2014, Scholastic in collaboration with the global market research and data company YouGov conducted an extensive survey to explore family attitudes and behaviors around reading books in the USA. Among the key findings of this research is that nearly two-thirds of children (65%)—which represents a significant increase from 60% recorded in 2012—indicate their strong preference to read books in print when digital alternatives are available. The decline of preference for e-books in favor of print for the generation often referred as ‘digital natives’ should not be surprising. Naomi Baron, a professor of linguistics at American University, surveyed with a team of researchers over 300 university students in the USA, Japan, Germany and Slovakia. Their results reveal a clear and massive preference for print, especially for what is considered serious reading. Over 90% of university students indicate—when given a choice of various media that including print copies, cell phone, tablet, e-reader, and laptop—that they could concentrate best in reading the paper print version. Research also unveils that people are more likely to re-read if they have a book in hard copy (Baron, 2015).

Before we take such drastic changes—such as replacing learning handwriting with classes on typing and texting—lured by the seductive narrative of progress and alignment with the technological revolution we have to carefully consider the impact on learning. Handwriting is a complex educational task that is activating in a very different way how brains function. Moreover, we still have very little information on the impact of flickering screens and digital mediums on the human cortex, imagination, critical thinking and on the dynamics of learning. Cursive writing involves different brain regions in a complex puzzle that remains largely an unexplored process (Planton et al., 2013; Roux et al., 2014).

Results of a large number of research studies undermine the idea that using the laptop’s keyboard is leading to better results in education or increases students’ satisfaction. In fact, most find that taking notes on a laptop impacts on comprehension, analysis, critical thinking and memory. For example, in a study published in 2014 in the *Psychological Science*, two researchers from Princeton University and UCLA provide a set of evidence that indicates that students who handwrite notes remember conceptual information better than those who take notes on a computer. In studies that included hundreds of students from Princeton and UCLA, we find results that reveal that when laptops are used solely to take notes, they may still be impairing learning because their use results in shallower processing. The research analysis concludes that the keyboard use negatively affects performance on educational assessments, even—or perhaps especially—when the computer is used for its intended function of easier note-taking (Mueller & Oppenheimer, 2014).

In different research studies conducted by Mueller and Oppenheimer, we find that students who use laptops to take notes are more accurate and detailed. But it seems that this is a mechanical process, when the focus is on transcription rather than comprehension and analysis. In other words, study results suggest that the use of keyboards to take notes is leading to a mindless or. The more accurate record of

what the lecturer presents is not associated with a meaningful understanding, analysis or application of this information. These results were unchanged when Mueller and Oppenheimer warned a group of laptop note takers that they have the tendency to transcribe information without thinking. However, even when they were invited to avoid the mindless keyboard note-taking by thinking about the information and take notes in their own words, the group recorded the same results, with no improvement in synthesizing material than students who received no such warning. One possible explication is that the focus is shifted from the mechanical process of typing, on the easy task, rather than the complex task of writing the synthesized and processed information. Clifford I. Nass, a professor of psychology at Stanford University who studies multitasking and learning, explains with an inspired metaphor the process of shifting to shallow or mindless tasks, possible on computers. He states that he doesn't think law students in classrooms are sitting there thinking, 'Boy, I'd rather play Freecell than learn the law'. What happens, he continues, is that there's a moment that comes when you say, 'Boy, I can do something really easy, or I can do something really hard' (Glenn, 2010).

In a study on the effects of laptop use on student satisfaction and quality of learning, students with laptops reported statistically significantly less satisfaction with their education compared to students with no laptops. Investigating why student engagement is diminished in the group using laptops, researchers found that the most important reason for their dissatisfaction is 'laptop multitasking distraction in class'. Students too easily got distracted using the laptop for Internet activities instead of being attentive to the professor (Wurst et al., 2008).

Similarly, in 'What's Lost as Handwriting Fades', an article published in 2014 by The New York Times, Stanislas Dehaene, a psychologist at the Collège de France is quoted in making a very important point:

When we write, a unique neural circuit is automatically activated. There is a core recognition of the gesture in the written word, a sort of recognition by mental simulation in your brain. And it seems that this circuit is contributing in unique ways we didn't realise... Learning is made easier (Konnikova, 2014).

A 2012 study coordinated by Karin James, professor in the Department of Psychological and Brain Sciences at Indiana University, states that handwriting is important for the early recruitment in letter processing of brain regions known to underlie successful reading. Moreover, this study demonstrates that handwriting leads to the activation of different regions of the human brain in a way that suggests that cursive facilitates reading acquisition in young children. In other words, handwriting is closely associated with literacy and access to superior levels of proficiency in reading and writing. This point is demonstrated by numerous other studies, with data revealing that letter perception is facilitated by handwriting experience, and it further suggests that handwriting experience is important for letter processing in the brain (James & Engelhardt, 2012).

Writing by hand is an acquired language that is involving simultaneously motor skills and complex functions of the brain. Cursive writing requires the engagement of the working memory—the same memory engaged in learning and the use of

language—and a learning process on how to draw and use letters, to use them to create words able to express ideas, and to combine them in sentences and coherent texts. Using a keyboard involves a part of these processes, but brain scans and research studies show that keyboarding requires a more limited set of skills and brain functions. Virginia Berninger, a professor of educational psychology at the University of Washington Center on Human Development and Disability, was interviewed for a CBS. This Morning investigation of what makes companies specialized in new technologies build on the art of handwriting in a digital age. Professor Berninger, a specialist on the effects of handwriting on the human brain and author of widely referenced articles published in scientific journals, summarized both the complexity and the importance of handwriting saying that writing is the way we learn what we're thinking [...]. The handwriting, the sequencing of the strokes, engages the thinking part of the mind (CBS News, 2014).

The importance of handwriting and the art of calligraphy was not lost by technological companies, in the same time when is marginalized in schools. There are strong examples in this field that show that handwriting is much more than a simple set of obsolete skills in education. Steve Jobs, one of the most innovative and influential creators of new technologies, provided at The University of Stanford a moving and insightful presentation of his personal journey. His reflections on handwriting and calligraphy can stand next to research data for reflection on what can be lost when we consider handwriting obsolete in education or when we step as far as eliminating cursive writing from curriculum. In this commencement address, Steve Jobs noted:

...much of what I stumbled into by following my curiosity and intuition turned out to be priceless later on. Let me give you one example: Reed College at that time offered perhaps the best calligraphy instruction in the country. Throughout the campus every poster, every label on every drawer, was beautifully hand calligraphed. Because I had dropped out and didn't have to take the normal classes, I decided to take a calligraphy class to learn how to do this. I learned about serif and san serif typefaces, about varying the amount of space between different letter combinations, about what makes great typography great. It was beautiful, historical, artistically subtle in a way that science can't capture, and I found it fascinating. None of this had even a hope of any practical application in my life. But ten years later, when we were designing the first Macintosh computer, it all came back to me. And we designed it all into the Mac. It was the first computer with beautiful typography. If I had never dropped in on that single course in college, the Mac would have never had multiple typefaces or proportionally spaced fonts. And since Windows just copied the Mac, it's likely that no personal computer would have them (Jobs, 2005)

It may seem to be an outrageous way to waste of time to study the art of calligraphy, but this proved to be useful for Mr. Jobs, as it still is very productive for the computing industry and its users. The art of handwriting and calligraphy opened the world of beautiful representations of letters to one of the most important and influential actors in Silicon Valley, who changed profoundly both technology and dynamics of the modern life.

The example above may be still unconvincing for those who are suggesting somehow that the panacea of education stays mainly in the capacity to adopt new technologies in our classrooms. We can look at some impressive examples in the industry. Microsoft's Surface Pro 3 tablet allows users to write with a digital pen and

Apple's iPad offers the same possibility. However, this may seem far from the art of handwriting, which requires the pen on paper and specific skills. This is where a new set of technological tools already widely used place the discussion on less extreme oppositions. Founded in 2007, Livescribe is a company that successfully selling a 'smartpen', a ballpoint pen that can basically captures all your cursive notes and converts handwritten writing into digital formats. Writing on paper, you also have the option to convert handwritten notes into printed text. This smartpen is embedding a flash-drive, a digital audio recorder and an infra-red camera that captures handwritten notes, audio and drawings on paper with microdots (that can be purchased or printed at home). Sharing recorded text, drawings or audio to a personal computer, smartphone or tablet is simultaneous, as more recent models use Bluetooth to synchronize these notes in all devices used by the author. A different company offers—also at an affordable price—the Equil Smartpen 2. The difference is that this smartpen is not requiring a special paper, capturing cursive notes from any kind of paper, converting handwritten notes into digital formats and transferring them to various devices for editing, enhancement or record keeping. This smartpen is using a built-in handwriting recognition that facilitates conversion of cursive writing into typed text. Wacom Inkling is a similar solution and we can only expect to have more sophisticated (and cheaper) solutions like these in the near future.

The art of calligraphy is also merging with technology, as various companies create beautifully written letters for customers using both people and robots, or only sophisticated robots that are able to learn individual handwritings. MailLift is a company serving trusted by numerous clients and many hundreds of companies across United States to produce handwritten letters. More impressively, Bond is a new company that is using only robots to produce beautifully written letters for clients interested to keep the human touch and bring style in their communication.

It seems that only the irreconcilable dichotomy between handwriting and digital solutions is obsolete > unfortunately, this is affecting the perspective of some academics and decision-makers in the field of education. Maybe this is caused by a superficial understanding of possibilities—and risks—opened by new technologies. Nevertheless, technology moved ahead and the industry and investors realized faster than education the importance of the important art of handwriting for our civilization and for personal development. There are now easily accessible alternative solutions to facilitate a convenient way to convert the use of pen on paper into typed texts and digital formats. Handwriting is this way not only still important, but it is even more important than before, as it can be enhanced with audio notes or lecture recordings. Handwritten notes remain fast and convenient, and we can only imagine how inconvenient is often to open a laptop and type notes. Learning cursive writing is most probably more important now that it ever was: research shows how important is for learning and developmental stages of the human brain, and technology shows how we can store, edit, enhance, convert and share handwriting.

The myth that cursive writing is not a twenty-first century skill and the argument that teaching cursive is a waste of valuable classroom time is not supported by research data or by a rational analysis of evidence provided by science and technological advancement. It is evident that typing is an important skill set in the digital age,

but to oppose keyboarding to handwriting will probably stand as a very unfortunate experiment in the history of education. In a time when critical thinking, reasoning and creativity are more important than ever for economy and society it makes little sense to undermine what researchers in psychology, brain science and education prove to stand as a keystone to build educated, imaginative and inquisitive minds. Before we consider handwriting another dying art and decide against it we should consider that an impressive number of research studies present us with a multitude of reasons to seriously consider the impact of this decision on literacy and on the mind capacities that we can hinder. Moreover, a serious reconsideration of the importance of handwriting is required, as current technological developments open to a balanced combination of digital solutions and what makes humanity unique and able to progress.

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**Part IX**  
**Craft, Creativity and Community**



# Chapter 18

## Magic Stitch



**Susie Vickery**

At the age of 7, I lay down on an old sheet, my sister traced a line around my body, and I made my first dress. I appliquéd an image cut from an old curtain and stitched bias binding around the arm and neck-holes, all by hand. I have continued to sew almost every day of my life since then and was lucky enough to be able to turn my love of making into more than a 20-year career as a theatrical costumier specialising in men's period tailoring. Since moving to South Asia in 1998, my practice has expanded to include embroidered art and animation, a second career in craft development, and a third in community arts.

My background as a theatrical tailor and recent work with handicraft groups in low- and middle-income countries has led to an enduring interest in the lives of artisans and those in textile-related jobs. My work, both artistic and developmental, focuses on the handmade and the role of the maker and addresses concerns about global and local inequalities. I try to highlight these concerns in my artworks and offer practical solutions to inequalities through my craft development work.

Most of the embroideries and animations in my art practice explore the history of, and issues surrounding, garment production since industrialisation. I have looked at the conditions in Victorian England and the 'invention' of the sweated trade, a system of subcontracting through middlemen with the artisan at the bottom of the pile. Developed and honed in the squalid factories and workshops of England, the sweating system was subsequently exported around the world. Our clothing is now made predominately overseas and we have profited and benefited from the outsourcing of appalling working conditions.

In my partnerships for craft development in Nepal, India, China, Tibet, Myanmar, and Gaza, I hope to help artisans—predominantly women in poorer communities—to earn a livelihood through the making of products for which they are paid a fair

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price and which reflect their own culture. We avoid subcontracting and market the products directly to buyers after involving the artisans in setting prices.

My third interest is in working with women who live in vulnerable communities in Mumbai, India, to help them develop textile art that expresses their health concerns. These women have spent their lives raising children, cooking, cleaning, and running the home, and have never been encouraged to express themselves or to create. Through the process of creation, they learn about issues, misconceptions, and prejudices about health, and how to change their own and other people's behaviour. The process gives them an opportunity to feel that they are being listened to. Many of them are community activists and are able to share their new knowledge with other women.

## **Artworks: An Exploration of the History of Garment Production and the Exploitation of Workers in the Sweated Trade**

Techniques and processes are central to my practice. I look at the subaltern status of textile work through embroidery—both static pieces and embroidered stop-motion animation—that speaks to the history and current practice of tailoring, globalisation through outsourcing, and sweatshops. In much of 'fine art', the concept is paramount and technique comes second or does not feature at all. In my work, technique and skill are as important as concept and the process of making and use of skills are inherent to the product.

The techniques and imagery I use are inspired by didactic medieval and eastern religious art, the flat stylisation of Medieval religious icons and Mughal miniatures, and their elaborate decoration. Having lived in Nepal and India since 1998, the work is influenced profoundly by South Asian popular culture, especially old Bollywood posters with their rich saturated colours, kitsch imagery, and garish delight in superimposing pattern on pattern. The resulting artworks are embroidered, appliquéd, and sometimes animated as I have found that bringing movement to the work can get people's attention, make them smile, and perhaps make them think.

I first began to think about the working conditions of artisans while studying for a degree in embroidered textiles through distance learning and working with handicraft groups in Nepal. My interest in working conditions expanded to those of garment workers after moving to Mumbai and witnessing the prolific, unregulated garment factories in the slums. This led to a study of the similarities between the sweated trades in Victorian London and outsourced garment workshops in present-day Mumbai. Along with further research into Tibetan costume and documentation of the training and working processes of tailors in India, Tibet, and London, this led to an embroidered graphic book, 'It's Not the Job, It's the Cabbage: The Lives of Tailors' (Figs. 18.1, 18.2, 18.3, 18.4 and 18.5).

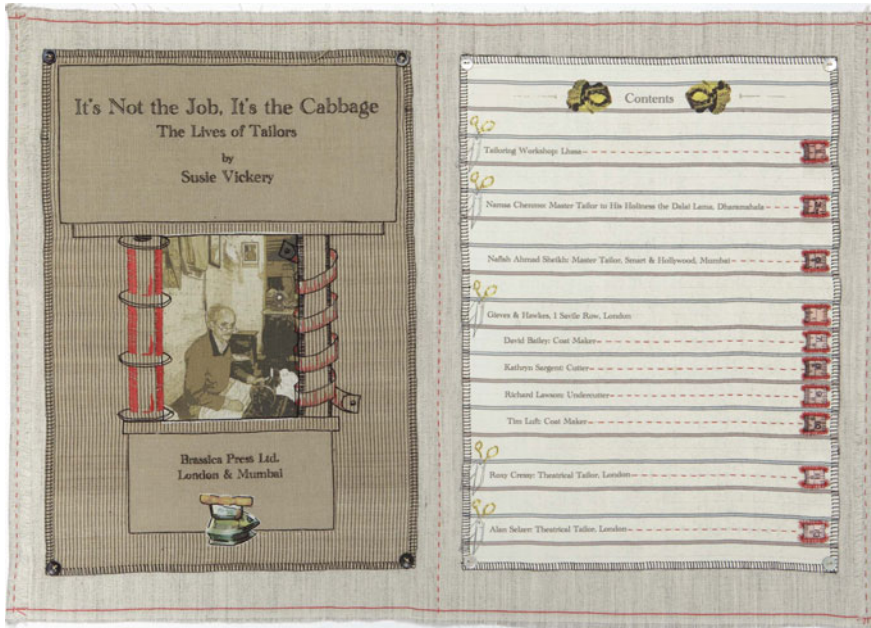


Fig. 18.1 It's Not the Job, It's the Cabbage: The Lives of Tailors

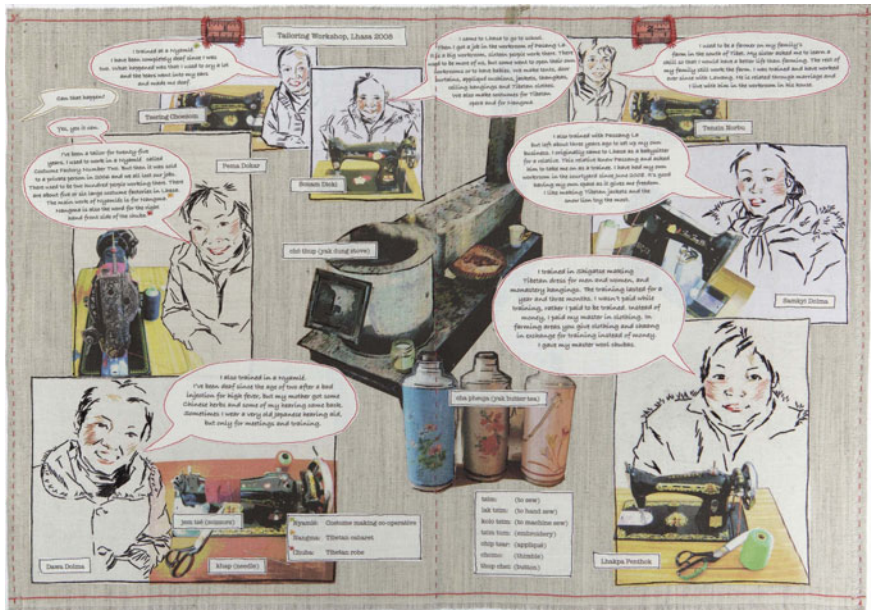


Fig. 18.2 It's Not the Job, It's the Cabbage: The Lives of Tailors



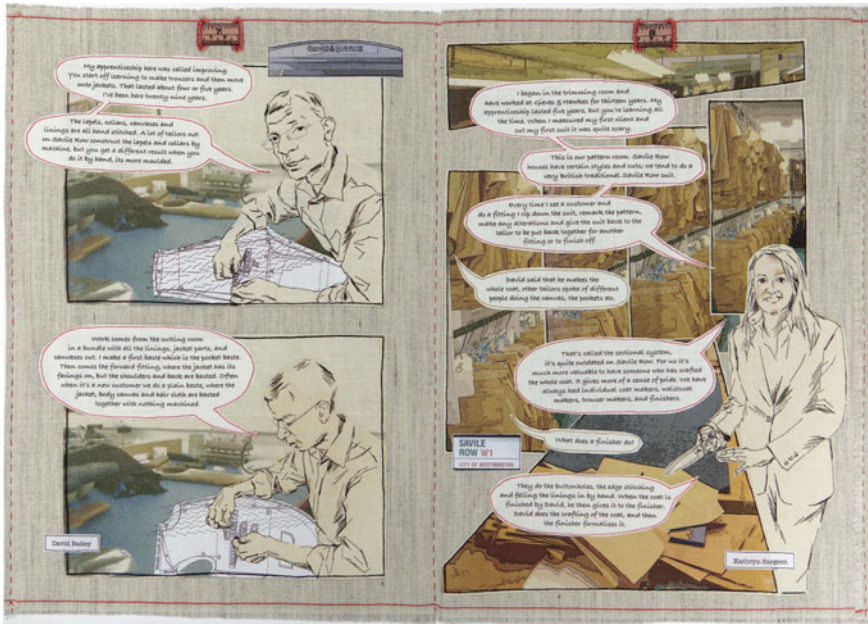


Fig. 18.5 It's Not the Job, It's the Cabbage: The Lives of Tailors

The tailors' stories were illustrated with a combination of traditional tailoring stitches, embroidery, and appliqué, with tape measures as page numbers on a base 'paper' of tailoring canvas. The title comes from an interview with one of the English tailors, Alan Seltzer, who talked about the idea of 'cabbage', the excess material left after a tailor has completed a garment. Parsimonious cutting to maximise cabbage (an older word for theft) is seen worldwide and is a practice that links generations of tailors and diverse cultures. In his satirical essay of 1820, 'On the Melancholy of Tailors', (Fig. 18.6) Charles Lamb accused tailors of growing fat on excess fabric purloined from their clients.

I illustrated the essay in a three-metre panel in which embroidered fabric puppets were stitched onto a tailoring canvas. The piece used different levels of technology: hand-stitched text in an old-fashioned typewriter font, hand-stitched, buttonholed sprocket holes to mimic a strip of film, fabric puppets and backgrounds made of digitally printed old pattern drafts, and a digital stop-motion animation of the puppets enacting the essay with a sung accompaniment. The piece won the Christine Risley award and was exhibited at the Constance Howard Textile Research Centre at Goldsmiths University, London. The soundtrack was performed live by composer and singer Tyrone Landau in front of a projection of the animation.

Some of my work takes the form of layered panels on which interviews are illustrated in stitch and animation. In works such as 'Much Better' (Fig. 18.7) and 'William Morris' (Fig. 18.8) embroidered and appliquéd fabric puppets of the interviewees are set against a background of stitched and stiffened textile panels. The



Fig. 18.6 On the Melancholy of Tailors



Fig. 18.7 Much Better

Fig. 18.8 William Morris



panels are spaced to create depth in a reference to theatrical wings and flats framed by a proscenium redolent of the Pollocks toy theatres of the Victorian age.

The works came out of my continuing study of garment workshop conditions and tailors' lives. I am a great admirer of the work, visual and political, of William Morris, a founding member of the Arts and Crafts movement that reacted to the industrial revolution. Morris believed in the need to improve conditions in factories and to recognise the artisan's role in manufacturing. In 1885, he gave a speech in response to a report about the exploitation of women in prostitution, in which he compared it with that of workers in garment factories. I animated an embroidered puppet of Morris giving the speech and the puppet and accompanying film were exhibited at the William Morris Gallery, London, alongside information about Morris' socialist work.

'Much Better' came out of an interview with a Tibetan tailor from Yunnan province in China. Wangdu came to a workshop as part of a livelihood development project for Tibetan artisans. I recorded and photographed him talking about his training and work history in a beautiful carved and painted room in his home. Because my Mandarin revolves around sewing terms, I work with a translator and often resort to charades and English expressions. Wangdu picked up on one of my phrases of encouragement—'much better'—and imitated it to much laughter.



**Fig. 18.9** Ironing Wallah

For my work based on interviews, I begin with photographs and recorded text. The design is sketched out in a collage of photographs, drawings and words. I then work directly in cloth, using tailoring techniques, fabric manipulation, embroidery, and embellishment. I try to use appropriate fabrics: khadi and antique saris with Indian artisans, brocade with Tibetan tailors, and western tailoring canvas with London tailors. Other works are one-off stills, snapshots of people's lives. 'Ironing Wallah' (Fig. 18.9) is stitched onto photographs on fabric replicating the patchwork construction of his workplace.

'Master Tailor' (Fig. 18.10) uses metallic threads in a range of tones to recreate the light on a pair of brass-handled scissors.

'Silk Gents' (Fig. 18.11) is a collage of photographs taken in Mumbai's Khadi Bhawan, a government-run emporium selling khadi, the handloom and hand-woven fabric promoted by Gandhi.

'The Sweated Trades' (Fig. 18.12) is an embroidered portrait of a zari worker in Mumbai, set against a photograph of a London sweatshop in the early 1900s. The photographs are transferred onto cloth and then stitched into. In all my embroidered ethnography I try as much as possible to identify the subjects and to share with them any profit from the sale of the works.

In 2013, I was approached by a music duo from Melbourne to develop an animated film to accompany a song written in response to the Rana Plaza garment factory collapse in Bangladesh. The film featured embroidered puppets and automata of





**Fig. 18.10** Master Tailor

women working in a sweatshop. The automata were made of old sewing equipment: old wooden rulers, machine bobbins, thimbles, and wooden spools of thread. They were filmed in motion and looped and multiplied to create a whole garment workshop. Other scenes showed an embroidered puppet of a woman leaving a slum and walking to work in a garment factory, carrying a bird in a cage that called to mind the conditions of factory workers. Her journey continued down Oxford Street, London, past a shop displaying the clothing that she had made. The film ended with the construction and collapse of a house of cards, from which the bird escaped and soared above the slums. Proceeds from the sale of the song, 'Shopping Bags', (Figs. 18.13, 18.14, 18.15 and 18.16) go to Labour Behind the Label, part of the international Clean Clothes Campaign, who lobby for better working conditions and compensation for garment workers around the world.

My most recent animated film looks at the history of industrialisation through a comic conversation between Charles Babbage, (Fig. 18.17) creator of the Difference and Analytical Engines seen by many as the forerunners of the modern computer,



**Fig. 18.11** Silk Gents

and Joseph Marie Jacquard, inventor of the Jacquard loom. Babbage was inspired to create a calculating engine by the punchcard system of the Jacquard loom.

The film shows Babbage and Jacquard in conversation against a background plan of the Analytical Engine made entirely of buttons. The two chat about the connections between them and the different reactions to their creations.

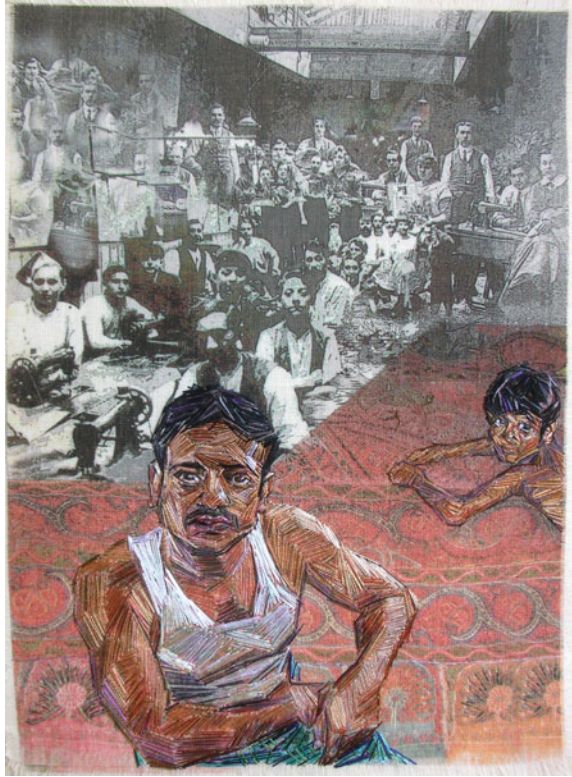
Both Babbage's work (principally his study of working methods in factories, 'On the Economy of Machinery and Manufactures') and Jacquard's loom were designed to replace workers. They worked against the handmade and the idea that an artisan could make a complete item, and my piece uses only hand techniques for this reason. Babbage's study influenced Karl Marx's critique of capitalism. Marx saw the division of labour as dehumanising and deskilling:

In handicrafts and manufacture, the workman makes use of a tool, in the factory, the machine makes use of him.

Sentiments later echoed by William Morris.

My previous career as a tailor for theatre and opera, the starting point for my practice, seems to have remained immune to mass production. In the costume industry, garments are still made as one-off pieces to the measurements of the performer. They

**Fig. 18.12** The Sweated Trades



**Fig. 18.13** Shopping Bags



**Fig. 18.14** Shopping Bags



**Fig. 18.15** Shopping Bags

are predominately handmade by one or two costumiers, the cutter and the machinist, rather than being made in a garment industry assembly line in which each step is done by a different machinist. This is a rare pocket of specialisation in garment production, similar to haute couture and high-end tailoring. The masterclass in nineteenth-century tailoring that I teach to students of theatre production at the Victorian College of the Arts, Melbourne, is a small chance to preserve some of the old traditions of garment production.



Fig. 18.16 Shopping Bags

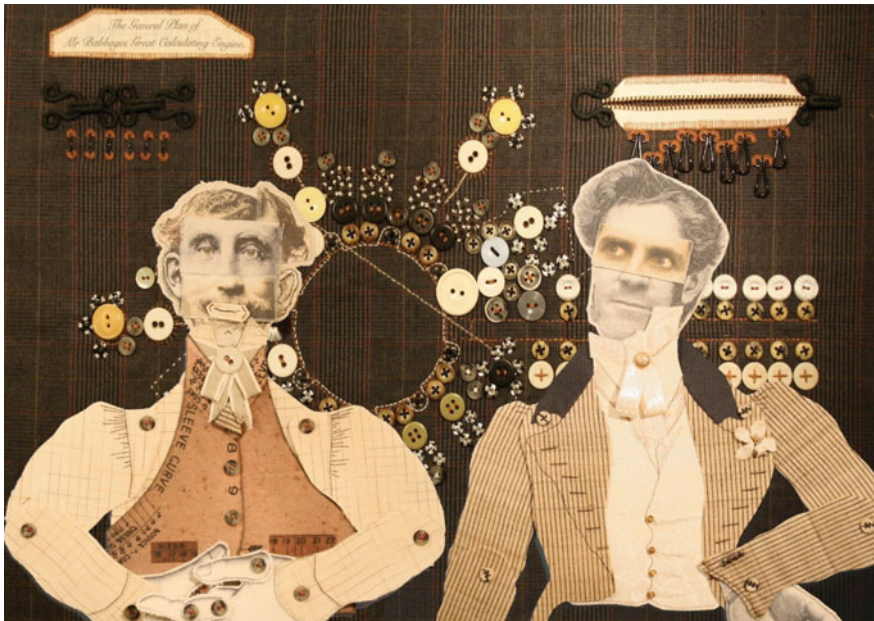


Fig. 18.17 Charles Babbage, a conversation with Jacquard 2014

## Development Work: Projects that Aim to Build Capacity for Livelihoods

The livelihood development projects that I work within Tibet, Nepal, India, China, Myanmar, and Gaza build capacity for income generation through craft production and encourage self-reliance in design, product development, and marketing. After moving to Nepal in 1998, I discovered the unique art and craft of the Janakpur Women's Development Centre in the south of the country (Fig. 18.18). The project was set up by Claire Burkert in 1990. The women of Janakpur and surrounding villages live a traditional life, often veiled and rarely doing paid work outside the home. They paint whimsical designs of people, animals, and gods onto the mud walls of their houses during festivals.

Claire helped them paint images on paper and ceramics and to appliqué and print them on fabric. Women involved in the project became leaders of the Centre, saved money to educate their children and buy bicycles to ride to work, and travelled to Kathmandu, Europe, and the USA to market their art. They remain under constant threat of commercial copying and mass production of their artworks, which necessitates continuous reworking of their designs and products to keep them ahead of their competitors. I worked with the Janakpur women for several years until I moved to Mumbai in 2004, helping them to develop new products and interpret their designs



**Fig. 18.18** Yunnan Province, China

and painting into saleable pieces, and Claire and I continue to work together on projects in Tibet, Myanmar, and Gaza. We work with women artisans in Lhasa and rural Yunnan province to make stitched products reflecting Tibetan culture.

With the artisans and product development staff at Drogenling, we look at temple paintings, Tibetan imagery, and photographs as inspiration for product design. Since 2007 we have made a series of Tibetan dolls, animals, and mythical creatures as toys and puppets, including the snow lion, tiger, dragon, sheep, and monkey. Some of the designs have also been made into decorative cushion covers and bags. The essential element of all these products is that they are handmade, that they reflect Tibetan culture, and that the artisans are paid fairly for their work. Several of the products have won the UNESCO seal of excellence (Figs. 18.19 and 18.20).

While living in Kathmandu, I worked with Tibetan refugees to preserve their culture through tailoring of the *chuba*, a traditional robe. Since coming into exile, they were having *chubas* made by Indian and Nepalese tailors. Our project trained unemployed youth in tailoring the robes themselves and made them aware of traditional hand-stitched methods. For Tibetans still living in Tibet, there has been a recent upswing in the wearing of traditional clothing, at least partly in response to a perceived loss of their culture and a need to assert Tibetan identity through dress. Since I first went to Tibet in 2007, I have seen an increase in the wearing of traditional clothing and a huge increase in shops selling it.



**Fig. 18.19** Yunnan Province, China



**Fig. 18.20** Yunnan Province, China

I also collaborate with the Sulafa Embroidery Centre in Gaza, an income-generation project supported by the United Nations Relief and Works Agency for Palestinian Refugees. Sulafa works with more than 300 women: the unemployment rate in Gaza is over 45% and the embroidery work provides valued income. Our aim is to expand the range of designs and products and to increase product marketing. We have co-developed new designs using images of fruits, flowers, and fish embroidered onto ornaments. All of the products from these projects are marketed in the USA at the Santa Fe Folk Art Festival and at the New York Gift Fair, the resulting orders being sent directly to the organisations.

## **Community Engagement with women’s Health Through Craft and Art**

A third stream of work focuses on community engagement to co-create art responding to the health concerns of women in vulnerable communities in Mumbai. Part of a large project run by SNEHA (Society for Nutrition, Education and Health Action), a non-government organisation dedicated to improving the wellbeing of women and their families from Mumbai’s disadvantaged majority, artworks are made with materials sourced from local recycling industries, developed in participatory workshops that culminate in exhibitions.

The first community engagement project that I was invited to work on was *Dekha Undekha* (*Seen Unseen: Conversations about Art and Health*), which began in 2010. Workshops encompassed three disciplines—photography, ceramics, and textile art—and I was asked to be the mentor artist for textiles. With an emphasis on bringing



groups together, the idea was to start conversations about health that were grounded in everyday life. Poverty is no barrier to an interest in art, and the final exhibition was mounted in Dharavi, Asia's most well-known slum, which has between 500,000 and one million residents. None of the amateur artists had ever been to an exhibition and the project included gallery visits and 8 months of structured workshops. My workshops began with discussions with health professionals on a range of topics, including diet, nutrition, self-image, domestic violence and living conditions, and continued with practical textile techniques: embroidery, appliqué, three-dimensional forms, and quilting. Initially, the artists found it hard to express their ideas and interpret them as stitched artworks. They began wanting to be told exactly what to do, but ended up realising that the most satisfying work happened when they had thought about how and what to create. By the end of the project, they were used to thinking conceptually, translating ideas into stitch and fabric, and seeing their creations as artistically valid.

One of the outstanding artworks was a cupboard filled with embroidered emoticon fabric balls, representing the artist Mehzabeen's vision of her inner turmoil (Fig. 18.21).

Each of the balls represented an emotion, crammed together into a tough and constricting space. The cupboard was her body, but it was also her crowded home and the densely packed neighbourhood in which whole families live in a space the size of an average western bathroom. Another was a piece about domestic violence: a rolling pin (often used in beatings) was wrapped in barbed wire and accompanied by cloth *chapatis* with stories of violence embroidered onto them (Fig. 18.22).

There was a cupboard filled with rag dolls of the participants representing their worries—water, money, health, and the future of their children—viruses embroidered onto sieves, and healthy and unhealthy foods made of fabric (Figs. 18.23 and 18.24).

The final exhibition was held in a school hall in the heart of Dharavi, transformed for two weeks into an aquamarine professional-looking gallery. The reception was overwhelmingly enthusiastic and more than 3000 people, including school groups and the local police force, attended. The workshop participants took turns stewarding the exhibition and all of the women were thrilled with having the opportunity to explain their creative process to the visitors (Figs. 18.25 and 18.26).

Following the success of 'Dekha/Undekha', another art project was planned. 'The Dharavi Biennale' culminated in a large exhibition after 2 years of artist-led workshops, including comic drawing, photography, cooking, and textile art. In 2013, together with textile artist Nika Feldman, I facilitated a textile workshop in response to the fatal rape of a woman in Delhi. We worked with a group of women using recycled saris and clothing. We held discussions with Dr Nayreen Daruwalla, director of SNEHA's program on prevention of violence against women and children, and a policewoman who dealt with rape cases. The workshop raised the idea that women tended to blame other women and that solidarity is preferable to judgment. The participants were given notebooks to take home and fill with the responses of friends, family, and neighbours to questions about blame. We worked with them to make a list of protective and warning symbols, both traditional and modern: warnings about live electricity, the traditional 'nimbu mirchi' (lemon and chilli), horseshoes, traffic

**Fig. 18.21**  
Dhekha/Undekha:  
Emoticons



**Fig. 18.22**  
Dhekha/Undekha: Rolling  
Pin





**Fig. 18.23** Dhekha/Undekha: Seives

lights, and padlocks. They each chose one to illustrate on the ‘pallu’ of a recycled sari using appliqué and embroidery, and we worked with them to come up with accompanying slogans. Several women had never sewn before. Anjali Ama, a 50-year-old Dharavi resident, would practice cutting and sewing at night while the rest of her family were sleeping.

After the saris were finished, the women wore them for a shoot in Dharavi by photographer Manasi Sawant, reclaiming the streets with their powerful slogans. Their faces were painted with superhero masks because, in the wake of the rape of Nirbhaya, a politician had said that women were ‘painted and dented’. A ‘fashion’ parade was held in the evening in an open area in Dharavi, accompanied by a play about domestic violence and rape by a youth theatre group (Figs. 18.27, 18.28, 18.29, 18.30 and 18.31).

As part of SNEHA’s work to prevent violence against women, the ‘Little Sister’ project involved community volunteers in mapping domestic violence in Dharavi. The map located different types of violence in particular locations and was reinterpreted as a quilt made of recycled materials. Participant women each sewed a section of the map illustrating the places they lived and worked. I continue to work with some of the workshop participants to transform their artworks into saleable products. All of the products are made from recycled materials and sold locally.

**Fig. 18.24**  
Dhekha/Undekha: Food



## Conclusion

In all my work I hope to combine my interest in justice for artisans, particularly women, with the need to create something beautiful and thoughtful. Since the Renaissance, there has been a divide between art and craft, with art seen as the higher of the two and textiles occupying a fairly low rung in the craft hierarchy. Recent concerns about sustainability within fashion, recycling, and globalisation have brought craft to the fore in people's minds. Countries like Japan have always honoured the craftsman, but in most, the craftsman has been sidelined as a hobbyist or as an expensive maker of luxury goods. William Morris, despite his best intentions, realised that the market for his goods was with the comfortably off. Now that most manufacturing is outsourced to lower-income countries, there has been a growth in the appreciation of the handmade and of the designer-maker. This does not touch the huge amount of manufacturing in anonymous, unregulated factories overseas, but I hope that growing awareness will help us to think more about the things that we buy, the conditions in which they are made, and our need for them. Being a maker I am perhaps well positioned to



Fig. 18.25 Dhekha/Undekha:Exhibition



Fig. 18.26 Dhekha/Undekha:Exhibition



**Fig. 18.27** Provoke/Protect: Anjali



**Fig. 18.28** Provoke/Protect: Kismati



**Fig. 18.29** Provoke/Protect: Nirmala





**Fig. 18.30** Provoke/Protect: Fashion parade



**Fig. 18.31** Provoke/Protect: Fashion parade

appreciate the time that it takes to make clothing. I am lucky to work on several responses to the issues: creating artworks, facilitating the creation of artworks by others, and helping others to turn creation into a livelihood, all the while prioritising the handmade.

**Susie Vickery** career centres on embroidery and textiles, both practical and academic. Her core skills were developed over twenty years as a costumier for theatre and film. In the last fifteen years she has built expertise in two further areas: development work and fine art embroidery. She has extensive experience of rural and refugee development projects for women, particularly in the area of handicrafts and costume in Nepal, Tibet, Myanmar and India. For the last ten years she has been based in Mumbai where she has been working on an art and health project with women in informal settlements. Her work in the region is the inspiration for her embroidered animations, automata and textile pieces, which reference working conditions in garment factories and Asian art. Every year Susie teaches a masterclass in men's nineteenth century costume at the University of Melbourne and she has recently become an honorary fellow.

**Part X**  
**The Aesthetic**

# Chapter 19

## MATTER MUTTER: An Antipodean Artist's Report on the Role of Matter in Capturing an Idea



Alex Selenitsch

### Making Things Means Attending to the Behavior of Matter

Creative work involves ideas or subjects, or expression, or demonstration—all of which are human, existential issues somewhat different to the mere fact of matter. Yet in making a creative work, these existential issues have to be made evident through matter. Just as the existential issues that an artist works with may be complex or complicated, matter that comes to the creative worker is already complicated, processed, refined, and sometimes highly produced. It is rare for an artist to harvest or mine their materials and oversee their transformation into a creative work. Matter cannot be taught or commanded, or rather, one can only command it to do what it can do. Matter is indestructible, but is also mutable, being subject to the laws of physics and chemistry, which never cease their work.

Not all matter is included in the art/craft/design arena. In fact, many disciplines deliberately restrict the kind of matter they deal with, and this is continued through the transmission of techniques, working styles, and distribution systems. Nevertheless, making things means attending to the behavior of matter. The difficulty, or inconvenience, of working with matter was one of the conditions that prompted many artists in the 1960s to ask: can you make a work of art that is purely a concept, or an idea?

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## Conceptual Art Asks for the Idea to be Held Without Materialization

Can you avoid the turmoil that matter provides? *Avoid* is probably the right word. Through Conceptual Art, a range of strategies emerged: the use of non-art materials or systems to carry the concept (such as office systems, books, data systems)<sup>1</sup>; temporary materializations using transient material effects<sup>2</sup>; and the use of poor or deliberately bad workmanship to downplay or even deny its part in the semantic arena.<sup>3</sup> In the longer term, all of these have been doomed strategies. Non-art systems quickly become art as soon as they come near a gallery or studio, ideas disappear just as easily as transient materials, and bad workmanship easily becomes a teachable or copied aesthetic, certainly a symbolic one.

Piling up matter, or exhibiting untreated lumps of it, was a reaction to neat construction and finishes and also the logical end of taking matter at its face value, but in removing ideas from touching matter, it contributed nothing to the understanding of the interaction between ideas and matter (Figs. 19.1).<sup>4</sup>

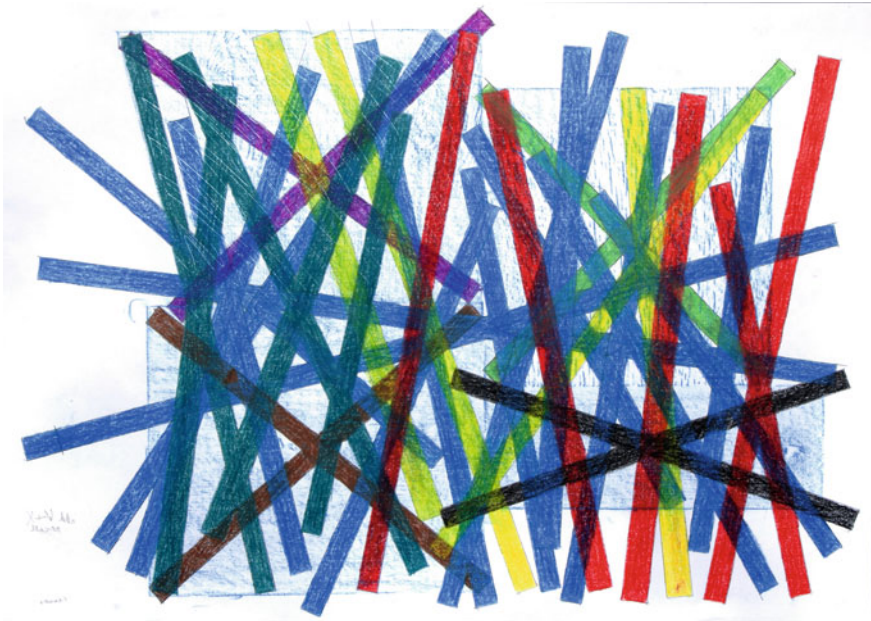
## Crafted Work Uses Received Ideas and Forms So That All Attention is Paid to Matter

Can you avoid the uncertainty and crisis that an idea brings to matter? *Nearly*, by avoiding, or ignoring ideas through the use of type as a formal given. Starting with a type, such as “chair”, “teapot”, “sonnet”, “still life”, “courtyard house”, “bowl”, and so on, means that the invention of a composition is avoided, and you can get into the making straight away (Fig. 19.2).

Concentrating on technique is also a good way of avoiding ideas. The experimental end of technical work involves much research into processes and effects, with outcomes such as Op Art,<sup>5</sup> electronic and then spectral music,<sup>6</sup> prefabrication,<sup>7</sup> and parametric forms.<sup>8</sup> The values of workmanship, of precision and virtuosity hover over this kind of activity.

Often, materials, techniques, and finishes are already embodied in the type: mention “vase” and everything about it appears in front of you. This happens because the type has already been washed with ideas from many makers for it to have been invented: the thinking put in by others allows you the freedom of not thinking. But there are two actions in pure making that can generate ideas: working with and through mistakes, and in improvisation. In the former, it appears as if the material or its misbehavior (often the maker’s misbehavior) forces the issue. In the latter case, matter is deliberately chosen and structured to attract ideas or concepts with minimum prescription so that performers can react to the matter to hand, in the moment (Fig. 19.3).





**Fig. 19.2** Crayon. Image Alex Selenitsch

## **IDEA and MATTER Are Not Opposites, nor Are They at Ends of a Spectrum**

There appears to be no pure position for either IDEA or MATTER, and for many creative workers an unspecific mix of the two is accepted on the condition that it might make something that holds interest.

There are, however, some strategies where IDEA and MATTER are quickly brought into an explicit conversation. The more startling of these is the found object, as propagated by the Surrealists and Dadaists. In the found object, a materiality and idea in one context is shifted to a new and dissonant frame of reference, but one where there is a similarity as well. In a found object, IDEA and MATTER laugh at each other.

Another strategy extends the typological method. Through a large number of examples, in different materializations, and even better through different disciplines, an IDEA is clarified through the variation that each specific materialization creates. It is Plato's method, so to speak: many, many cups will eventually suggest what the ideal cup could be. Even better, if the cups are written, drawn, made, built, and sung, in paper, stone, ceramics, and earth, and at different sizes and scales (Fig. 19.4).



**Fig. 19.3** HHscreens. Image Alex Selenitsch





Fig. 19.4 Ideal CITY. Image Alex Selenitsch

### Some Works: (From Which the Preceding Remarks Have Been Drawn)

#### *Flotsamandjetsam*<sup>9</sup>

Once an army camp in southern NSW on the Victorian border, Bonegilla became Australia's first post-WW2 Migrant Reception and Training Centre in 1947. I visited it in 2007, curious to see where I had been a resident in 1949, and found that Block 19 still exists and is now a heritage site, still standing as parallel rows of gable roofed building clad in corrugated iron. The idea of representing refugees as a history of marks seemed to naturally apply to this iconic Australian material which resists deformation to a point, but is easy to dent. Corrugated card has similar properties, and this miniature analogue suggested a series of "drawings" in which card was

indented, by hammering wooden dies into the corrugations. A balsa wood model of chaotic sticks poured over a set of barracks (with the last one being overturned by the implied forces) continued this literalist idea of impact. The idea of semi-controlled balance was made into a set of sculptures of chairs, in which found chairs were suspended in air by multiple sticks going through, past, and around them.

## *Agora*<sup>10</sup>

In 2011, while looking at a photo I took in 1975 of the Agora in Athens, I was taken by the different kinds of assembly or groupings that the place suggested, and specially three: equal and regular (as in the colonnade of the Stoa), casual and scattered, (as in the ruins), and centralized and hierarchic (as in the Tholon, or rather its remaining floor plate). To make these more obvious, I overlaid drawing/measuring instruments over a copy of the photograph. Using a reduction of the photograph into geometric parts, I had acrylic sheets of different colors cut to give a kind of jigsaw puzzle set, which was then re-assembled using different colors for the parts. While working on these, I visited Arthur Circus in Hobart, Tasmania, and found an existing, built version of the same forms: oval plus random placings plus repeated elements, these being the roundabout, the plantings and civic furniture, and the identical cottages placed around the Circus. Arthur Circus is a reduced antipodean version of the grand curves of Bath and Edinburgh and is a prime example of how European ideas were materialized in ad hoc and restrained circumstances in the first 50 years of Australian colonization. What better way of drawing images of Arthur Circus than with chalk: ordinary, unsubtle and messy, and difficult to control in detail, with the added necessity for a further simplification of form.

## **Implied Strategies (Derived from a Consideration of the Preceding Examples)**

What these works show/combine:

(a) *The way of making the work, makes the image*

The making is invented as a recipe, or plan of action, a set of instructions, similar to a game. This last similarity is important, as the making actions then allow for some unpredictability, and room to move or modify as the action/work is made. Generally, (and this is the case for many of my works), inventing the game takes some time, while the play or action is very quick. It's probable that one of the implicit criteria for the game is a rapid execution, so that improvisation and spontaneity can be better brought into the action.

(b) *The way of making the work is an analogue of the subject*

Here, the matter (oil and ink, corrugated cardboard, sticks, chair and gravity, laser-cut Perspex, chalk) is handled in a way which is isomorphic to the subject. The suspended chair is lifted into the air by passing vectors; the drawings of Arthur Circus in chalk provide a rough 2D model of its construction, but with a 4D narrative as part of the sketchbook they are placed in. That the final images/objects are not topographic “realist” images is a signal to look at them as outcomes of a process, as traces or recordings of a partially improvised performance. Indeed, this process is the focus of the works.

### **Implied Sources/Influences (Derived from Matching the Above Strategies to a Wider Artistic Culture)**

Are there precedents for this kind of work? Yes, but it is conjectural as to whether precedents have found their way into my practice through propaganda, or whether I sought these out as they were strategies which were sympathetic to my experiences and abilities. It’s likely to be another impure mixture of both. Nevertheless, there are plausible connections to the wider creative context (Fig. 19.5).



**Fig. 19.5** MacksStack. Photo Alex Selenitsch

The first of these is a bundle of tendencies that treat composition as the successive addition of gestures: constructivism, futurism,<sup>11</sup> concrete art,<sup>12</sup> and aspects of minimalism where repetition is primary.<sup>13</sup> Even abstract expressionism has this as part of its foundation, where an artwork is the total sum of gestures, each of which is a response to the state of the work before each specific gesture is added. Concrete art, which promises to just use the matter to hand, and where the revelation of the composition's structure is the subject, is probably the strongest influence in this bundle. In fact, my creative work began through concrete poetry, where a physical property of language and what is done to it becomes the metaphor, just as much if not more importantly so than any meanings assigned to it. This attitude has spread to my work in disciplines other than literature, although the concrete poetry continues as such, giving artifacts such as the *matter/mutter* concrete poem accompanying this report.

A second bundle of tendencies brings together practices that make art outside of traditional and conventional categories: Dada,<sup>14</sup> neo-dada,<sup>15</sup> and Fluxus.<sup>16</sup> In these, matter and objects can be introduced into creative work on their own terms; indeed, the peculiarities that this might introduce are valued. While Dada provides a foundation for the making of art outside of traditional disciplines (an outsider attitude which has by now been firmly institutionalized), Fluxus brings forward the idea of performance as the creative work. For many Fluxus artists, the performance is by the receiver of the art, who then creates it through the performance. In my case, the performance is by me, and the artwork is a trace of that performance, similar to much of the process art of the 1960 and 1970s, but not like the body-driven events of performance artists of the 1980s, as my interest is not in the self or the individual.

In both bundles of tendencies, matter is accepted in its received state. Geometry, industrialization, and modernity color the constructivist bundle, and commonplace, found and used products, and leftovers proliferate in the Dada bundle. Both of these values are present in my practice, which oscillates between platonic geometry and the detritus of manufacture. A faint echo of the IDEA/MATTER dialectic is present in this: the conceptual bias of industrialized products versus the tactile and chancy accumulation of marks and alterations of form through the life of post-functional objects and materials (Fig. 19.6).

## Notes

1. Artists Mel Ramsden/Ian Burn, Robert Rooney, Mel Bochner.
2. Artists Hans Haacke, David Medalla.
3. Artists Dieter Roth, Mark di Suvero, Mike Parr.
4. Artists Robert Morris, Walter de Maria, Felix Ganzalez-Torres.
5. Artists Brigitte Riley, Jesus Rapael Soto, the artist group GRAV.
6. Composers Iannis Xenakis, Gerard Grisey, Tristan Murail.
7. The English school building system CLASP, architects Moshe Safde, Denys Lasdun.
8. Architects Zaha Hadid, Greg Lynn.
9. *flotsamandjetsam*. 2012, exhibition; Place gallery Melbourne. [http://www.placegallery.com.au/2012/artists/alex\\_selenitsch/alex\\_selenitsch.htm](http://www.placegallery.com.au/2012/artists/alex_selenitsch/alex_selenitsch.htm)



**Fig. 19.6** Tumble. Image Alex Selenitsch

10. *AGORA: shields, maps & transparencies*. 2013 exhibition. Place gallery Melbourne. [http://www.placegallery.com.au/2013/artists/alex\\_selenitsch/alex\\_selenitsch.htm](http://www.placegallery.com.au/2013/artists/alex_selenitsch/alex_selenitsch.htm)
11. Artists Vladimir Tatlin, Aleksandr Rodchenko, Kasimir Malevich.
12. Artists Max Bill, Sophie Tauber-Arp, Richard Lohse.
13. Composers Gavin Bryars, Steve Reich, Philip Glass; artists Richard Serra, Donald Judd.
14. Artists Marcel Duchamp, Man Ray.
15. Artists Jasper Johns, Robert Rauschenberg.
16. Artists George Brecht, Robert Filliou, Emmett Williams.

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# Chapter 20

## Encountering Fragments



Rose Woodcock

### Introduction

Sometimes, a chance encounter can be the point of departure for something momentous and entirely unplanned. For example, I encounter a remark by a character in a science fiction novel:

The horses' hair was the chestnut red of certain fir trees Thel had seen back on the high spine, and their manes, long and rough, felt exactly like handfuls of the trees' hairy fibrous bark: indeed, looking closely at it, he couldn't see any difference. He laughed.

Then the small herd in the enclosure bolted and ran around the inside of the fence, all in a mass, their manes and long russet hair flowing behind them as if they were underwater, and he laughed again. 'A horse is a fish made of trees'... (Robinson, 2000: 73)

When a string of simple words produces a horse that is a fish made of trees, there is clearly something going on that is not about 'fiction' in the same sense that unicorns are fictional. Rather, it is a reminder that despite the unlimited possibilities of combinations of syntax and vocabulary in any given language, '*everything* is never said' (Foucault, 1972: 118). It is always *some thing* that is said, whose singular specificity runs on a logic of rarity within abundance; a fragment of language arising amid the plenitude of all possible utterances. That such a sentence arises at all, is also a reminder that words, in their specific somethingness, possess materiality. Like the 'Angel's share' in the production of Scotch Whisky, the materiality of words is their palpable dimension, that bonus share (those intoxicating fumes) of the stuff of language that is not reducible to its referential ways of communicating meaning. It is the materiality of words that enables a sentence to be crafted in some particular way, accompanied by an awareness in the reader that the sentence has been decidedly

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handled by the writer in just this particular way. Not all writing works this way of course: poets aside, in the hands of many other writers, their craft is directed to render itself invisible so that the semantic content of the writing, and not its material form, is the object of attention for a reader. So when a shred of writing does draw attention to the stuff out of which it is made, we might visualize the materiality of the stuff of words throwing up little plumes of neuro-linguistic dust in those parts of our brain that manage the vicissitudes of language and enable us to read [1].

The experience of reading poetry might then be likened to walking across a patch of uneven ground. Drawn to notice what is immediately underfoot we attend to the manner of our stepping, and if it is a little awkward and slows us down, this at least makes for more interested walking. We pay attention as our feet scan the ground for bumps and ruts and stones: a haptics of eye and foot. As such, we may or may not be attentive to the histories, geologies and industrial archaeologies arising beneath us. For all this other stuff is surplus to the fluency of mindful walking, itself tuned to not turning an ankle.

Walking tracks, industrial detritus, the materiality of words, dirt and dust: these elements coalesce in this chapter, through the principal of chance encounters and a conceptual framing of the ‘fragment’ as an instigating agent. It is not the metaphysics of chance that is of interest here, but its simple practicality; how certain encounters help determine the rules of a practice so that it can continue being done, and how these encounters bring into being the materials, and therefore the tools and techniques of that practice. Chance has been the driver for many others: for abstract artist Jean Arp (1886–1966), chance was the ‘Father of the muses’ (Gamboni, 1999: 206) and art movements such as Dada, Surrealism and Abstract Expressionism embraced it as their core principle. In my practice, I prefer the idea of the encounter because it suggests an opportune meeting with others within a collective of ongoing background activity. Chance, by itself, implies being overtaken by something altogether unexpected or unforeseen; something ‘cosmic’.

By contrast, what I do seems utterly suburban. I begin by walking along and looking down. Thereafter, my encounters unfold amid dirt and broken glass along the walking tracks of the Merri Creek in Melbourne’s northern suburbs: against the background of an irreplaceable indigenous past and an incomprehensibly distant geological one, and despite the restoration of the natural ecology here, the industrial history of the Merri Creek persists. From (presumably) the remains of municipal rubbish dumping around and into the creek in earlier decades, numerous fragments of bottles and jars populate the sub-surface of these walking tracks, their gimlet edges glinting dustily.

## Encountering Fragments

This chapter begins with the example of a random few words crafted to produce a novel metaphor: a horse is a fish made of trees. This may seem an odd connection to the theme of creativity, craft making and artisanship, but an arbitrary example

from fiction writing helps to introduce the theme of this chapter, which is the role of the fragment in my practice. Specifically, I am interested in how these glass fragments create the conditions for the possibility of chance encounters, and how the activity of encountering unfolds to produce the ground rules that shape the practice and define its methodology. The fragment associated with the Romantic movement of the later 1700s up to around 1830 involved particular, even paradoxical, aesthetic sensibilities. The Romantic fragment (or ruin) evokes a longing for unfulfillment: in Romantic poetry, it is the ‘shattered ending... the poem that cannot reach a resolution’ (Wanning Harries, 2005: 361) that embodies this ideal. In terms of aesthetic sensibilities, my attraction to the fragment diverges from that of the Romantics: I do not long for the lost whole bottle, for in its unruined state, what more could it tell me?

This chapter considers how disciplinary knowledge accrues from the particular ways in which a practice situates itself among the relations of its components, its fragmentary bits and pieces, its program of stops and starts among material objects and associated sundry procedures. The overarching theme of Craft—how it might be defined and how those definitions might be articulated and exemplified—is explored through the impoverished lens of the encountered fragment rather than in direct dialogue with ‘what craft is’. The discussion below is a response to the unpredictable interactions among those various factors that exercise the Arts, whether we call them craft, fine art or science: materials, techniques, tools, concepts, methods, theories, critiques and contexts.

Mine is much the same as the activity of many other creative practitioners: an interplay of materials and processes, driven by ideas and defined by open-ended outcomes that cannot be known in advance. I exhibit from time to time and hope my work will engage others and have impact. The discussion below explores a particular conceptual framing of ‘encountering’ to help explain what I do and its relevance to this book about Craft: because what I practice is neither particularly ‘skillful’ nor self-consciously ‘crafted’, and neither is it specifically geared towards making ‘art’. On reflection, it is somewhat like ‘doing science’ without being especially ‘scientific’. Here, etymology is my friend because the origin of the meaning of ‘scientific’ includes the Latin ‘*scientia*’ (knowledge) and ‘*ficus*’ (making, doing), that is, ‘making knowledge’. Science has its origins in practical experimentation and observation via the senses, and involved an inter-dependent interchange between, rather than opposition of, *epistêmê* (knowledge) and *technê* (the arts, craft). Its earliest practitioners, from around 600 BCE Greek Ionia, recognized that doing and making are the foundations of all knowledge (Farrington, 1961). The origins of scientific thinking lie in applied technique, from which emerged an *epistêmê* that did not seek to separate itself from ‘learning by doing’. As Heidegger argues in his critique of Modernity, there must also be, within and between abstract reasoning and the practicalities of material technique, an unfolding *poiesis* (‘art’): a mode of reflective, creative enquiry that allows for the release or ‘unsecuring’ of *technê* from an otherwise instrumental, narrowly ‘techno-logical’ application (Heidegger, 1977).

I have no background in Science, but I am curious about many things that come from scientific research proper, and from the body of knowledge that is ‘the sciences’.



I am also hopeless at maths, which would thwart any attempt at science training on my part. It is just as well I can read. In a book on the history of Mathematics and the origins of the number ‘zero’, I encountered a whole chapter dedicated to ‘Dust’. Cicero’s ‘learned dust’ was ‘the sand in which mathematicians drew their diagrams’ (Kaplan, 1999: 52). Mathematics, it seems, was also a practice that began in the dirt at one’s feet. The technique carried over to the sprinkling of sand (dust) on wooden tablets to create counting boards, and the Greek word ‘abacus’ is believed to have come from the Semitic word *abq*, ‘dust’ (Kaplan, 1999: 52). The figure zero so fundamental to the smooth operations of modern mathematics is thought to have emerged as the trace of a rounded object, probably a pebble: used as a counter during the ‘sand-work’, it would leave a circular impression in the dust (Kaplan, 1999: 49). A beholder’s share of gritty materiality right there at the centre of our all-important ‘0’.

## Dirt and Broken Glass

Prior to featuring a municipal rubbish tip, the Merri Creek area in Melbourne’s North was mined for its bluestone. But thousands of years prior to white settlement this region was home to the Wurundjeri-willam people of the Woi wurrung clans (Moreland City Council, 2010). Beginning with the Batman ‘treaty’ of 1835 and the subdivision of land around what is now Moreland, Brunswick and Broadmeadows, there followed a rapid expansion of industries around quarrying, brickmaking and farming into the late 1800s. This brought housing, transport and commercial development, all of which served to scatter, bury or remove the traces of aboriginal presence in the region. Its geological past goes back hundreds of millions of years, overlaid by these more recent archaeologies: Aboriginal presence erased by unfettered nineteenth-century land grabs [2], in turn overwritten by mid-twentieth-century industrial, residential and commercial development (ongoing), and now featuring suburban parkland, itself overlaid by a network of bare-earth and compacted gravel walking tracks. Remarkably, individuals and organizations, such as the Merri Creek Management Committee (MCMC), Friends of the Merri Creek, the Wurundjeri Land Council, CERES Environmental park and others, have restored parts of the Merri Creek corridor to something like its original state: native bush and forested areas support wildlife that has gradually returned (Sacred Kingfisher, Tawney Frog Mouth, Platypus).

While walking these tracks I encounter not the return of the native wildlife, but a noticeable quantity of broken glass, which I begin to collect. I can recall no particular impetus for picking up the first piece because I have always been a picker upper of things, and like a bad scientist I did not document this first encounter. Habit becomes a practice formed around and facilitated by *encountering*: the more items collected, the more attention is paid to them as ‘items in a collection’. Their status shifts as the definable dimensions of an emerging practice begin to accrue and take on ‘disciplinary’ aspects. Systems and rules manifest. For example, sorting according

to whether a piece is window glass, which is not part of the collection, or bottle glass, which is, whether it is clear, green or brown bottle glass; whether jar or bottle, and by dint of its shape and curvature, to which part of a bottle or jar the piece belonged. There are thick, round, lens-like pieces, conical sections, half cylinders, curved planes and tooth-shaped fragments. There are brilliant asymmetrical prisms, some as small and elegant as a rodent's tooth. The practice becomes nominally 'scientific': the outcome of picking up and collecting fragments is 'a collection' or 'archive'; sorting becomes 'classification'. A lexicology is required to manage the ordering of different 'species' of glass fragment, and suddenly there is a sense of responsibility, an obligation to do this properly. And if not properly 'scientific', at least with an earnest and applied *scienticity*.

From the picking up of bits of dirty glass emerges an activity that affords its own provisional discourse around methodology and technique. Employing a specific observational approach, I have become skillful at spotting fragments that are almost entirely buried, edge-on, flush with the soil surface. I am adept at discerning, from a good distance, that an item is of plastic and not glass. I have become expert at fashioning tools from various found objects to facilitate the prising of a fragment from hard ground without it fragmenting further. I know where to look, and when to return to a specific section of path after heavy rain. This knowledge is specific to the particularities of the practice, is self-limiting, and of use perhaps only to me. But I become curious: where did all this glass come from? I want to identify and understand the various connections of the geological, historical and archaeological background to my practice. Curiosity always leads to new encounters with the unknown. And so these encounters with the fragments of broken bottles and jars that intercepted my steps produce a further, nested encounter: noticing the glass involved paying attention to the ground, and noticing that I was noticing the ground made me think about it as 'soil'. And because, like 'the horse made of trees', this soil was particular in its materiality, I wanted to know more about it.

How, then, to advance a desultory practice: what theoretical framing is appropriate? In relation to which disciplinary discourse(s) is it best conceptualized? What does it contribute?

## Scientific Practice

As an untrained non-scientist looking on, I cannot contribute to the real science done in the fields of soil or any other science, nor produce new methodologies of value for those disciplines. Yet, as a creative practitioner, can I only look on, curiously? Perhaps the answer lies in founding a concept of 'practice' which does not separate process from outcome. Motokiyo Zeami (1363–1443) published *Fushikaden* as a book of instruction for students of Japanese Noh theatre wanting to improve their craft. Zeami's notion that the practice is the outcome draws from Zen Buddhism, but aligns with the definition I need:

Because practice itself is realization, there is no end to realization; because realization itself is practice, there is no beginning to practice (Zeami. M, 2013).

This definition of practice asserts a cyclic, difference-through-repetition approach to doing craft, rather than a linear notion of planning, practicing, perfecting and performing or producing the outcome. It does not separate the crafting from the crafted object. Convened among the materialities of dirt and broken glass and with no forward plan, mine is a loosely construed, outward-looking practice: ‘what comes up’ literally and conceptually, informs a performative, heuristic and cyclical working method. I discover what the terms of reference are as I find them; I practice them while performing the rules. Rather than consider which disciplinary discourse best identifies mine, I work ‘duologically’ between two or more disciplines, and in the process, I theorize my own.

Briefly, ‘duologue’ (here) would be defined as a bumping together of disciplinary discourses. An encounter is ‘duologic’ insofar as bits of disciplinary specificity slough off, but fruitfully so, as a consequence of having insecure boundaries. Disciplinary terminologies and key words leak from disciplinary edges to form novel discursive assemblages. Unlike a dialogic or a dialectic process, which is a move towards resolution (synthesis), ‘duology’ has an appetite for...

The glass fragments and the Merri Creek dirt are my materials, and the walking tracks provide an open studio-laboratory. Soil science and vision science are two discourses that bump together in my practice, which involves repurposing terminology and concepts from one discipline to construct novel precepts. The ‘duoscope’ (a neologism) is a play on the workings of binocular stereoscopic vision. In binocular perception, our two eyes see a slightly different view of the visual field, due to the lateral offset in the two retinas which corresponds to the gap between our two eyes. Stereoscopic literally means ‘solid sight’ and schematically binocular perception involves triangulation: two different images secured by one process of stereopsis that resolves the disparity. Duoscopic would then mean ‘two sights’, but with the images purposefully unresolved. Tellingly, the original ‘stereoscope’ was not only an optical device but also a medical implement for detecting ‘foreign bodies in the soft parts’, to aid in removing calcified lumps—pebbles—from the bladder (Dunglinson, 1842). The discourse of stereoscopy reveals itself to have leaky boundaries. Its key words have already escaped. Like grit in the eye, reflection on the principles of binocular (stereoscopic) vision carries with it an image of solid, crusty material suspended in the aqueous humour of an eye.

In the universe of my practice, it is the encountering of fragments that pulls the disparate parties of soil geomorphology and stereoscopy into a close enough orbit where they pull bits off each other: their terminological specificity and definitive conceptual frameworks streaming off like dust behind a comet. The practical form of this approach manifests in my creative practice in the form of scientific devices that combine scientific concepts from soil and vision sciences, techniques from linguistics and fragments of propositional poetry. *As the glass fragments rise, their appearance on the surface of the soil releases chemicals in the brain that trigger perceptual*

*responses and associated collective behaviours.* Three cheers for *epistêmê*, *techné* and *poiesis*.

## Soil and Optics

The soil of the Merri Creek is classed as a black vertosol type. It is found in other regions of Australia and on other continents, but has a particularly important connection to this region. Vertosol is defined as a ‘cracking clay type’ soil with a characteristic ‘self-mulching’ or ‘churning’ behaviour where coarse fragments such as stones and glass fragments are pushed upward with the swelling soil. ‘Merri Creek Mud’ stopped being spread over the Melbourne Cricket Ground (MCG) in the mid-1980s because it was notoriously bumpy. In addition to these attributes, vertosol has ‘lenticular’ properties caused by stress shear in the soil over alternate wet and dry cycles (Driessen et al., 2001). The shrink-swell behaviour produces ‘gilgais’ (‘small water holes’), a local indigenous term to describe depressions in the ground which appear over time. Gilgais have important connections to water, serving as a temporary source of moisture and seasonal foraging for indigenous people. Gilgais are generally considered a nuisance for farmers: the movement of soil associated with gilgai formation damages building foundations and roads, and the hollows and hummocks result in large undulations that interfere with crop harvesting (Schaetzl & Anderson, 2007: 283). However, the gilgais evoke images of the ground alive and breathing, its up and down shrink-swell movement below the threshold of human awareness, gently spewing out broken glass and other foreign irritants. Soil is alive, but the black vertosol seems alive not only in a biological sense: it displays ‘behaviours’ and so is shot through with manifold discursive possibilities (what does it want?).

## Collective Fragments

Despite being scattered and so many of them lost, fragments always exist in relation to all the other fellows in their collective. Each is bound to the same origin and to a shared, lost or distant, originary whole: a bottle from a now-closed rubbish tip, a page from Parmenides’ philosophy textbook *On Nature* [3], the Sibylline leaves in a cave in Naples as described by Mary Shelley:

[A]t length we entered the gloomy cavern of the Cumaean Sibyl...

At length my friend, who had taken up some of the leaves strewed about, exclaimed, "This is the Sibyl's cave; these are Sibylline leaves." On examination, we found that all the leaves, bark, and other substances, were traced with written characters (Shelley, 1826).

Fragments—of a broken bottle, of a prophesy, of Parmenides’ poem—are each part of a tenuous ‘collective’ to which they will always belong. But it is also the nature of a fragment that it is defined by what is missing and incomplete. Alva Noë

is a philosopher of perception and consciousness, whose observations about seeing someone in a photograph are pertinent to the work of defining the ontology of the fragment here. Noë observes that there is an important difference between seeing someone in real life, and seeing them as ‘manifestly absent’ in their presence in the photograph. He identifies the particular sense in which someone or something ‘shows up *as* not there’ (Noë, 2008). The presence of *absent* fragments in a given collective, then, helps cast them as a distributed network with indeterminate spatial and temporal boundaries: for who knows where all the fragments might be and how far flung from each other? In addition, the paradoxical twin forces of presence and absence produce a timeline for the collective which includes all immanent *possible* encounters with all its fragments, stretching back and forward through time.

Akin to Latour’s concept of the ‘actant’ in Actor Network Theory (Latour, 2005) or to Harman’s Object Oriented Ontology (Harman, 2005), the word ‘collective’ captures the sense in which a fragment has agency as an individual through its relationship to others rather than from its identity as an individual. Many of these glass fragments bear text: short, typically broken, sentences and single words that sometimes read like Sibylline utterances. A low branch of a Sheoak tree buffeted by the wind over the years had swept thin layers of soil and its own dropped needles to produce a bare patch of softly scalloped dirt, like a smaller and drier version of a gilgai. Observing the result of this action by the tree, I find a glass fragment with a text. It proclaims, with wondrously empty positivity: ‘THIS’ (Fig. 20.1).

Other pieces contain text which is more propositional: ‘... REMAINS THE PROPERTY...’ and ‘...NOT TO BE...’ make portentous claims. As fragments,



**Fig. 20.1** Placeholder—This Glass Fragment

they evidence having come from somewhere else (a glass factory, a shop, someone's kitchen) and having survived the catastrophe of the rubbish bin—smash!—before joining the landfill along the Merri Creek. The Australian Government's Science and Research Priorities website features a directive related to mining equipment, technology and services research, in the category 'Future: Practical Challenges'. It promises research support for efforts that foster 'a fundamental understanding of the physical state of the Australian crust, its resource endowment and recovery' (Australian Government Science and Research Priorities, 2018).

As they labour their way up through what remains of the Australian Crust along the Merri Creek, I imagine the glass fragments grinding themselves into lenses. In the process, they release their dirty words. Poetic justice as an antidote to the resourcefulness of White settlement.

## Conclusion

The fragment, in its capacity to generate encounters and summon collectives, has been a focus of this chapter, which has obliquely addressed the definition of 'craft'. I have described my practice as an investigation into how scientific discourses can be handled to interweave in the form of a 'duology' that manufactures new forms of knowledge in the domain of creative art practice. I orchestrate 'duologies' among the discourses of soil and vision science to produce 'scientistic' methods that playfully misconstrue key terminology and concepts. This is a form of craft practice that does not produce crafted objects.

To what extent can 'craft practice' be defined in a further and more expanded field before the definition breaks down? A further example of craft as an 'encounter' may be helpful here: the distributed, unregulated yet very systematic placement of finger marks on the rear ends of cars where their owners (presumably) scumble to open the car boot or hatchback. The build-up of finger marks in the dust on their vehicles forms a tangible but ephemeral record of industrious, everyday labour by numerous individuals. These marks are artefactual in their materiality, productive in how they render the labourer 'manifestly absent'; present '*as not there*' (Noë, 2008). In another context, the finger marks could be considered as important demographic data sets.

What interests me about the numerous individual's handling of their dirty cars, is the possibility of considering them in the context of a craft practice. There is 'work' involved for all parties here. Exploiting the slippage between the noun and verb forms of the word 'work' or 'craft', the principles of a practice can be seen to involve various forms of work and worker: the encountered objects (finger marks as 'works'), the work done by the handlers of their cars ('workers'), and the work involved in the encounter (encountering as an activity involving the effort of not documenting one's findings).

As objects, I have no wish to document the finger marks, for instance, by photographing them. Like having a 'no excavating rule' for the extraction of the

glass fragments (I do not allow myself to dig up ground in the search for more fragments), the rule with the finger marks is to just observe them in situ as they arise for me at that moment in traffic. It is important, for this practice, to let the fact of their accumulation, as such, remain out of reach. The fingerprints are far more interesting as a virtual or immanent collection, as a phenomenon gathering itself for itself, than as a collection of documentary photographs thrown onto Instagram. Fragments are best left shattered and unresolved.

The finger marks on other peoples' cars instantiate a form of practice that expands the idea of 'craft' as defined as 'hand-made', in the same way that the fragments of Parmenides' philosophy passed through numerous hands, the Sibylline leaves passed through Mary Shelley's fiction, and the pieces of broken glass come into my hands through a practice of handling and collecting. There is always unfettered movement in the circulation of objects, subjects and methods within this practice. But what is the contribution of this practice? At the very least, the glass fragments stand as a reminder of how a living place and its community has literally been worn down: not only through the instruments of colonization but also through the blunt forces of digging up, filling in and levelling off. The broken glass is a tangible reminder of the mistakes of the past. Through their slow, collective persistence, they perform a labourious, material practice of their own. As sharp, gritty individuals, they are working to release the discourse of soil from its own instrumentalising 'crust'.

The craft of my practice lies not in refashioning fragments into other (aesthetic) objects or by forensically tracing and documenting their stories: my practice is in the encounter. And so thereby I mine the connections between disparate entities: glass, soil and words. Glass is crafted, elementally, from sand and fire.

Glass is a fire made of sand.

## Notes

1. The regions of the brain involved in reading include the frontal and temporal lobes, Broca's area, the angular and supra-marginal gyrus and arcuate nucleus which link these areas together (Edwards, 2018).
2. 'Most of the Aboriginal archaeological sites present in the Moreland area at the time of European settlement have probably been destroyed. These sites are likely to have included scarred trees, interments, shell middens, stone artefact scatters, eel and fish traps, stone arrangements and other ceremonial sites' (Moreland Council, 2010: 26).
3. Parmenides of Elea (500 BCE) wrote *On Nature* as a philosophy treatise for 'mortals'. Written as a poem rather than prose, *On Nature* (not its original title) exists only in fragments, many of which were copied by hand by others, including Plato.

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**Rose Woodcock** graduated from the South Australian School of Art in 1985 and developed her art practice through studio and exhibition work before completing a Dip. Ed. (Flinders). She taught in Japan for several years before returning to Australia to continue her further education. While completing her PhD at Melbourne University, Rose began teaching animation at Deakin University, School of Communication and Creative Arts with a focus on animation theory and practice and creative practice-led research methods for undergraduate and post-graduate students. Her research includes investigating the possibilities of anomalous binocular perception in virtual (VR) environments, and the inherent visual ambiguity of pictorial objects, ideas which draw from her PhD thesis 'Vision, ambiguity and perceptual possibility: why pictures matter in the critique of stereo-immersive VR' (conferred 2011). Rose works in interdisciplinary research teams across the creative arts, VR design and development, and the vision sciences.

Woodcock's research is currently associated with the Merri Creek in Melbourne's North through creative practice that explores how the discourses of Science and Art interweave in the form of a 'duologue' to craft new forms of knowledge across both domains. She has exhibited work exploring the duologic as a theoretical framing in Melbourne and Tokyo.

# Chapter 21

## Crafting Resistance: Talismanic Memory Maps



Gabrielle Bates

### Crafting Resistance: Magically Subversive Talismans of the Witch

Once again, Australian cities are transforming rapidly. Following a clear pattern established by settlers, the colonial imperative of urban expansion and development continues to play out with enormous impacts for those who call these places their home. Within this climate, my creative practice investigates how rituals and magical objects associated with Witchcraft might be used to protect and engage with urban areas affected by questionable development and gentrification. I produce handcrafted objects known as *Talismanic Memory Maps* as part of my investigation, and this short paper describes the process of how they come into being (Fig. 21.1).

Modern Witchcraft is derived from a highly diverse and eclectic subculture of creative applications that use ritual and magic to manifest desired outcomes. Its heterogenous qualities are perfectly suited to the “do-it-yourself” methodology of Bricolage which I use to support my experimentation with rituals and magical applications. Sociologist Veronique Altglas explains that Bricolage “...designates activities of fabricating and repairing, meaning something like ‘do-it-yourself’ and ‘tinkering’...Claude Levi-Strauss and Roger Bastide employed ‘bricolage’ as an analogy to depict the ways in which, in reference to traditional settings, cultures generate new myths and religious systems”.<sup>1</sup> In this sense, Bricolage complements the intuitive, local and craft-based nature of my creative outcomes, as well as their potential to create new understanding about place and politics.

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<sup>1</sup> Altglas (2014).

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**Fig. 21.1** Gabrielle Bates, *Talismanic Memory Map*, 2017, mixed media, 20 cm × 12 cm

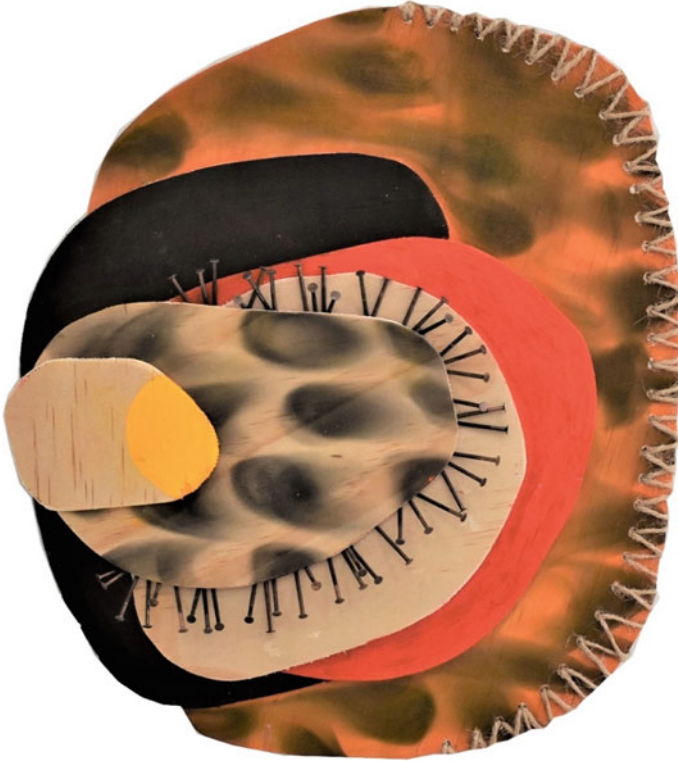
In Sydney, gentrification and urban renewal are nothing new, but their recent intensification mirrors broader currents of global power imbalance.<sup>2</sup> Arts writer Vince Carducci advocates for a more “activist-style” approach to gentrification in cultural production, stating, “The temptation to abandon art practice as a mode of critique against the process of gentrification, or the broader currents of neoliberal capital for that matter, needs resistance”<sup>3</sup> (Fig. 21.2).

Many suburbs in Sydney’s Inner West are experiencing dramatic transformation due to the construction of the WestConnex Motorway. Despite strong opposition to the project,<sup>4</sup> the government pushed it through with little community consultation.

<sup>2</sup> Human geographer Peter Jackson argues that capital interest is the reason for urban change and gentrification. Jackson, “Culture and capital in urban change”, *Maps of Meaning: An Introduction to Cultural Geography*, (London & NY: Routledge, 1995), 56–57.

<sup>3</sup> Carducci (2015).

<sup>4</sup> A coalition force across Inner West suburbs is headed by the WestConnex Action Group which disputes the project and calls for its end. “Why Oppose WestConnex?” WestConnex Action Group, accessed 1 November 2017, <http://www.westconnexactiongroup.org.au/stop-westconnex/>.



**Fig. 21.2** Gabrielle Bates, *Talismanic Memory Map*, 2017, mixed media, 22 cm × 20 cm

This action has resulted in the widespread displacement of communities, the demolition of heritage homes, and the removal of significant quantities of trees in public parklands.

Shelley Hornstein writes:

Demolition... is emblematic of death, a phenomenon often complicated by politics and value shifts that pushes our emotional balance over the edge.<sup>5</sup>

I agree. This kind of accumulated displacement, destruction and loss of community make me feel powerless. It makes me yearn for a home, to belong to a spiritual place where the land, people and heritage are valued more than property prices.<sup>6</sup>

As a practising Witch and artist, my impulse is to subvert the economic and cultural imperatives that drive these patterns of destruction. This requires a holistic engagement with these suburbs, and in so doing, I have developed my own speculative

<sup>5</sup> Hornstein (2011).

<sup>6</sup> "The need to belong is a strong interpersonal motive influencing human behaviour, emotions, and thoughts". Wilczyńskaagnieszka et al. (2015).



**Fig. 21.3** Gabrielle Bates, *Talismanic Memory Map*, 2017, mixed media, 20 cm × 17 cm

place-lore.<sup>7</sup> Lore is an important aspect of Witchcraft.<sup>8</sup> The transference of lore knowledge in the secret initiation rites of Witches is essential.<sup>9</sup> My place-lore helps to create a greater sense of connection and action, and it allows me to explore different ways of applying the core principles of Witchcraft. According to Starhawk, the core principles of Witchcraft are (Fig. 21.3) as follows:

Immanence—the way in which the divine manifests in the material world; Interconnect-  
edness—that all being is interrelated; and Community—where growth and transformation  
occur through the interactions and common struggles of the people.<sup>10</sup>

Working with these principles, I ritually walk the boundaries of threatened neigh-  
bourhoods, gleaning pieces of detritus from the streets as I go. This act is as vital to

<sup>7</sup> Archaeologist Pikne Kama describes place-lore as “place and lore connected with the place. The locus and lore are equally important, but the relationship between a concrete place and narrative may be loose Kama” (2016).

<sup>8</sup> Lore is a body of knowledge, especially of a traditional, anecdotal or popular nature, on a particular subject. Dictionary.com, accessed 4 October 2017, <http://www.dictionary.com/browse/lore>.

<sup>9</sup> Orion (1990, 41–42).

<sup>10</sup> Starhawk, “Witchcraft as Goddess Religion”, in *The Spiral Dance* (San Francisco: Harper Collins, 1999), 10.



**Fig. 21.4** Gabrielle Bates, snapshot of gleaned materials prior to assemblage, 2017

my creative process as my subsequent crafting process. I regard it as form of meditation that “offers an unparalleled way to open oneself to the ‘Spirit of Place’ and to its subterranean history”.<sup>11</sup> As I walk, I give myself over to the places I explore, sensing out their character and histories to develop a deeper understanding about how they are changing. Each ritual walk requires focus and a willingness to experience my surroundings in alternative ways. I memory-map the dynamic relationships between roads, architecture, flora, fauna and people, and the more my perception becomes attuned to the patterns within these living relationships, the more I begin to experience a phenomenon that I can only describe as “enchanted”.

Enchantment is a unique perspective that challenges disenchanting material values,<sup>12</sup> and (Fig. 21.4)...

...opens a pathway toward...experiences that swell the heart and stretch the limits of belief and understanding.”<sup>13</sup> It has also been suggested that “many urban Pagans are creating this enchanted vision of the city through their active revisionings [sic] of the urban landscape.”<sup>14</sup>

<sup>11</sup> Lucy Lippard, *The Lure of the Local*, (New York: New Press, 1990), 17.

<sup>12</sup> These disenchanting values reflect “the rationalising processes of bureaucracy and functional organisation...and the tendency of capitalism to undermine values by turning everything into commodities”. Bahnisch, *Sociology of Religion in Postmodernity: Wicca, Witches and the neo-pagan Myth of Foundations*, (Brisbane: Queensland University of Technology, 2001), 2.

<sup>13</sup> Moore (1996).

<sup>14</sup> Furney (2004, 25).

The ritual act of gleaning is also essential to my process.<sup>15</sup> A direct engagement with adversity and place, gleaning has roots in the conditions of poor farm workers forced to collect harvest leftovers or pick over unviable fields to survive. I perform the gleaning ritual as a meditative action, always observing the protocol of “take only what you need”.<sup>16</sup> Items must be small, easy to carry and come at little or no cost outside of time expended. These rules fit well with eco-mystic ideas around recycling<sup>17</sup> and reiterate my interest in values beyond the profit-driven, disposable culture.<sup>18</sup> I investigate crevices, gutters, rubbish bins, alleys, backyards, parklands and building sites in search of materials that seem to embody stories about my threatened neighbourhoods. As soon as I have gleaned enough materials from my walks, I organise the items into categories based on shape, colour and texture. This facilitates the sense of flow needed for focused, intuitive assemblage. It also creates a greater familiarity with the materials and heightens my sense of intention prior to creation.

The ritual that follows requires my entering into a semi dream-like state where I can access my memories of the places I have walked. Often, I light a candle or sit quietly before starting. I then cut loose, rounded shapes from pieces of found timber, layering them on top of each other to create the appearance of map contours in relief. Onto these I add black carbon, bright colours and iron pigments to absorb negative energy<sup>19</sup> and suggest a dynamic of interconnection.<sup>20</sup> Candle smoke markings and magical items like those found in fetish objects are also included, such as bones, coffin nails, feathers, string, twigs, twine, doll parts and beads. Cherry pips and chicken bones from casual meetings and dinners (where the subject of urban change

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<sup>15</sup> “Glean; to gather slowly and laboriously in bits; to gather after the reapers or regular gatherers; to discover or find out”. Arthur Delbridge and J.R.L. Bernard, eds., *The Macquarie Dictionary*, second edition (New South Wales: Macquarie Library, 1994), 405.

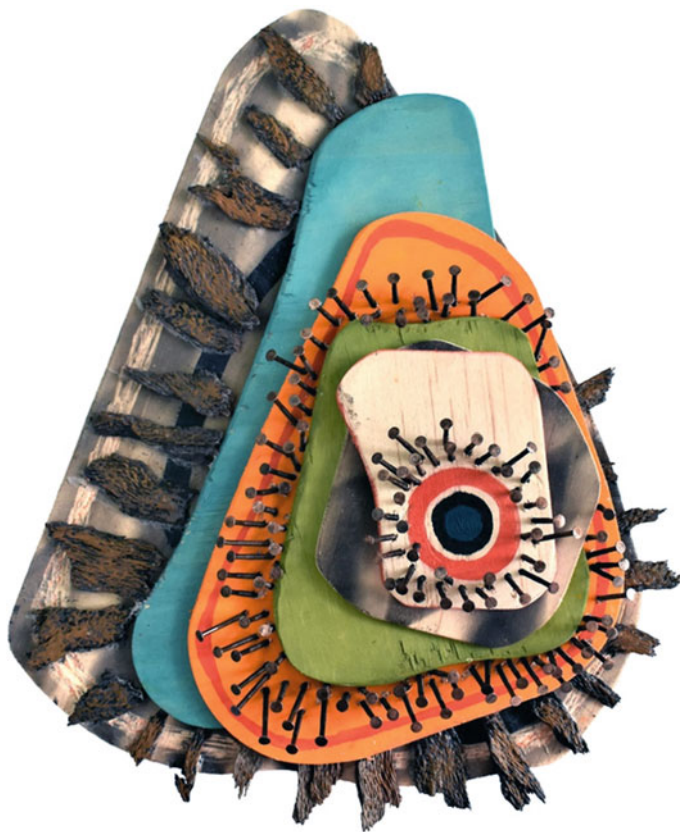
<sup>16</sup> In advocating for an “earth-wise cultural recovery”, Pegi Evers writes on the Pagan tradition of gleaning, stating that “The most important rule for gleaning and wild-crafting is to take only what you need”. Pegi Evers, *Ancient Spirit Rising: Reclaiming Your Roots & Restoring Earth Community* (Ontario: Stone Circle Press, 2015), 203.

<sup>17</sup> Considering a new framework for economic reform, Pegi Evers examines the writing of Riane Eisler who adds “three life-sustaining sectors with a much higher value—household economy, natural economy and volunteer economy”. She then cites the practice of “reduce, reuse, recycle and repair” as a means for rejecting capitalist tendencies. *Ibid.*, 207–08.

<sup>18</sup> American artist Aris Georgiardi reflects, “Repurposing things in general can be seen as political—our culture has come to depend on the constant cycle of replacing old things with new ones, and rejecting that model is subversive to the economy”. Holland (2014).

<sup>19</sup> Including iron pigment. There seems to be a general agreement across Witchcraft websites that carbon and iron trap and absorb negative energy. For examples, see “Psychic Self-Defense”, *Liminal Landscapes*, accessed 18 September 2017, <http://www.liminallandscapes.com/protection.html> and “Iron In Folklore: Superstitions Explained”, *Diabolical Confusions*, accessed 18 September 2017, <https://diabolicalconfusions.wordpress.com/2011/02/15/iron-in-folklore-superstitions-explained/>.

<sup>20</sup> Professor Paul Carter argues for “special knowledge” about regions, stating that the interconnected layers of stories and words combine to create a window through which we can see a region. Carter (2010, 3).



**Fig. 21.5** Gabrielle Bates, *Talismanic Memory Map*, 2017, mixed media, 22 cm × 18 cm

was discussed) were also added, alongside continuous circular scratchings, burns and symbols (Fig. 21.5).

I work back and forth between the layers, allowing the objects to find their place within the “geography” of the assemblage. Lucy Lippard describes a similar process of non-linear invocation used in more experimental, indigenous and artistic forms of mapping (Fig. 21.6):

It makes clear how memory fades as it recedes, how legend then myth creep in and take over...Telling stories that are...not linear, but always coming back around...Going backward, the artefacts get mixed up, the path meanders, allowing more lateral exploration.<sup>21</sup>

As the shapes fall into place, they seem to echo the multi-layered nature of the living relationships I perceive in my case neighbourhoods. They appear to move towards or away from me in multiple layers that, once finally configured, co-exist

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<sup>21</sup> Lippard (1998, 25–26).





**Fig. 21.6** Gabrielle Bates, *Talismanic Memory Map*, 2017, mixed media, 31 cm × 25 cm

within a single dynamic entity. Thomas Moore writes about the shift in position that occurs between subject and place when things are allowed their own vitality:

My own position changes when I grant the world its soul...as the things in the world present themselves vividly, I watch and listen. I respect them because I am not their creator and controller. They have as much personality and independence as I do.<sup>22</sup>

By adopting this kind of open approach that relinquishes sovereignty, I find that the configurations seem to embody the many changing histories, repetitions, patterns, borders and relationships I sense in threatened neighbourhoods.

When all items are finally assembled, I bind the objects with twine. This gesture reinforces the intention of protection, care and nurture. I perceive this process of

<sup>22</sup> Moore, "Beautify and the Reanimation of Things", *Care of the Soul* (New York: Harper Collins, 1992), 268.



**Fig. 21.7** Gabrielle Bates, *Talismanic Memory Map*, 2017, mixed media, 65 cm × 82 cm

assemblage and tying of twine as a form of spell binding. Binding spells is a magical means of imposing influence through psychic linking.<sup>23</sup> The process relies on a lengthy and somewhat circuitous exchange between intuition, memory, material and action, requiring concentrated intention while binding the materials tightly together (Fig. 21.7).

Traditional talismans are often inscribed with words, symbols or patterns.<sup>24</sup> This is reflected in the layers of incantations I carve into my larger assemblage. Not to be confused with “Witches’ marks”,<sup>25</sup> these rough-hewn inscriptions are the result of a manifesting technique known as “spirit onto matter”,<sup>26</sup> a ritual process that aims to transform intention into reality through the inscription of words onto a material

<sup>23</sup> Starhawk, *Spiral Dance*, 128.

<sup>24</sup> Morris (1999, 10).

<sup>25</sup> Witches’ marks are also often found in liminal spaces to ward off evil, but the evil is regarded as the Witch itself. Kennedy (2016).

<sup>26</sup> Especially when intentions are carved onto objects such as candles, wands, bones or timber. Holland (2009, 36).

surface. My scratched incantations appeal to local spirits to protect threatened neighbourhoods and their communities, and each invocation firmly declares my place-lore, leaving no doubt about my political position.

In both anthropology and archaeology, objects such as these are known as “fetishes”, and are generally regarded as the “the embodiment or habitation of a potent spirit or as having magical potency”.<sup>27</sup> Objects of this nature have agency in that they possess the power to trigger memory and even embody the collective memory of a group.<sup>28</sup> This kind of “mnemonic power”<sup>29</sup> activates apotropaic magic.<sup>30</sup> The assemblage of local materials creates repositories of collective memory that evoke a sense of familiarity, encourage affection for neighbourhoods, possibly even stir a desire to protect them. As apotropaic guardian objects<sup>31</sup> known to ward off evil, the talismans also seem to engender a sense of urgency, calling for external active intervention. Additionally, they act as consolidating symbols of resistance that can be expressed in the homes of communities affected by radical urban change.

To reach their greatest potential, the *Talismanic Memory Maps* are crafted as “threshold applications”.<sup>32</sup> This is a term used by sociologist Cynthia Kay Riley Aug to describe protective charms traditionally placed over liminal zones such as doorways, windows and chimneys of homes. Zones like these are believed to have great power and symbolic meaning. They are thought to operate both literally and metaphorically “between the living and the dead; the material and the spirit; the public and private; the decent and the indecent; the sacred and profane”.<sup>33</sup> In this way, the talismans can directly engage the space they seek to protect.

These elastic, intuitive, unconventional and superstitious approaches allow my talismans to operate in other ways too. They reject established methods of history construction and record-keeping by offering an alternative to conventional representations of place. They also contribute to the development of a loose, “workly character” that gives greater political substance to the objects.

For anyone else, the materials used in these objects are worthless, but for me, their recycled, non-commodifiable qualities challenge aesthetics attributed to luxury artefacts, pointing towards alternative approaches to valuation (Fig. 21.8).

By conceptually blending politics with the magical applications and rituals of Witchcraft, my investigations actively engage with neighbourhoods threatened by

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<sup>27</sup> Dictionary.com, accessed 19 September 2017, <http://www.dictionary.com/browse/fetish>.

<sup>28</sup> As Colin Renfrew observes in his parallel visions of artists and archaeologists, objects have the power to trigger memories, especially when they are reconfigured or shown in unfamiliar contexts. For non-literate societies, artefacts have a key role in embodying the collective memory of the group. Renfrew (2003, 144).

<sup>29</sup> Ibid.

<sup>30</sup> Apotropaic magic is an ancient protective spell activated through objects or marks to deflect misfortune, ward off harmful influences. Collins Dictionary, accessed 4 March 2018, <https://www.collinsdictionary.com/dictionary/english/apotropaic>

<sup>31</sup> Auge (2013, 38).

<sup>32</sup> Auge, “Silent Sentinels”, 36.

<sup>33</sup> Ibid.



**Fig. 21.8** Gabrielle Bates, *Talismanic Memory Maps & Amulets*, 2017, mixed media, dimensions variable, UNSW AD Space, April 2017

radical urban change to subvert modern values that facilitate profit-driven over development. My creation of a speculative place-lore based on the three core principles of Witchcraft and apotropaic magic allows my magical talismans to express political resistance through the mnemonic potential of fetish objects and the use of threshold applications. Combining esoteric practice, grass roots politics and the magical potential of materials has helped me expand my knowledge in unexpected and exciting ways, uncovering alternative methods for addressing the ever-increasing sense of powerlessness experienced in places affected by rapid urban change. Ultimately, I feel that I am being guided by the places I engage with, and this perhaps is the most satisfying outcome of all—a championing of the spiritual modes of relating-to and connecting-with place, to genuinely care for and understand it.

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**Gabrielle Bates** is a Sydney-based artist and writer working across painting, sculpture and installation to explore intersections between place, politics and esoteric practice. A graduate of Sydney College of the Arts, she is currently an MFA candidate at UNSW Art & Design. In 2007 Gabrielle was accepted for a year-long residency at Rimbun Dahan in Kuala Lumpur, followed by residencies in Penang, Manila and the Top End of Australia. Her art works have been selected for competitive award exhibitions including the Portia Geach Prize for Female Portraiture, North Sydney Art Prize, Tim Olsen Drawing Prize and the Wollongong Bicentennial Sculpture Award. A survey of her paintings was held at Victoria University in 2010 and she has produced 12 solo exhibitions to date.

**Part XI**  
**The Markets**

# Chapter 22

## Head and Hands in the Cloud—Cooperative Models for Global Trade to Be Found in Traditional Crafts



Kevin Murray

### Introduction

On 24 April 2013, an eight-storey building collapsed in Savar, just outside the capital of Bangladesh. Rana Plaza contained a garment factory that produced clothing for Western markets. The final death toll was 1127, the largest in the history of the garment industry.

Like the 9/11 collapse of the Twin Towers in New York, the destruction of this building revealed a global divide. Rather than a religious difference between Islam and the West, the mass deaths revealed an economic fault line that separated the workers desperate to earn \$50 a month and the Western consumers looking for a bargain.

What is the appropriate response to the Rana tragedy? One alternative is to reduce the practice of offshoring. It is sometimes argued that there is mutual benefit in this arrangement, involving jobs for economic upliftment and cheap prices for consumers. But the question arises of its longer term trajectory. Analyses of global off shoring (Levy, 2005) suggests that the mutual benefits of such trade are capped by a glass ceiling, preventing ascension to higher skilled work. Without denying the structural inequity, it is hard to ignore the calls from local workers that overseas companies retain their operations in Bangladesh.

Another response to this scandal has been to address the specific problem. Many companies have signed on to an 'Accord on Factory and Building Safety in Bangladesh', involving regular building inspections. While this is a useful response to the immediate problem, it does not address the broader issues. It still does not concern itself with problems such as working conditions and low wages.

But the most telling response has been simply the concern to learn more about what goes on behind the scenes in the global supply chains. The UK Deputy Prime

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Minister Nick Clegg spoke for the ordinary consumer who naively looks for the most convenient and cheap source of clothing:

I'm not pretending our shopping choices are done on some sort of moral calculator, far from it. You go to the most convenient shop, you buy what's affordable, you try and get what you can in an affordable way for your kids.

I'm saying... there's more we could do to talk about what goes on behind the scenes and this terrible catastrophe might well prompt people to think again. (Mason, 2013)

In Australia, Fairfax print media (Doherty, 2013) and ABC television current affairs have both sent journalists to background the lives and opinions of factory workers. Kerry O'Brien introduces the Four Corners episode by reflecting on the contemporary dilemma:

They are easier to buy if you don't have to think too much how they got here.

(Fashion Victims, 2013)

The invisibility of production is an enduring issue in globalisation. Despite the post-industrial conditions of most Western cities, Slavoj Žižek argues that the same class dynamic exists today as occurred in the nineteenth century. Whereas the proletariat were once visible as the great unwashed in poorer suburbs, they have been exported to distant locations such as southern China (Žižek, 2012).

This paper considers whether global consumerism is necessarily dependent on the withholding of its guilty secret. It looks to other models for transnational relationships that offer greater transparency.

## World Craft

An alternative though much less travelled pathway in object production exists in the area of world craft. A number of Australian designers have established projects in countries such as India where they work with groups of artisans to add handmade elements to their garments (Murray, 2010).

For instance, the Australian weaver Liz Williamson, honoured as a Living Treasure of Craft, has developed a 'Made in Asia' range of scarves that are woven in West Bengal to her designs. Williamson has been travelling to India regularly for a number of years and developed close relations with a particular weaving studio the village of Fulia. This range sells at a lower price than those she weaves herself.

Williamson has adapted the traditional form with new colours and shapes. At a conference last year Make It New Again (NID), she admitted that she was resigned to having her designs copied within India, though she prefers that these copies compete in her local Australian market. While there is a clear economic differential between the designer and weavers, the situation is not a 'race to the bottom' where producers are hostage to undercutting from alternative cheaper providers.

The weaver's labour is valued as a skilled process which adds value to the final product. This value has a number of elements. The relative rarity of the craft grants

the garment a high status. The tribal identity of the maker provides the wearer with an exotic story to tell. And in some cases, it offers the buyer a story of themselves as exercising moral agency in contributing to economic empowerment, particularly to women, or helping to save an endangered craft.

By comparison with industrial goods, the trade in world craft is tiny. Its market ranges from serious collectors to gift-buyers in shops like Oxfam. But in its respect for labour, it does provide an alternative model for global manufacture, reflecting the call in the textile industry for ‘re-crafting capitalism’ (McClellan, 2011).

## The World Craft Supply Chain

As with manufacture generally, the supply chain in world craft is growing in length and complexity. From the traditional contact of family or village production, where there is a relatively direct relationship between the producer and user, capitalism has introduced a number of roles including importers, retailers, marketers and publishers. For the purposes of analysis, this chain has been reduced to three roles: labour, capital and user.

The labour in world craft is provided by the artisan. It is estimated that in India there are up to 200 million artisans (Craft Economic Impact Study, 2011), mostly in the informal handloom sector. In the traditional model, the artisan maintains a skill often passed down through generations. This skill is honed through a lifetime of repetition, learnt initially as an apprentice and further developed until acquiring the status of master. This traditional artisan is positioned against that of modernity. The process of industrialisation threatens to replace their hands with machines. Globalisation floods their local market with cheaper imports. The artisan is thus seen as a threatened species, a carrier of intangible cultural heritage.

This problem has become an opportunity for capital. Obviously, traders are not new to the economy of world craft, but more recently there have been a spate of designers from Western countries seeking to work with traditional artisans, ostensibly to save their dying crafts. Principally, the designer seeks for a way to connect the traditional village artisan with an urban market.

Within Asia, some significant craft enterprises have been developed by US entrepreneurs. In the 1960s, Jim Thompson revived Thai silk as an industry (Kurlantzick, 2011). In India today the FabIndia chain established by Robert Bissell is selling work by 40,000 artisans (Singh, 2010). In their wake of these post-war entrepreneurs is a generation of young graduates from design and business courses in USA and Australia looking for ways to use new e-commerce tools for trading craft online.

Product development involves design modification including new colour ways and uses, from camel rugs to laptop bags. The design usually makes the initial investment of time and money by travelling to the villages and paying up front for the labour and materials, in the hope that they can recover their costs through sales back home.

As a market-based enterprise, it's critical to consider the role of the user in the supply chain. The consumerist paradigm sees the user as the end point of the supply chain. Once money is exchanged, then the product disappears into the private sphere (Appadurai, 1988). But there are alternative ways in which this supply chain can be fulfilled. In the case of world craft, the products can be purchased by collectors who maintain an enduring interest in the history and future of a specific craft, such as rug making. The value of these products also lends to their use as heirlooms, to be passed down through generations. There is potential for users to take on the role of custodians, seeking to honour the traditional values of the producer in the way they are incorporated into everyday life.

The emerging platforms for world craft position the user not just as a consumer but also as an active participant alongside designer and artisan in the production of value.

## Urban Market

Compared to the disposable labour that constitutes the garment industry, these world craft enterprises involve a more socialised supply chain, embedded in everyday life rather than industrial routines. This does have some negative implications. For a traditional artisan, there are competing demands that can interrupt supply. These involve not only the religious festivals but also the social obligations that can take precedence over promises to people on the other side of the world.

But much value is also gained. Besides the aesthetic qualities of handmade goods, they offer the user a connection to an idyllic world filled with meaning. The Australian potter Sandra Bowkett has been working with traditional potters in Delhi, bringing them to Australia and facilitating sale of their iconic water vessels, *mudkas*. While these would sell for around \$1 in India, the potters were astounded to see their everyday objects being sold for \$60 in Melbourne. Given access to tap water and the more portable alternative of plastic bottled water, the appeal of *mudkas* was not so much in their utility but in the world they conjure. This world was demonstrated by live pottery demonstrations in the exhibition gallery.

The standard setup of the retail shop floor is not conducive to the symbolic value of crafted goods. There is limited access to information about where products come from. The limited space of the swing tag conventionally will only give details of the country of origin. There are some certifications such as Fair Trade that promise social and environmental standards in production, but they offer little detail of what happens behind the scenes.

While browsing crafted goods, the shop assistant may attempt to convince a wavering customer by telling a story about the product under consideration. The customer may then 'try on' the story when thinking about its recipient, such as friend with an upcoming birthday. This story can be related on the day during the ritual of unwrapping the present. Ideally the values represented through the story,

such as respect for tradition, can be something that the giver and recipient share in their relationship.

But there are clear limitations. In the retail context, the story exists as a static narrative. There is no reverse exchange for the user to share with the artisan how they used their product. Such exchanges are limited to the regular craft markets where customers might return to vendors to report on how well the product performed.

It is only now when alternative online marketplaces are emerging that the potential for reciprocal exchange becomes evident.

## E-Commerce

One of the earliest trading platforms unique to the Internet, the online auction house eBay, was established in 1995. A key innovation was the capacity for customers to communicate directly to sellers and rate their experience. This record of evaluations underpins what has been termed the ‘reputation economy’ (Botsman, 2012).

## User-Capital

The World of Good platform was an extension of eBay into ethical consumerism. It was founded in 2004 by two business graduates of Indian descent from Berkeley, Priya Haji and Siddharth Sanghvi. Previously they had supplied mainstream retail products by third world artisans for companies such as Disney and Hallmark. In 2010, their brand and related assets were acquired by eBay. World of Good site within eBay offered products made by poor communities around the world.

There are many such online retailers of third world products, but World of Good was distinct in the development of a platform that commodifies trust as a component of the final product. World of Good worked with organisations known as Trust Providers, who provided a guarantee that the products they were selling were of genuine philanthropic benefit. These benefits were divided into social and natural. The overall system was known as trustology. An essential component of the trustology is what was known as the ‘goodprint’ that included details of the product’s positive moral impact. It’s like a food ingredient label, except for ethics.

So, with the case of the Cotton Rounded Hill Tribe shoulder bag, the seller had been verified by the Trust Provider known as Empowerment Works. The product’s goodprint included ‘a cooperative organisation’, ‘produced communally by women in a minority tribal group’ and made ‘from biodegradable materials’.

As a trading platform, eBay enables communication between buyer and seller, as well as a rating system. World of Good had a parallel capacity for dialogue. Each seller has a section on the site where they can communicate with the buyer. However, the basic moral lie of the land is a world of good rich people purchasing goods from

grateful poor people. The potential for exchange is constrained by this missionary meta-narrative (Black, 2009).

In August 2012, eBay incorporated abandoned World of Good as a separate platform and directed ethical consumers to [green.ebay.com](http://green.ebay.com), a categorisation of eBay trade associated with social and environmental sustainability. In the meantime, model similar to World of Good has been adopted by an Australian under the name of Shop for Change.

Such initiatives are always vulnerable to the criticism that they mask this global divide. They can be seen to allay anxieties about exploitation by filling the screen with smiling faces. James and Scerri (2012) argue that the self-affirmation promoted by much ethical consumption constitutes a ‘deferral of an alternative politics of consequence’:

Under the aegis of abstract, market-oriented and neoliberal-democratic conditions, existential problems seem to enter sociality as ever-further opportunities for the satisfaction of sovereign desire through consumption of ethical life-style opportunities. (James & Scerri, 2012)

While arguable in a theoretical vein, the impact of such critiques is to widen the distance between theory and praxis. There is at play currently a dialectic between the private consumer and connectedness that is generative. There is potential to envisage a path forward that leads us beyond the narcissism of philanthropic capitalism towards a more reciprocal relationship. It is unlikely that we will ever reach global equality, but we can imagine getting closer.

## User-Labour

More recently, platforms that have emerged that offer a more direct exchange between user and labour. In the crafts, the most successful has been [etsy.com](http://etsy.com), established in 2005. It now has 22 million members and has a turnover of \$895 million (Ludwig, 2013). As well as providing feedback on the exchange, visitors to the website can communicate with the seller directly. The goods sold tend to be DIY non-traditional goods involving low-level craft skill, responding to the US culture of self-reliance, celebrated in the Renegade Craft Fairs, *Maker* magazine and the *Craft Nation* documentary. But unlike the cosmopolitan nature of world craft platforms, Etsy is more parochial. CEO Chad Dickerson has recently positioned Etsy in opposition to the commerce that led to the Bangladesh tragedy (Chappel, 2013). At the moment, you cannot navigate Etsy by country. It is not set up for an interest in world craft.

However, Amazon has customised their e-commerce platform for world craft. In 2010, one of their engineers Gurushyam Hariharan established an ethical subsidiary called Equal Craft. This site guides visitors directly to artisans where it provides a photograph and short biography. Uniquely, it offers the opportunity to leave a message for the artisan. However, the network seems limited to one NGO, Kala Raksha, which provides their own more effective access to artisan portfolios. While innovative in providing a seeming direct connection between consumer and artisan,

it leaves many questions unanswered. How does the message get to the artisan? Who translates it? What does it mean? Equal Craft seems limited as a conduit for exchange along the supply chain.

## Capital-Labour

Not all platforms are focused on selling. Some are there to connect capital and labour for product development, prior to sale. IndiaMART offers a directory of manufacturing services and products for foreign trade. In the case of designer-artisan partnerships, UNESCO has been promoting these partnerships in their transition from heritage to market as a focus of cultural conservation. In 2007, the NGO Craft Revival Trust was supported by UNESCO to develop the publication *Designers meet Artisans* to advocate for the service of designers to traditional crafts.

Nest was established by social work graduate Rebecca Kousky in 2006 after her volunteer experience in Mexico and India. Nest connects artisans with the capital they need for business and product development. A Needs Catalogue identifies projects requiring capital for their completion, such as the creation of a centralised weaving facility for the ‘dying craft’ of silk weaving in Varanasi. This initiative reflects the growth of micro-financing, like the crowd-funding philanthropic site Kiva. Nest Collaborative enables design of products for specific retailers, such as American Eagle Outfitters.

In 2012, GlobeIn launched a parallel platform that matches artisans not with investors but with advocates. The platform came from the experience of an Italian business graduate, Anastasia Miron, who posted on Etsy images of craft that she admired while travelling around the world. But because the artisans had no access to the Internet, they couldn’t sell their work online. With the help of Vladimir Ermakov, a software engineer for Netscape, she developed a platform to accommodate offline components. What’s unique to GlobeIn is the role of artisan helper, a voluntary position which takes image and video of artisans that is uploaded to the website. There are also regional managers who process the individual sales, taking responsibility for payments and postage.

What seems significant for GlobeIn is the way it makes visible the role of the Western consumer as virtual trader. Coming from a wealthier country, helpers can acknowledge their appreciation of the time with an artisan by connecting their host to this foreign market.

## User-Capital-Labour

The IOU Project takes this one step further by granting visibility to the user. Indian-born fashion designer Kavita Parmar had established a successful clothing business in Spain until the financial crash of 2008. While others looked to offshoring production

in China in order to lower prices, Parmar explored the potential for technology to reach into the informal textile sector. She chose to focus on Madras, where there were 250,000 families working on handlooms. Working with the coops, she recruited 243 weavers who produce a range of patterns in the traditional Madras plaid. These clothes are then shipped to Spain where they are assembled by local artisans into different fashion items. When users purchase these on the website, they are taken along the supply chain, showing images of the weaver and artisan. There's often a short video without sound with the artisan standing in front of the workshop. After purchase, buyers are encouraged to upload an image of themselves wearing the received clothing.

For Parmar, this is a wholesale setup that saves costs of retail outlets while offering an authored product with additional meaning. She feels in this way that she can support the craft sector to a broad market, 'including the 80% who aren't interested in saving the world' (Parmar and Murray, 2013). Making the customer visible counters the power relations implicit in much charity, which focuses exclusively on the interests of the needy, rather than acknowledging on the desires of the donor. It's possible to read into this narrative a sense in which the weaver, artisan, designer and wearer are joined together in the shared journey of the product, from its origins in tradition to its destiny in everyday wear.

Of course, it could go further. Missing from this supply chain is the designer, notably Kavita Parmar. By placing herself in this picture, it opens up the question of her interests in this enterprise.

## New Questions

The development of these e-commerce craft sites presents useful models for alternative circuits in global trade. The response to the scandals of outsourcing has thus far been for more regulation. But there is much opportunity in developing platforms that engage the consumers as active agents in the construction of relationships across the supply chain.

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# Chapter 23

## Transferring Traditional Art and Skills into Contemporary Craft as a Sustainable Business in Nepal. A Case of Mithila Art, Allo Fibre and Dhaka Weaving



Chandra Prasad Kachhipati

### Introduction

Having a rich tradition of craftsmanship, Nepal is well known for its crafts such as metal idols, sculpture, wood carving, stone carving and Thanka (Buddhist religious painting). During the 1980s, new contemporary crafts emerged like Mithila Art products, natural fibre-based allo products, Dhaka patterned weaving, Lokta hand-made paper products, ceramics, felt and more. These products are made with locally available raw materials, utilizing the Nepalese traditional skills. More than 90% of the artisans working in these crafts are women. Their emergence have helped in sustaining livelihoods and alleviating poverty in the country by creating employment to thousands of women and marginalized producers. *Fair Trade Group Nepal* members have made a great contribution in developing and promoting the new products and artefacts in national and international markets.

### A Few Case Stories

#### Janakpur (Mithila) Art

Janakpur, a city in Nepal's eastern Terai, the Southern plain land bordering India, is a Hindu pilgrimage site with a legendary history. God *Ram* and goddess *Sita* are said to have been married there and each year Janakpur celebrates *Ramnawami* (Ram's birthday) and *Bibaha Panchami* (Sita's marriage to Ram). People come to Janakpur

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from all over the world to see the Janaki Mandir, a Moghul-style temple dedicated to *Sita*. Janakpur was once the capital of a kingdom called Mithila (whose territory extended into present-day Bihar, India) and it remains today the centre of Maithili culture in Nepal.

Maithili culture has its own language and a rich literary tradition. The women's tradition of painting has been passed down from generation to generation. Examples of the women's art can be seen in the mud homes in villages nearby Jankpur. Visitors to the Janakpur will notice the artistic tradition alive on the walls of the neighbouring village, Kuwa.

The painting traditions vary from caste to caste. The art of *Brahmins* and *Kayastha* is closely tied to religious ritual as exemplified in the making of *aripana*. To make *aripana* a woman grinds rice with some water into a paste called *pithar*. Dipping two fingers into the *pithar* she makes graceful lace-like designs on the mud floor of her home or courtyard. Then she dots the designs with red powder called *sindur*. Women have a repertoire of such designs which may be drawn for worship of the house deity, or for rituals related to marriage or a particular full or half-moon day.

Brahmin women decorate a *maraba*, a pavilion made out of mud plaster on the occasion of *Upanayan* (a boy's hair cutting ceremony) with images of the gods. On the occasion of weddings, *Kayastha* women pay special attention to the decoration of a wedding chamber called the *kohbar*. The *kohbar* is a room in the bride's house where the couple will spend their first four nights together. It is decorated with an ornate tantric design also called the *kohbar*, consisting of a stylized central stalk of bamboo (symbolizing the male) surrounded by circles that are lotus leaves (symbolizing the female). The *kohbar* also contains parrots, images of happy union, and turtles and fishes, which represent Vishnu's incarnation and also male and female sexuality. On the wedding night, the bride and groom perform a ritual in which they apply *sindur* to the *kohbar*. Often in this room is an image of parrots with bamboo, symbolizing generations to come, and Lord Shiva riding his bull. Krishna playing the flute in a *katamba* tree, where he has mischievously hung the saris of bathing cow-herding maidens (*gopis*) is also a favourite image in the *kohbar* chamber.

While the imagery of the *Kayastha* and *Brahmin* tradition is perhaps the most refined and religious in character, painting is done by all the castes. The villages around Janakpur are their liveliest at the time of the autumn festival of *Deepawali*. Just before *Deepawali*, women cover their houses with a smooth mixture of mud, dung and rice husk. They form relief designs on the walls of the house and make decorations around the wood columns of their verandas. Before the night when *Laxmi*, the goddess of wealth, is worshipped, they paint the house walls to attract a visit from the goddess. Often pregnant elephants, symbolizing prosperity and auspicious peacocks are painted.

Prior to the introduction of Mithila paintings to handicrafts and the establishment of the Janakpur Women's Development Center, little was known about the Mithila culture and craft by outsiders or people from other parts of Nepal. The emergence and development of the market for handicrafts painted with Mithila over the last three decades have contributed significantly to the uplifting of the socioeconomic status of many poor women in this region (Figs. 23.1 and 23.2).



Fig. 23.1 Mithila painting



Fig. 23.2 Products with Mithila art. Janakpur Women's Development Center. (Founder Member FTG Nepal)

The Janakpur Women's Development Center was initiated in 1989 with the aim of helping village women earn income from their traditional arts. The success of this project lays in the vision of an American artist lady Ms. Claire Burkert who was inspired by a visit to the *Janaki* Temple and nearby villages where she saw the rich art engraved in houses and temples. Ms. Burkert began by giving paper and painting materials to few women and encouraged them to paint the traditional designs they had painted in their house walls. In the beginning, it was hard for these women to believe that their efforts could be worthwhile. Moreover, it was not easy to get them to work because of the oppressive circumstances in which they lived where they were not even allowed to talk strangers and had to keep their veil on most of the time. With persistent efforts, Ms. Burkert managed to convince a few tourist resorts and hotels in Kathmandu and Chitwan to use the paintings made by these women to decorate the hotel walls.

A turning point came when Machan Wildlife Resort, in Nepal's Royal Chitwan jungle, asked the women to paint the mud walls of the guest bungalows. The women were reluctant; most had never travelled anywhere except from their birthplace to their husband's village. They had to receive permission from their husband and to have a male chaperone, and they had to bear the criticism of fellow villagers who accused them of being shameless. But once transported to the strange jungle they discovered the pleasure of meeting women from other villages and making paintings together and it was clear there was nothing to fear in travelling from home. When it was time to leave they were very keen to stay together as a group to see what more might come from bringing their traditional skills to the marketplace.

That experience became the turning point and catalyst to the development of the *Mithila*-based handicraft. The vigorous marketing approach followed through with several exhibitions in Kathmandu and sales through outlets like Sana Hastakala (Founder member *Fair Trade Group Nepal*). Moreover, the art became popular with the expatriate community in Kathmandu.

The first show of the artists' works on paper was held in 1990 at the American Library in Kathmandu, where Maithili art from the southern Nepal received warm welcome. In 1991, through a grant from the United Nations Fund for the Development of Women and support from Save the Children—Japan, the women began training in a broad range of skills. Because the market for painting was deemed limited, they were taught how to use their painting techniques and traditional designs with other media such as printing, ceramics, sewing and weaving. Focus was given to training women who were poor, uneducated and had little chance to experience the outside world.

Because the arts of *Mithila* are the women's own, the JWDC believes that women should have jurisdiction over the marketing of their art, and that profits should be co-operatively managed by the producers. (Several business and organizations have sprung up which imitate the arts of JWDC but none are managed by the artists themselves.) In order to empower the women to run their NGO, they are given training in literacy, record keeping, costing, quality control, marketing, management, leadership, team building, gender awareness, health and child care.

Today Artists associated with the Janakpur Women's Development Center are earning recognition as some of the finest contemporary artists in Nepal. To date their work has been exhibited in the United States of America, the United Kingdom, Germany, Belgium and France (Figs. 23.3 and 23.4).



**Fig. 23.3** Women artists from JWDC at the centre



**Fig. 23.4** Women artists painting the art

## Allo Natural Fibre (Wild Nettle)

Allo (nettle *girardinia diversifolia*) is grown above 8000 ft altitude and distributed among Nepalese hills from west to east. The villagers start harvesting it from September to March and spend 1 or 2 days in the jungle and take further time to collect the bark of the plant. The bark of the stem is collected and dried for few weeks.

The dried bark is then boiled with wood ash for about 4 to 5 hours to make it soft and to extract the fibre. Then it is washed with mud to take away the unwanted substance and the fibre becomes ready for spinning to making the yarn. The traditional method of spinning the yarn by hand spindle still exists. Since the allo is available in the hilly areas from the east to the west of Nepal, the commercial production of allo has spread from the eastern district of Sankhuwasabha to the western districts of Parbat, Kaski, Rukum, Darchula, etc. (Figs. 23.5 and 23.6).



Fig. 23.5 Allo spinning



**Fig. 23.6** Allo shawl knitting

### **Allo Cloth Production Club**

The Club is situated in the remote hilly areas of the Shankhuwasabha District. Although the commercial production had not existed prior to the establishment of the Allo Cloth Production Club, people of this region have long been engaged in the production of allo and used to sell or exchange it at the local bazaar for other necessary goods. The few families who were able to preserve the traditional skill of allo processing and weaving did so on a haphazard basis. After a survey done by Koshi Hill Area Rural Development Project (KHARDEP, a British project) seeking to identify the alternative means of income earning opportunities to the people of this region, it indicated that the possibility of Allo cloth weaving was explored in 1984.

The marketing of the allo products from Shankhuwasabha to Kathmandu targeting tourists began in 1985 when KHARDEP was approached to this area. KHARDEP introduced weavers to few marketing outlets in Kathmandu for the allo products. This was initiated by the efforts of Ms. Susi Dunsmore (a British citizen involved in the KHARDEP project). The markets for these products were tested without modifying the design and quality of the products, rather producers were encouraged to make and produce in their own traditional way. These original marketed products were Dhakro (sack), Jhola (bag), Bhangra (vest), Fish Net and simple woven cloth, woven in a back strap bamboo loom.

At the beginning, the producers of Bala and Mangtewa VDCs were approached and a few women turned out to be interested in experimenting with their skills and embarking on exploring the potential viability of the commercial production. After 1 year of trial marketing it showed a glimmer of hope. Then, after another year of selling the products, attempts were made to form an informal group of producers. Experiments were carried out for new products, slowly introducing new modified products suitable to the market in Kathmandu aimed mainly for the tourist and expatriate market.

After a couple of years' experience selling the products, it was determined that the production of allo products could be a viable means of subsistence income, earning sources for the people of this region. Thus, the initiative was taken to expand its activities in a concerted manner. The weaving centre was built in 1986 on a self-help basis—most families providing 2-day free labour, with the cost of building materials and equipment being met by the British Ambassador's special fund and the German Embassy paid for the development and manufacture of the mangle/press. The small out house close to the river was designed to allow for sourcing and finishing processes and for drying, rolling and tentering the cloth. With the building completed and the equipment installed, the weaving centre opened for training in 1988. To take charge of the weaving centre, Allo Cloth Production Club was formed by the weavers and officially registered in 1989. One of the first 3-month courses at the centre was conducted by the resident VSO, assisted by the women's training centre Dhankuta. They addressed the difficulties of marketing, pricing, labelling, record keeping and ensuring reliability of supply of uniformly high-quality products. The VSO volunteer stayed there for 2 years and every effort was made to promote the market. New products were developed by mixing wool, creating place-mats, knitting crutch shawls and other products. The production began to improve and orders were coming from various outlets and traders from Kathmandu. Mahaguthi and Sana Hastakala both founding members of FTG Nepal were the major buyers and promoted their products in their local sales outlets and through their exports as well. Within the first few years, allo products became popular in the tourism market. Concurrently, with the increased demand the club was able to increase the number of producers and the supply chain (Figs. 23.7 and 23.8).





**Fig. 23.7** Club building and women knitters

## Dhaka Patterned Weaving

One of the handloom fabrics, which became more and more popular, is *dhaka*, a fabric used for making shawls and caps in particular. Weaving *dhaka* is an intricate art that has been preserved in Nepal. The traditional pattern is woven on wood and bamboo treadle looms by Limbu and Rai women from the eastern hill areas of Nepal. Stripes of mercerized sewing cotton with intricate and colourful cotton patterns are used in weaving and each design is unique in its shading. The weaver decides without a chart and without counting threads into which section of the warp she is going to lay the colours that form the pattern (Figs. 23.9 and 23.10).

## Tehrathum Bansghari Dhaka Weaving Centre

This group was formed through the initiation of KHARDEP in 1983 to experiment with its overall Dhaka cloth weaving development plan. A British volunteer Pam Macklan was assigned by KHARDEP to assist producers in creating new designs and products. Sita Subba was the first woman to experiment in and test the market. Prior to this she used to weave Dhaka topi (men's cap) and cholo (women's blouses)



**Fig. 23.8** Improved handloom to weave allo wool fabric

to sell to the local market. There was a branch of the Cottage Industry Emporium in the locality which supplied weaving yarn and collected the finished product to sell through its stores. Mahaguthi, founder member of FTG Nepal, first began to buy goods from the Cottage Industry Emporium. Sita Subba has become one of the sole suppliers to Mahaguthi since 1984 when the Cottage Industry Emporium failed to supply yarn and sell the finished products. Sita Subba and her sisters Ranjana and Tulsia have trained a number of weavers in this locality and these weavers later on became independent producers. Similarly, a group of 12 weavers from Solma, a village on the hill adjoining Tehrathum, who used to work in this workshop, left in 1988 and established the Solma Weaving club.

## Ujolta Dhaka Cloth Industry

Ujolta Subba, a middle-aged woman from Tehrathum district, is one of the producers from the Association for Craft Producers, another founding member of Fair Trade Group Nepal. She has been making Dhaka cloth since weaving Dhaka cloth was reintroduced into Tehrathum District during 1984–86. As an individual weaver supplying to the Cottage Industry Emporium and other private entrepreneurs, she came in contact with ACP in 1988 while searching for a market. ACP started by placing trial



**Fig. 23.9** Dhaka weaving

orders for narrow shawls from which ACP used to make cushions, bags, etc. Because of the continuous orders received from ACP, Ujolta started expanding production and employing more women.

Today, these crafts have become well known in the country and abroad. Mithila art has been transferred into products like painting, mirrors, table cloths, bedcovers, ceramics and many gift items. Allo and Dhaka blended with wool, silk and cotton are used for high-end fashion garments and accessories. These products are widely marketed in national and international markets with many businesses and organizations promoting them. Fair Trade Group Nepal member organizations are proud to be pioneers in developing and promoting these crafts.



**Fig. 23.10** Dhaka shawls and scarves

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**Chandra Prasad Kachhipati** has been serving since 1990 as Executive Director of Sana Hastakala, a successful craft based marketing fair trade organization which helps small scale and home-based artisans. Kachhipati is Immediate Past Chair, Fair Trade Group Nepal. As a part time job, he was involved in teaching Economics, Banking and Foreign Trade in Navadurga Campus, Bhaktapur, affiliated to Tribhuvan University, from 1992–2007.

Before joining Sana Hastakala, Kachhipati worked with Nepal Bank Ltd. for eleven years as Assistant manager and Wood carver's cooperative society as manager for 3 years. He has written a book "Collective Marketing, the case of handicrafts in Nepal" co-authored with Surendra Shahi published by ICIMOD. Written and published many reports and articles on Nepalese Handicraft marketing, Foreign trade of Nepal, Fair Trade and Social Responsible Business and more.

Kachhipati has been actively involved in Fair trade movement. Participated in World Fair Trade Organization (WFTO) Biannual conferences in Milan; Italy, Arusha; Tanzania, Quito; Ecuador, Blankenberg; Belgium, Rio De Janeiro; Brazil and New Delhi India. Participated in WFTO Asia conferences in Dhaka, Kathmandu, Bangkok, Colombo and Goa. Kachhipati is the founder treasurer of Fair-Trade Group Nepal and presently serving as Immediate Past Chairperson. Served as one of the members of Asia Fair Trade Forum Strategic Plan committee. Elected President of WFTO Asia from 2008 to 2010. He attended and made presentations on Fair Trade in different forums including Social Solidarity Economy and government and non-government organization: 4th Meeting on Globalising Solidarity Economy, Luxembourg, (2009), 2nd Asian Forum for Solidarity Economy, Japan (2009), Asian Social Entrepreneurs Summit, South Korea (2010), MEPP,

Council of Labour Affairs, Taiwan (2010), 3rd Asian Solidarity Forum, Malaysia (2011). Kachhipati received the Best Entrepreneur Award in 2011 from Federation of Handicraft Associations of Nepal.

# Chapter 24

## Exhibiting and Creating a Design Identity for Your Craft



Megan Atkins

Exhibiting or displaying your craft can be both exciting and challenging. Whether in the context of a commercial or gallery setting there are approaches and guidelines that you can use to assist in showing your work to its best advantage. From a craft market to an art fair or gallery, displaying your craft well can be of great benefit to your practice.

Creating a design identity for yourself and your work is an important tool in communicating your story to a broad audience and can assist with the promotion and marketing of your work.

### Curating Your Work

Depending on the volume and variety of work that you produce, the curation of your work is an important first step. Or if you are part of a group exhibition, your work may be curated by an individual or an organisation.

If you are undertaking the curation of your work yourself, it is important to select works that show your skill and practice to its best advantage. Works can be grouped chronologically, thematically or by physical size. Think about how best to tell the story of your craft through the selection of your work. The selection of works will most likely differ for different venues or events.

Also consider the area that you have to display or exhibit your works. If you have a limited area, try not to crowd the work in. It is often easier for people to see your work if there is space around each work.

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## **Creating an Object List**

Once you have selected your works, creating an Object List can assist in the organisation of your display. Headings that you could use may include the following:

- Object Number (Give each work a number)
- Object Name
- Material the work is made from
- Dimensions of the object (length x width x depth)
- Display method for the object (framed, on a display plinth, etc.)
- Any specific notes about the object

Using a computer program such as Excel or Word can be useful in creating your object list.

## **Writing Text for a Display Panel and Labels**

When exhibiting or displaying your work, you will often be required to produce text about your work.

### ***Display Text Panel***

This is usually a panel that describes yourself and your craft practice and a summary of the work that is on display. An example of what you may write could include an introduction to yourself as a craft practitioner and then a description or story about the works that are going to be exhibited or displayed. Approximately 250 words is a good benchmark to work with unless you are instructed differently by a gallery or event organiser. Thematic text in an exhibition or display is usually around this amount as any longer and people tend not keep reading.

Depending on the amount of space you have in your display, a display text panel could be up to A2 in size. An A4 size would be a minimum for this type of panel. The formatting of the text should be very clear and uses a simple font. Ensure that the font sizes aren't too small and are legible.

A display text panel label can be printed simply on paper, but if you have the capacity, it is often more robust and can look better if it is mounted on card or foam board.

## ***Object Labels***

Object labels are individual descriptions of the work that will be on display. Referencing your object list is a good place to start when composing a label. A label usually includes the following information:

Maker (Your name)

Date of Birth

Title of work

Material the work is made from

If required, you can add in additional text of 50–100 words that describes the individual object. Object labels are usually smaller than the Display Text Panel. A6 could be a good size to start from. Again, as with the Display Text Panel, the font should be very clear and legible. Usually a minimum font size of 14 point is good to work to.

You can use different hierarchy of text in your labels and make the most important information larger. The title of the work is usually in bold. Below is an example of this:



Black text on white is the most legible way to present a label. Reversing out white on black or a colour is possible but the font would have to be larger than usual.

As with the Display Text Panel, an object label may be printed simply on paper, but if you have the capacity, it is often more robust and can look better if it is mounted on card for foam board.



## ***Displaying Your Work***

As you have curated your work for the space available, the next step is to consider how the works will be displayed.

In some circumstances, there may be exhibition ‘plinths’ or display cases available, or it might be as simple as a table.

Whatever the situation it is beneficial to create a display that shows your work to its best advantage. This could include having an appropriate background colour (not necessarily ‘gallery white’) and having enough space around each work so that it is not crowded by the other works.

If your work is framed or is hung on the wall, consider the height at which it is hung. As a general rule a viewing line of 1500 mm from the floor to the centre of your work is a good guide. If you are having your work framed, consider around 80 mm of border around the work and a simple frame that does not distract from the work being framed.

The object label usually sits next to the work.

## ***Business Cards***

Depending on the context, it is often beneficial to have a business card that people can take away. This wouldn’t usually happen in a gallery situation, but in any other sort of display such as an art fair or even a local market it is a good idea to have a business card available.

## ***Design Identity***

Presentation of yourself and your work is important in the promotion of your craft. Creating a logo, website, social media presence and business card can assist with this.

If you have the capacity to work with a graphic designer, great! But if you are in a position of having to do it yourself, keep things simple and achievable. There are many online templates for creating logos, business cards and websites that are economical and easy to use.

In creating your design identity, create a brief for yourself on how you would like your identity to look and what you want it to communicate. Refer back to your artists’ statement about yourself and how you can reflect your practice in your design identity.

## ***Colour***

The use of colour is of primary importance. Reference the colours and materials that you use in your work. Keep your palette to a maximum of around 3–4 colours for simplicity and legibility. Ensure that your colours don't 'clash' when you put them together. Again, legibility is key.

## ***Typography***

One of the first things to look at is typography. There is an endless selection of fonts available. The selection and use of fonts are important. From Serif, Sans Serif to scripts and display fonts, look at a font that reflects you and your work. Think about what fonts would work with the type of work that you produce. Decorative fonts are OK to use for headings, but for 'informative text' such as contact details, keep the font simple and legible. It is also good to have a consistent font across all the design elements that you produce whether printed or online.

## ***Consistency of Your Design Identity***

In the presentation of yourself through your design identity, consistency is key. Use your logo, fonts and colours consistently across all the platforms that you use, be they online or printed. This makes producing all these elements easier and creates a design identity that is recognisable and professional (Figs. [24.1](#), [24.2](#), [24.3](#), [24.4](#) and [24.5](#)).



**Fig. 24.1** Sara Thorn: Material Treasures—Craft Victoria, Melbourne



**Fig. 24.2** Sara Thorn: Material Treasures—Craft Victoria, Melbourne



**Fig. 24.3** Scarf Festival 2018—National Wool Museum, Geelong. Images: National Wool Museum



**Fig. 24.4** Scarf Festival 2018—National Wool Museum, Geelong. Images: National Wool Museum



**Fig. 24.5** The Accidental Futurist—Grainger Museum, University of Melbourne. Image: Grainger Museum

**Megan Atkins** runs a multi-disciplinary design studio specialising in design for museums, galleries and interiors. Trained in Industrial Design at RMIT, Megan spent her early career in the museum sector with John Dangerfield Architects in London and Desmond Freeman Associates in Sydney. This was followed by a position as designer at the National Gallery of Victoria during the redevelopment and opening of NGV Australia and NGV International. Megan then worked as the Exhibition Designer and Producer for the State Library of Victoria designing permanent and temporary exhibitions and art installations. The studio designs and produces projects across different scopes and scales, working with an emphasis on detail, finishes and the creative use of space. They offer services from concept design and space planning, through to design, production and installation. Their collaborators include architects, engineers, curators, historians, multimedia designers and an extensive network of fabricators. Atkins works with a variety of clients from arts institutions, galleries, universities, architects and curators to small organisations and private individuals. Clients include the Grainger Museum, the Arts Centre Melbourne, Bendigo Art Gallery, La Trobe Regional Gallery, Melbourne Museum, the National Wool Museum, Old Treasury Building Museum, Government House Melbourne, Robert Simeoni Architects, Monash University and Way Back When Consulting Historians.

# **Part XII**

## **Conclusion**

# Chapter 25

## A Global Dialectic



Lindy Joubert

### Background

When the Arts and Crafts movement of the nineteenth century was established to protest against the new industrialisation of Mid-Victorian manufactured products, it evolved into an international campaign for design reform with supporters arguing that design affects every aspect of the built and natural environment, and society. Later, in the twentieth century, The Bauhaus was founded in the city of Weimar by German architect Walter Gropius. In 1923, through his idea of unifying all the crafts and the arts he developed a craft-based curriculum stressing the importance of designing for mass production. It was at this time that the school adopted the slogan 'Art into Industry'. The Bauhaus has continued to influence every progressive school around the world (Griffith Winton & Bauhaus, 2000; Winger, 1969).<sup>1</sup>

Building on the past history, making sense of it all through reevaluating and repositioning education for the future, the value of the crafts in global education systems becomes increasingly important.

The essays in this book present a range of visionary narratives, chronicling individual, family, community or country testimonies of craft practices in the past, the

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<sup>1</sup> The Bauhaus was founded in 1919 in the city of Weimar by German architect Walter Gropius (1883–1969). Its core objective was a radical concept: to reimagine the material world to reflect the unity of all the arts. Gropius explained this vision for a union of art and design in the Proclamation of the Bauhaus (1919), which described a utopian craft guild combining architecture, sculpture and painting into a single creative expression. Gropius developed a craft-based curriculum that would turn out artisans and designers capable of creating useful and beautiful objects appropriate to this new system of living.

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present and for the future. They describe perspectives on national trends, what the future holds and what the past has taught them.

The contributing authors illustrate how their craft has contributed to training, education, business acumen and their role as advocates contributing to their nation's cultural wealth, heritage and future opportunities.

## **Crafts, the Environment and Sustainable Development**

The world is in a very different place from the nineteenth- and early twentieth-century movements. Now in the twenty-first century there is an urgent awakening to the fact we have only one Earth and it been being threatened with the exponentially rising population of 7.8 billion people who are using more of its resources than it can provide. Every new person is a new consumer, adding to that demand. Renewable resources are currently being used for 1.7 earths with 3 earths needed by 2050 if the rate of consumption increases at the same pace. Some countries such as China, the United States and India take far more than others and many steps are being taken to make global consumption sustainable.<sup>2</sup>

The UN Secretary-General António Guterres has described the fight against the climate crisis as the top priority for the twenty-first century, in a passionate, uncompromising speech responding to the report on the *State of the Global Climate 2020*, he claimed:

This report shows that we have no time to waste. The climate is changing, and the impacts are already too costly for people and the planet. This is the year for action. Countries need to commit to net zero emissions by 2050. And they need to act now to protect people against the disastrous effects of climate change.

Global quality standards on early childhood education support children becoming environmentally responsible. Emphasising greater contact with nature is a crucial part of sustainability education in early childhood education and care. This helps children develop an appreciation for the Earth and all its inhabitants. Insightful educators who provide a learning culture where children develop skills to take care of nature are providing them with the knowledge and resources to equip them for the time ahead.

As the global climate crisis accelerates, teachers and researchers are considering how to approach the pressing issue with children. A targeted environmental education for children and young people from the primary years all the way through to tertiary

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<sup>2</sup> The UN's International Resources Panel has projected that resource use per person will be 71% higher than today in 2050. The answer lies partly in whether we can 'dematerialize', or reduce the amount of materials needed to produce goods and services. While some scientists believe that the world can achieve significant dematerialization through improvements in technology, a new MIT-led study finds that technological advances alone will not bring about dematerialisation and, ultimately, a sustainable world. Christopher Magee, Professor of Engineering Systems in MIT's Institute for Data, Systems, and Society and Magee and his co-author, Tesselano Devezas, a Professor at the University of Beira Interior, Portugal, published their findings recently in the journal *Technological Forecasting and Social Change*.



education plus an informal education outside the school system have great effect. The United Nations Sustainable Development Goals state that children are critical agents of change and by addressing the new goals, they will find a platform to channel their infinite capacities for activism into the creation of a better world.

## **Finland, a Leader in Addressing the Arctic as the Barometer for Global Climate Change**

*The Arctic Institute, Centre for Circumpolar Security Studies* states that since 2000, the average Arctic surface air temperature has increased at twice the rate of the global temperature. Finland has positioned itself as a leader in sustainable development in the Arctic Region. Moreover, Finland is often rated among the world's top countries in terms of environmental protection standards. Finnish Lapland has been upheld as an example of providing ecosystem services to help prevent ecological problems caused by human action, in an economically and environmentally sustainable way.

How can effective responses be developed addressing the theme of this book? In Finnish Lapland, Ante Aikio established *Samiland* in the Levi tourist centre with his partners, catering to international and national visitors and providing education about the Sámi culture. *Samiland* educates children and adults in environmental and cultural protection and ways to practically address the urgency of climate change in the Arctic Region. *Samiland* is part of the UNESCO Observatory's Cultural Village programme, increasing the knowledge and benefits of a craft and cultural education for sustainable development, community, resilience and local cultural expressions. The indoor exhibitions highlight the enduring benefits of the crafts, Indigenous knowledge and the uniquely crafted Sámi building practices through visual, audio, craft and design displays which include detailed knowledge of the 1000-year-old Sámi culture, its transition to the present and to the future. *Samiland* also has an outdoor living museum on the Sámi history, unique architectural and building practices and way of life, demonstrating the Sámi ability to live close to nature and preserving their age-old practice of reindeer herding.

Apart from running *Samiland*, Ante Aikio is a Sámi yoik singer and novel writer. He also works as a professional reindeer herder and as an entrepreneur, Founder of the entertainment company *Goranus* whose mission is to increase people's awareness of cultural heritage, environmental protection and Sámi mythology.<sup>3</sup>

The World Wildlife Fund WWF reports on global warming and climate change threatening the Sámi way of life. WWF discusses the work of Klemetti Näkkäläjärvi (Juvvá Lemet), a Sámi cultural anthropologist and linguist at the University of

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<sup>3</sup> Samiland provides an informal education in an exhibition complex, which includes a 500 m<sup>2</sup> indoor exhibition and a 10,000 m<sup>2</sup> outdoor exhibition area. Samiland was opened in December 2011. All exhibition texts are in Finnish, English and Russian, and the texts of the indoor exhibition have been translated into German and French. The exhibition presents the rich history and present issues facing the Sámi people through illustration, narration and participatory activities.

Lapland. He warns that changes to the amount and structure of snow in Finnish Sápmi could threaten Sámi life. Reindeer culture is part of everyday existence for Sámi people, he claims, and reindeer need Arctic conditions to thrive. In Finnish Sápmi, the average temperature has risen by 2.3 °C since the post-industrial period. If warming continues at this rate it could threaten Sámi's traditional reindeer herding culture. Näkkäljärvi says that like other Indigenous peoples, the Sámi have always adapted, whether to assimilation, environmental conditions or climate change but at this point in time the limit of endurance is almost reached.<sup>4</sup>

## The Crafts, Mental Health and Well-being

Beyond vocational and educational opportunities, the crafts can be a powerful intervention for people who have experienced trauma and can find success where all else fails. The effects of climate change-related extreme events can impact on forced migration, rehousing, breakdown of families and a host of other detrimental factors. These impact on the mental health and well-being of individuals and communities, manifesting as mild stress, increased alcohol use and, occasionally, mental disorders such as post-traumatic stress, depression or anxiety. Climate change-related impacts have resulted in loss of businesses and studio spaces, forced change and deterioration of living circumstances. The massive recent rise in global climate-related natural disasters results in losses of inter-personal networks including social support and community resources—all of which have mental health consequences. Communities now live in anticipation of what the future may bring in relation to the COVID-19 pandemic and its associated lockdowns, economic impacts and the threat of more virulent COVID strains, such as Delta variant taking hold. These factors, alongside more frequent and more extreme weather events such as large storms, flooding, fire storms, droughts and heat waves, add to mental stress for many and can contribute to more serious mental health issues.

Across the many countries represented in the suite of books with the overall theme of *Educating in the Crafts*, (*Craft Shaping Society* is Book One), numerous craft industry services and programmes make valuable contributions by enhancing life skills for people, providing purposeful engagement and building craft businesses on small and large scales. Authors discuss useful linkages and the establishment of programmes leading to a variety of positive outcomes, including security through employment and people feeling useful and active in the development of their local economies. In general, the overwhelming contribution of craft enterprises, including formal and informal education in the crafts and the role of craft NGOs, results in community building and elevating participants' mental health and well-being.

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<sup>4</sup> Finnish Sápmi is in Northern Europe and includes the northern parts of Fennoscandia. The region stretches over four countries: Norway, Sweden, Finland and Russia. On the north it is bounded by the Barents Sea, on the west by the Norwegian Sea and on the east by the White Sea.

There is now a burgeoning field of research literature exploring the emotional responses of people involved in creative and cultural activities. This field of investigation offers solutions and is a clear guide to government spending for improving programmes, infrastructure and increasing support. Thus, positively impacting on the mental health and well-being of people engaging in creative activities. *Craft Shaping Society* expounds practical and creative experiences, the personal endeavours, and the strengths and opportunities crafts businesses and skill-building programmes offer to people. Further clarification how such activities affect emotions and what specific strategies are needed to regulate emotional responses were studied in a University College London and BBC collaborative project, the *Arts Great British Creativity Test*. This was a survey of almost 50,000 people published in May 2019. The study demonstrated, for the first time, the cognitive strategies the brain uses to regulate our emotions while taking part in creative activities, demonstrating the function and links between emotions and activities.<sup>5</sup>

## Cuts, Redundancies and Best Practice

*Craft Shaping Society* addresses the need for crafts artisans, educators, NGOs, educational institutions and global economies to negotiate and navigate the rapid changes and requirements in the job market. Skills such as flexibility, innovative thinking and entrepreneurship are essential. Currently, a low point in craft training is being experienced across many countries at this time. Craft education is suffering a crisis due to the COVID-19. Boland declares that with studio-based learning being a clear target, universities have dropped courses and cut back on experienced staff. It is still unclear what impact these changes in crafts education will have on current and future students. Understandably, many are concerned that the loss of teaching capacity and specialisation in the crafts will cause irreparable damage to the sector.<sup>6</sup>

At this time and possibly beyond, the overall impact on the tertiary sector will be significant as redundancies are accepted, courses axed and further staff cuts loom. This gives rise to the question, ‘should training in the crafts be part of a university education?’

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<sup>5</sup> The research journal paper *Craft Creativity Reduces Stress* describes the design and validation of a novel instrument measuring types of emotional regulation strategies (ERSs) used when engaging in artistic creative activities: How do artistic creative activities regulate our emotions? Validation of the Emotion Regulation Strategies for Artistic Creative Activities Scale (ERS-ACA). Daisy Fancourt, Claire Garnett, Neta Spiro, Robert West, Daniel Müllensiefen. 5 February 2019.

<sup>6</sup> *Art schools: legacy in crisis* by Brooke Boland. Australian Arts Hub article 14.12.2020.

Boland asks the question, ‘Should Art Schools be Part of University Education?’

She continues to report that without extensive policy reform or better institutional support for art schools, what will happen to arts education in Australia if we continue to see course and staff cuts? Dr. Cecelia Cmielewski, researcher with the Institute for Culture and Society, Western Sydney University, cultural consultant and writer states, ‘Different ways of delivering arts education need to be considered and that’s a very big agenda item. One which really needs to happen as a national discussion in Australia’.

Out of the chaos, opportunity may rise. In this current climate, the need has developed more than ever to adopt new strategies, approaches and opportunities in education and training. Over recent years, there has been a widespread threat to atelier-based, tertiary craft courses both in universities and art schools. The decline in the choice and diversity of craft learning experiences at universities and colleges highlights the diminishing transfer of knowledge. Rather than relying on skill training within academic institutions, attention needs to be directed towards TVET institutes who, with flexible foresight, offer the appropriate training ground. The TVET model addresses the practical importance of increasing traineeships provided by industry organisations through mentorships/apprenticeships and professional and career development training.

*Craft Shaping Society* presents successful models from countries such as Nepal, Thailand and Iran with effective craft training models which have energised the sector while developing sustainable practice, often starting comprehensive craft training programmes in primary and secondary schools. Thailand is an excellent example and is well supported and funded by the Government's Ministry of Education. The Thai craft export market is now worth in the billions of dollars, largely due to the Ministry's support and innovation across the country's schools.

Research models for improving an education in the crafts, enhancing the student ability to think critically and solve problems are presented in *Craft Shaping Society* from Kuwait, Denmark, India, Australia and the United Kingdom. Numerous examples demonstrate how analytical thinking, skill training and working with businesses in hand with the crafts motivate creativity, knowledge, culture and technology.

The essayists highlight through their personal stories and experiences how by developing an individual, community or world trade enterprise in creative craft goods, economies can robustly function at a time when levels of local, national or global trade fall. A craft-driven market can be a driver of job creation, innovation and social inclusion.

Creativity is recognised as a valuable skill in the workplace, in communities, homes and all manner of places. The current COVID-19 world is being saturated with talk of change, a revolution, of resetting lives, the economy and futures. Impacts on mental health and well-being, social infrastructures, basic survival and intra-personal and inter-personal relationships are being challenged as never before.

As this is being written, it is hard to believe, the world is well into the second year of the COVID-19 pandemic and it feels as if everything has been said. On a daily basis, we hear of the rising numbers of deaths and illness, the need to have a national programme for increasing vaccinations, of the struggles, the breakdown in businesses, the layoffs and the dire financial situation many communities now find themselves in. However, a greater sense of collaboration and communication is improving and craft artisans are becoming more energised, entrepreneurial, strategic and finding new markets and new ways of promoting and selling their products.

The online world offers an ever-expanding range of products and a host of opportunities. Consumers are becoming more knowledgeable of handmade products, appreciating the environmental integrity and the quality of the skills and materials. Collaborative innovations between designers and crafts artisans expand the craft vocabulary,

drawing a focus and interest to contemporary markets. Rebecca Reubens (2010) argues that a link between the apparent conflicting tenets of sustainability can be achieved through responsible and strategic design innovation which integrates the social, economic, ecological and cultural aspects.<sup>7</sup>

On this note, many Indigenous craft enterprises are thriving such as *Better World Arts* which has been operating for over two decades. The business began with traditional handicrafts but since 1996 they focused on Australian Aboriginal artisans and artists from Arnhem Land to Central and the Western Desert regions, from rural locations and from cities, moving in to collaborations with traditional artisans from remote regions in Kashmir, Peru, West Bengal, Uttar Pradesh and Nepal (Tibetan refugees) and China.

*Better World* artisans benefit from royalties paid to them on a monthly basis. Indigenous art centres benefit from a substantial profit share paid on their investments. All artisans benefit by having culturally appropriate opportunities through the creation of innovative, sustainable products and business structures. Importantly their incomes are supported by practicing age-old traditions in their own living environments. Collaborative, inter-cultural business opportunities such as these provide vital directions, transforming Indigenous communities into an innovation-driven economy engaging with the global marketplace.<sup>8</sup>

## Training and Guidance for Artisans

Greater awareness is rapidly growing of the impact a training in the crafts can make. Strategies succeed for raising awareness of the traditions and heritage of the crafts when training students alongside master crafts people for the transferring of skills within both informal and formal education settings. Many crafts are created through the prism of technology, enhancing the appeal for their contemporary and futuristic capacities.

Numerous governments and NGOs support national craft-based cultural industries by promoting exchanges with craftspeople in other countries and building craftspeople's capacity to market their products internationally. National Craft Councils, Ministries of Culture or of Trade and Economic Development provide them with the necessary advertising networks and export contacts. UNESCO and the World Craft Council established a *Seal of Excellence*, now known as the *World Craft Council's Award of Excellence* as a means of monitoring quality and a tool for marketing products. It is not a 'prize' but rather a mark of approval guaranteeing that products

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<sup>7</sup> Rebecca Reubens is a sustainability designer, design educator and entrepreneur, working at the intersection of craft, design and sustainability.

<sup>8</sup> Better World Arts have created and been involved in many projects that bring additional benefits to artists and their families. Some include working with schools to enroll and maintain Aboriginal students, run driver education in Pitjantjatjara, a literacy programme in conjunction with TAFE, immunisation programmes, health checks, a free homoeopathic clinic, hospital support for artists and families, professional development workshops for artists and KESAB programmes for families.

comply with certain quality standards and have been produced in accordance with the requirements of cultural authenticity and environmental protection.

Programmes such as these endorse high-quality crafts, creating guidelines as a matter of economic and cultural concern to every country and its relevant bodies and associations. By placing a spotlight on the crafts of each country, it guarantees national pride, increasing a nation's economy, building cultural tourism and fostering global understanding.<sup>9</sup>

Since the major UNESCO world crafts exhibition in 1993, *Recycling Waste: Ingenuity and Creativity*, which highlighted the art of using waste and refuse to make useful or attractive objects, craft artisans around the world have continued to exhibit their work made from recycled residues and materials discarded by consumer societies. Through the display and invention of creative products they succeed in making new and practical objects, demonstrating ingenuity and considerable technical skills. Plastic bags, cardboard boxes, computer parts, wires, old tyres, food tins, bottles, caps and steel drums are given new life for different purposes. This is a small part of a growing global movement for reuse and recycling, resulting in plastic bags being woven to make rugs, cushions and baskets, compressed to make bricks and paving, or cut up to make toys and a thousand and one other objects.

The question of training for production in the crafts in TVET systems is a powerful force and one that needs to be developed for the future. The contribution to Gross National Income GNI, economic growth, social equity and environmental sustainability undoubtedly achieves a central role in the sustainable development agenda, according to Marope, Chakroun and Holmes (2015) in *Unleashing the Potential—Transforming Technical and Vocational Education and Training*. Reinforcing this, Majumdar argues that since 'TVET is the major producer' of the future workforce, the sector has a responsibility to prepare future workers to contribute to sustainable development.

Supporting the views and concepts presented in *Craft Shaping Society*, UNESCO-UNEVOC (1999, p. 3) points out that in addition to preparing people for the world of work:

TVET is expected to be an instrument of social cohesion and integration ... Promoting flexible access to lifelong learning and training and enabling vocational guidance and counselling to reach all members of society.<sup>10</sup>

*Craft Shaping Society* presents authors of the highest calibre who explore controversial topics and demonstrate many aspects of the craft in education, tradition,

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<sup>9</sup> The World Craft Council Asia Pacific Region's *Award of Excellence for Handicrafts* aims to encourage designer-makers, artisans and craft makers to produce and create new forms of handicrafts using traditional, heritage and/or contemporary craft resources and practices to ensure the continuity, sustainability and innovation of craft systems. It is WCC's flagship programme for supporting makers. The Award has four main objectives, to establish rigorous standards of excellence for handicrafts, encourage innovation, offer training and support services and provide new opportunities to ensure the sustainability of handicraft industries.

<sup>10</sup> International Journal of Training Research. Volume 17, 2019—Issue sup1: Special Open Access Supplement Issue: *Emerging Labor Markets of the Future—Re-imagining Skills Development and Training*, Joint Editors: Sungsup Ra, Shanti Jagannathan and Rupert Maclean.

research, marketing, innovation, digital technology and more. They tell the stories and weave the dreams and aspirations of people who are makers and conveyers of their backgrounds, customs and heritage. Authors provide a global overview of the current context of craft-making, illuminating through their words and images a wealth of craft practices, products and vocational outcomes. *Craft Shaping Society* presents ways forward, making the vital link between skills, knowledge and education and the myriad ways that creativity, crafts and artisanship are navigated and negotiated between inherited traditions, modern technologies and the world of work.

## The Circular Economy—Regenerate, Reuse and Recycling

The concept of the crafts shaping and contributing to society by addressing climate change and reducing greenhouse emissions is of vital importance. In the marketplace, the dichotomy between the handcrafted object and mass-produced products is omnipresent. Mass production results in cheaper products catering to ever-expanding markets and the creation of the very real problem that too much is produced. Low and Gleeson claim the aim of their book, *Justice, Society and Nature—an exploration of political ecology*, is to see production and consumption profoundly reshaped so that needs are fairly met and ecological health and global integrity are maintained (Low & Gleeson, 1998).

The National Aeronautics and Space Administration NASA is a world leader in climate studies and earth science, providing the critical and important scientific data needed to understand climate change. NASA then informs the global community and world leaders who implement policy and decision-making action in conjunction with the scientific and planning agencies around the world.

World leaders are now addressing the urgency to curb greenhouse emissions and adapt to the impacts of climate change. All branches of every society need to seriously consider their role in the imminent catastrophes facing the world's oceans, such as sea level rise, ocean warming, deoxygenation and acidification. These causes result from the ocean's absorption of around 90% of the heat generated by rising greenhouse gas emissions trapped in the Earth's system, and taking in 30% of carbon emissions. Ocean and coastal life and the lives and livelihoods of coastal communities are experiencing devastating effects. World leaders agree that ocean action and climate action are intrinsically linked and must be strengthened through breaking down silos and collaborating globally to achieve the decisive action required.<sup>11,12</sup>

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<sup>11</sup> Climate change is one of the most complex issues facing us today. It involves many dimensions—science, economics, society, politics and moral and ethical questions—and is a global problem, felt on local scales, that will be around for decades and centuries to come.

<sup>12</sup> A key conclusion of a report published by UN Climate Change today *UN Climate Change News*, 30 April 2021. The UNFCCC Secretariat (UN Climate Change) is the United Nations entity tasked with supporting the global response to the threat of climate change. UNFCCC stands for United Nations Framework Convention on Climate Change. The Convention has near-universal membership (197 Parties) and is the parent treaty of the 2015 Paris Agreement. The main aim of the

This appeal for action gives the opportunity for a redesigned TVET education in the crafts to take up the call. The crafts are attuned to nature and the environment both as a source of inspiration and using natural, degradable materials for production. An education in the crafts is an inter-disciplinary training ground, drawing on educators, designers, artisans, technologists, marketing, social and environmental scientists and many more fields of endeavour. Importantly, the creation of craft products emit minimal pollution, require less energy and produce products made of materials that are natural and recyclable. In stark contrast, plastic products are a ubiquitous, profitable offshoot of the fossil fuel industry. The breadth of plastic industries reflects the values of societies driven by consumerism, profit and constant growth where the overriding impetus is to make more of everything, rather than less.<sup>13</sup>

It is not clear what strategies will be the most effective in mitigating harm from the global problem of plastic pollution. Borrelle et al. and Lau et al. discuss possible solutions and their impacts. Both groups found that substantial reductions in plastic-waste generation can be made in the coming decades with immediate, concerted, and vigorous action, but even in the best-case scenario, huge quantities of plastic will still accumulate in the environment.<sup>14</sup>

According to the World Bank, two trillion tonnes of strong waste are being produced every year with another trillion within the coming years. The top group of twenty petrochemical corporations on the earth account for 55% of the world's single-use plastic waste.<sup>15</sup>

There is no clear strategy to overcome the mindless obsession with single-use plastics, such as bottles, bags and food packages as the most commonly discarded types of plastic that end their short lifecycle polluting the oceans, being burned or dumped into landfills.

Dame Ellen MacArthur sends out the urgent plea to raise our level of ambition and match it with bold and urgent action. Plastic production is set to grow by 30%

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Paris Agreement is to keep the global average temperature rise this century as close as possible to 1.5 °C above pre-industrial levels. The UNFCCC is also the parent treaty of the 1997 Kyoto Protocol. The ultimate objective of all three agreements under the UNFCCC is to stabilise greenhouse gas concentrations in the atmosphere at a level that will prevent dangerous human interference with the climate system, in a time frame which allows ecosystems to adapt naturally and enables sustainable development.

<sup>13</sup> Ocean and climate change dialogue to consider how to strengthen adaptation and mitigation action. Key Messages. P.5. *Ocean and climate change dialogue to consider how to strengthen adaptation and mitigation action*. Informal summary report by the Chair of the Subsidiary Body for Scientific and Technological Advice.

<sup>14</sup> Science, this issue p. 1515, p. 1455. Further innovation in resource-efficient and low-emission business models, reuse and refill systems, sustainable substitute materials, waste management technologies and effective government policies are needed. Substantial commitments to improving the global plastic system are required from businesses, governments and the international community to solve the ecological, social and economic problems of plastic pollution and achieve near-zero input of plastics into the environment.

<sup>15</sup> Without urgent action, global waste will increase by 70 percent on current levels by 2050, according to the World Bank's new *What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050* report.



in the next 5 years, creating even more plastic waste and exacerbating the climate emergency.<sup>16</sup>

*Breaking the Plastic Wave* is one of the most comprehensive studies, quantifying what the near future holds and what businesses and governments must do now to address them. *Breaking the Plastic Wave* shows that, if we fail to act, by 2040, ocean stockpiles of plastic will quadruple by 2040; the volume of plastic on the market will double while in the ocean it will triple and then rapidly quadruple. These facts will become realities, in line with the 2016 analysis, which showed there could be more plastic than fish in the ocean by 2050.

*Breaking the Plastic Wave* reports the solutions lie in a circular economy and the problem starts long before plastic reaches our oceans and so must the solutions. Efforts to collect, recycle and dispose will fail to reduce plastic pollution if operating alone.

The world is slowly waking to this gargantuan and threatening problem. We cannot recycle our way out of plastic pollution, and neither can we simply reduce our way out of it. Maybe the answer lies in front of us and the world has failed to see it. As the *Breaking the Plastic Wave* report claims, the massive amount of discarded plastic is composed of products like packaging, toys, diapers, day-to-day objects like toothbrushes, etc. It is essential to realise that we have an abundance of these same goods already in existence as well-designed, bio-degradable, non-polluting, environmentally friendly, best practice, global saving, craft wares.

*Breaking the Plastic Wave* shows that we must take a comprehensive circular economy approach and prioritise rethinking what is put on the market. The global responsibility for each person is to keep products in the loop after they have been used, to reuse and recycle. If plastic production is reduced and eventually diminished, what would replace it?

The manufacturing from craft industries, working with glass, clay, wood, metals, textiles and natural fibres is an answer. It is not feasible that production using these organic and natural materials can match the volume of the plastics factory, but commitment to reuse, recycling, consuming less and building a closer relationship and respect for nature may possibly birth a new paradigm to saving the world and the oceans from drowning in plastic.

*Craft Shaping Society* supports a global system change towards a circular economy offering the best economic, environmental and climate outcomes. The circular economy considers every stage of a product's journey—before and after it reaches the customer. This approach is not only vital to stop plastic pollution, but as the *Breaking the Plastic Wave* study shows, it offers the strongest economic, social and environmental benefits.

The educational theory and practice of sustainable craft production aligns neatly with every proposed issue from the report, namely, collection and disposal; safe

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<sup>16</sup> On the 23rd of July 2020, The Pew Charitable Trusts and SYSTEMIQ released *Breaking the Plastic Wave: A Comprehensive Assessment of Pathways Towards Stopping Ocean Plastic Pollution*—one of the most analytically robust studies ever produced on ocean plastics. Thought partners were the University of Oxford, University of Leeds, Common Seas and the Ellen MacArthur Foundation.

disposal facilities; recycling capacity; maximising reduction in consumption and finding substitutes for alternatives where possible.

By calling for a circular economy approach and an overall system change, the crafts in education and across all TVET institutes can provide the training structure, the groundswell and the concerted action needed to contribute to administering climate change programmes to help reduce emissions; engaging with stakeholder groups and the community on climate priorities; supporting business and industry to innovate and adopt smarter practices and technologies and helping adaptation to the changing environment.

This is all very well, and the aspirations of governments and advisors are in place for major changes. But are major institutions, policy-makers, governments and populations ready for this? Is it possible to imbed the crafts and education in all of this? Adopting the report and research proposals using crafted products as the substitutes and alternatives where possible can create change for the ultimate health and prosperity of the planet. Actual pragmatic, economic outcomes from the circular economy approach aligned with mass-produced crafted, natural products will have the potential to reduce the annual volume of plastics entering our oceans by 80%, generate savings of USD 200 billion per year, reduce greenhouse gas emissions by 25% and create 700,000 net additional jobs by 2040.<sup>17</sup>

A total rethink on production is required. By using the dominant technologies which are driving the world's current technological revolution, they will shape and reshape the world of the crafts in education. TVET training institutes, if the political and policy mindset allows, can adopt the seven classes of technology that are driving today's universal revolution: pervasive computing, wireless mesh networks, biotechnology, 3D printing, machine learning, nanotechnology and robotics. These will be the foundations for new factories, work places, production lines and the utilisation of natural materials to replace plastic products in the future.

## **The Role of Crafts in Addressing Climate Change—Eliminate, Circulate and Innovate**

*Craft Shaping Society* calls on artisans around the globe to heed the call. The clear signal is that the solution lies in taking urgent, ambitious and coordinated action across the entire plastic system with a clear emphasis on stemming the flow at its source.

As global citizens, we are confronted with difficult years of increasing assaults from climatic disasters, the pandemic COVID-19 and Delta variant and the need to look for ways to recover from economic shocks. Such abounding chaos provides the circular economy with exponential opportunities. Through its approach considering every stage of a product's journey, the circular economy has the capacity to build more resilient and regenerative economies. The circular economy can improve on past

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<sup>17</sup> Data from *Breaking the Plastic Wave* study by The Pew Charitable Trusts and SYSTEMIQ (2020).

models and address the pressing global challenges with determination and resilience. Recent reports revealing the sheer scale of the global crisis we have on our hands foreshadow the critical stance we all must take in order to break the pattern of inaction.

In concluding, the world is in crisis and we must call on our businesses and national governments to get action on the critical issues. Present a united front and a common vision of a circular economy for plastic reduction. Face the crisis head-on, raise the level of ambition and vision and build pathways and highways to a pollution-free, plastic-free world. TVET is the vehicle to educate through all aspects of the crafts by building skill-sets and providing the knowledge resources to combat adversity such as climate change and plastic pollution. This will make a major contribution to the sustainable future of the world and will be a vital factor in reshaping society.

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# Correction to: Invisible Menders: The Convict Women Who Made the Rajah Quilt



Lara Nicholls

**Correction to:**  
**Chapter 1 in: L. Joubert (ed.), *Craft Shaping Society*,  
Technical and Vocational Education and Training: Issues,  
Concerns and Prospects 35,**  
[https://doi.org/10.1007/978-981-16-9472-1\\_1](https://doi.org/10.1007/978-981-16-9472-1_1)

In the original version of the book, the following belated corrections have been incorporated: The colour code and number 119802 have been removed from Figure 1 of Chapter 1.



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The updated original version of this chapter can be found at  
[https://doi.org/10.1007/978-981-16-9472-1\\_1](https://doi.org/10.1007/978-981-16-9472-1_1)

# Index

## A

Adler, Barbara, 153, 172  
Agora, 309  
AI and Digital Craft, 239  
Allo Cloth Production, 357  
Allo Natural Fibre (Wild Nettle), 356  
Arnhem Land Material Culture, 51–73  
Approach to Educating  
in the Crafts, 215–223  
Art of Handwriting and Calligraphy, 268  
Artworks  
An Exploration of the History of  
Garment Production, 276  
Askerud, Pernille, 153, 172  
Atkins, Megan, 365, 372  
Azizi, Azam Fallah, 135, 148

## B

Bais, Mitraja, 173, 182  
Bates, Gabrielle, 325, 337  
Beads from Arnhem Land, 61–71  
Bedouin al-Sadu Weaving  
Traditions, 103–112  
Beran, Harry, 117, 131, 132  
Bilum Weaving in Papua New Guinea, 77  
Botanical Heritage, 53  
Business Cards and Design Identity, 368  
Business in Nepal, 351–363

## C

Canavan, Keireine, 103, 113  
Canoes, Lipalipa, 59, 60  
Capital Labour, 347  
Carving Wood in the Trobriand Islands, 117

Challenges of Craft in  
Post Digital Age, 238  
Charaka, 93–100  
Chernbumroong, S., 245, 259  
Chiang Mai Digital Craft, 245–258  
Chudasri, Disaya, 213, 223  
Circular Economy, 383–386  
Cloth in Cross Cultural Traditions, 56  
Cochrane, Susan, 77, 87  
Collaborations and Contributions Enabling  
Sustainment of Craft Enterprises,  
354  
Collective Fragments, 319  
Colour as Design Identity for Your Craft,  
369  
Community Engagement with Women's  
Health Through Craft and Art, 290  
Conceptual Art Asks for the idea to be Held  
Without Materialization, 304  
Consistency of Your Design Identity, 369  
Contextual Learning, 153  
Community Engagement through  
Craft and Art, 290–300  
Cooperative Models for Global Trade  
Found in Traditional Crafts, 341–349  
Craft Directory, 176  
Craft Innovation Studio, 179, 181  
Craft Innovation Workshops, 177  
Craft Shaping Society, 379, 380, 383, 386  
Crafted Work Uses – Received  
Ideas and Forms, 304  
Crafting Context, 183  
Crafting Higher Education in the UK,  
183–191  
Lauren England, 183  
Crafting Resistance: Talismanic

Memory Maps of the Witch, 325–337  
 Crafts, the Environment and Sustainable Development, 376  
 Creating an Object List, 366  
 Creative Learning as  
   Developing Expertise, 197  
 Curating Your Work, 365  
 Cuts, Redundancies and Best Practice, 379

**D**

Declining Student Numbers, 188  
 Deep Interviews, 253  
 Design Education outside Europe, 157  
 Design Innovation and Craft Resource Centre, Ahmedabad, India, 173–182  
 Developing Learning Activities, 216  
 Developing Work: Projects that Aim to build Capacity for Livelihoods, 288  
 Dhaka Patterned Weaving, 359  
 Digital Craft Engine Production and Integration, 251  
 Digital Craft Theoretical Background, 228–229  
 Digital Craft: Case Study Projects, 231  
 Digital Design and Production, 250  
 Digital Story Telling, 248–259  
 Digital Technologies, 255  
 Dinh Quoc Phuong, 15, 30  
 Dirt and Broken Glass, 316  
 Display Text Panel, 366  
   Exhibiting and Creating Design Identity for Your Craft, 265–372  
 Domestic Space and Street Identities In Hanoi, 15–31

**E**

E-Commerce, 258, 345  
 Educating in the Crafts, 184, 215  
   The Role of Research Organisations in Craft Tradition, 173–182  
 Education and Creative Value, 188  
 Educational Research Projects to Learn Crafts, 213–223  
 Enabling 21st Century Skills Through Craft in Animation Movies, 216, 219  
 Encountering Fragments, 314  
 England, Lauren., 183, 194  
 Environment and Sustainable Development issues, 376  
 Essence of Crafts, 173  
 Eudaimonic Approaches

to Wellbeing, 201, 204  
 Exhibiting and Creating a Design Identity For your Craft, 365–372  
 Exploitation of Workers in Sweated Trade, 276

**F**

Fading Art of Handwriting, 263–270  
 Finland, Leader in Addressing Global Climate Change, 377  
 Firing Sculpture, 135  
   Firing-Sculpture Artists:  
     Hole, Nina, 137  
     Hansen, George, 138  
     Hawes, Wali, 138  
 Flotsamandjetsam – Exhibition, 308, 311  
 Formal Design Education, 174  
 French Colonialism in Tin Street, 20  
 Future Directions, 258

**G**

Galton, Maurice, 195, 211  
 Gandhi's Use of Cloth, 92  
 General Impressions, 254  
 Glass Bottles of Macassan Artefacts, 60  
 Global Dialectic, 375–387  
 Global Market Custodians, 33–47  
 Global Trade in Traditional Crafts, 341  
 GPT Concierge Desk: Procedural Approach, 243  
 Grave Posts, 60

**H**

Hamby, Louise, 51, 73  
 Hang Thiec Street in History, 18, 21  
 Hanoi's Ancient Streets., 16  
 Hansen, George, Sculpture Artist, 138  
 Hawes, Wali, Sculpture Artist, 138, 139  
 Head and Hands in the Cloud, 341  
 Health Through Craft and Art, 290  
 Hole, Nina, Firing-Sculpture Artist, 137

**I**

Idea and Matter, 306  
 Impact of Creative Learning on Young People's Wellbeing, 195–211  
 In Her Hands: Bilum Weaving Susan Cochrane, 77, 87, 88  
 Incorporating Craft in Learning Activities, 217  
 Incubation Periods and Graduate

Outcomes, 190  
 India's Significant Cloth History, 90  
 India's New Craft Design Thinking, 169  
 Indonesia's Indigenous Weavers, 33–47  
 Ingram, William, 33, 48  
   Threads of Life, 33  
 Interactional Art and the Audience, 141  
 Invisible Menders- the Convict Women  
   Who made the Rajah Quilt, 3–13  
 Invisible Trees, 221

**J**

Janakpur (Mithila) Art, 351  
 Joubert, Lindy, 375, 387

**K**

Kachhipati, Chandra Prasad, 351, 362  
 Kamel, Florence Jankae  
   Bilum Fibre Artist, 84, 86  
 Kata, Cathy, Bilum Weaver, 84  
 Kiriwina Sopi Guyau School, 122  
 Knowledge Representation Using Digital  
   Content Technology, 245  
 Korobo, Lake Kopiago Street sellers, 81  
 Kismati – Provoke/Protect, 297

**L**

Learning Crafts Through Educational  
   Research Projects, 213  
 Learning to Carve Wood in Trobriand  
   Islands, 117, 123–132  
 Lily Table – Re-Imagining Tooling, 231  
 Limitations and Future Directions, 257  
 Links with Creativity in  
   Eudaimonic Approaches, 204  
 Loh, Paul, 227, 243

**M**

Macassan Artefacts, 60  
 Macassan Influence on Arnhem Land  
   Material Culture, 51–73  
 Magic Stitch, 275–300  
 Making Things Means Attending  
   To the Behaviour of Matter, 303  
 Marketisation and Rationalisation, 189  
 Material Engagement, 230  
 Matter Mutter: Antipodean  
   Artist's Report, 303–312  
 McLellan, Ros, 195, 211  
 Metal, Bala, or Gotha, 57–58

Mexico – Mata Ortiz, 165–166  
 Mirgholami, Morteza, 135, 149  
 Mithila Art, Allo Fibre and  
   Dhaka Weaving, 351–363  
 Morocco: Women Leadership, 158–159  
 Murray, Kevin, 341, 349

**N**

Nature of Wellbeing, 199  
 Neoliberal Agendas and Marketisation, 187  
 Nepal's Sustainable Craft Business, 351  
 New Approaches to Design Thinking, 169  
 New Solutions in Traditional  
   Bedouin al-Sadu Weaving, 103  
 Nicholls, Lara, 3, 13  
 Mr Noi's Workshop, 24

**O**

Object Labels, 367  
 Oley, Elizabeth, 89, 102  
 Outstanding Movies That Incorporated  
   Crafts in Animation Making, 219  
 Outside Europe Design  
   Education Trends., 157–158

**P**

Papua New Guinea  
   Wood Carving, 117–132  
 Paba, Katarine, master weaver, 36, 37  
 Participation and Provision, 185  
 Patterns Symbol and Motifs, 108  
 Pipes – Smoking or Bamutuka, 59  
 Policy and Practice Tensions, 188  
 Problems of Terminology Associated  
   With Creativity, 195  
 Project Framework, 246  
 Project Output, 251  
 Pye's Notion of Workmanship, 229  
 Phuong, Dinh Quoc, 15, 30  
 Popenici, Stefan, 263, 271

**Q**

Quality Concepts, 155  
 Quilt Made by Convict Women, 3–13

**R**

Rao, Mansi Sathyanarayan, 173, 182  
 Redundancies, Cuts and  
   Best Practice, 379

Role of Research Organisations in Craft Traditions  
 Case Study  
 Design Innovation, 173  
 Role of Crafts in Addressing  
 Climate Change, 386

## S

Sarim, Ibu, Cloth Weaver, 38  
 Scientific Practice, 317  
 Selenitsch, Alex, 303, 312  
 Self-Determination Theory, 203  
 Significance of Traditional Craftsmanship To Thailand, 213  
 Singapore Creative Industries, 166  
 Shyam, Kalabai -and Shyam, Shambu Artisans, 180  
 Soil and Optics, 319  
 Social Context of Learning to Carve, 117  
 Socialism and Doi Moi in Tin Street, 21  
 Space and Street Domestic Identities in Hanoi, 15  
 Story-Telling, 252  
 Strategy: Assembly and Workflow, 237  
 Strategy: Tooling and the Digital, 232  
 Sureephong, P., 245, 259  
 Sustainability  
 Digital Craft, 258  
 Sweated Trade and Exploitation  
 History of Garment Production, 276–290

## T

Talismanic Memory, 325  
 Tehrathum Bansghari  
 Dhaka Weaving Centre, 359  
 Tensions Between Policy and Practice, 188  
 Thailand: OTOP, 162  
 Tin-Craft Production, 15–31  
 Tin Street in History, 18, 19, 20, 21  
 Tolmar, B., 245  
 Towards Digital Craft, 227  
 Tradition and Aspiration, 2–48  
 Traditional Bedouin

al-Sadu Weaving, 103–114  
 Training and Guidance for Artisans, 381  
 Transferring Traditional Art and Skills into Contemporary Craft, 351–363  
 Trends from Design Education  
 Outside Europe, 157  
 Typography, 369

## U

Ujolta Dhaka Cloth Industry, 360  
 Urban Market, 344–345  
 User-Capital, 345–346  
 User-Capital-Labour, 347–348  
 User-Labour, 346–347  
 Using Digital Content Technology, 245

## V

Value of Creative Education, 189  
 Vickery, Susie, 275, 300  
 Visitor Frequency, 256  
 Vocational and Technical Education in  
 Craft and Design, 153–172

## W

Weaving in Papua New Guinea, 77–88  
 Weaving Their Way to Self-Sufficiency in  
 Craft and Culture, 89–101  
 Website Creation Process, 249  
 Website History, 256  
 Website Presence, 254  
 Well-being and Mental Health  
 Interventions, 378  
 What happens to my Painting? Post- Digital  
 Challenges of Craft, 238–239  
 Women Weavers from Madang, 87  
 Wood Carving, 17–132  
 World Craft, 342  
 World Craft Supply Chain, 343  
 Woodcock, Rose, 313, 324  
 Working With Indonesia's  
 Indigenous Weavers, 33  
 Writing Text for a Display  
 Panel and Labels, 366