# EXPLORING SOCIAL DESIGN IN A DEVELOPMENT CONTEXT: THE CASE OF A HANDCRAFT POTTERY COMMUNITY IN CAMBODIA

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#### **Abstract**

This thesis argues for an alternative methodology in social design to counter existing approaches to development work. It is based on a field study conducted in a handcraft pottery community in Cambodia over twenty months. From a cross-disciplinary perspective that combines design culture, development studies and sociology, the thesis discusses the ways in which an innovative approach to social design can be developed, practised and analysed. The thesis, informed by the actor-network theory (ANT), unfolds the problematic situation by revealing that in-kind donations and external support has caused a sense of dependency within the local community. To move away from the system of technocracy and diffidence and towards creative knowledge generation and ongoing participation, the Social Design Thinking Workshops (SDTWs), as part of the field study, were conducted with ten Khmer potters. Action research, participant observation, semistructured interviews and visual ethnography were employed to understand the situation, create designs for ceramic production, expand the knowledge beyond technicality and reflect on the overall process of the SDTWs. A mutual relationship and productive participation became possible by establishing an ontological and epistemological stance that treated the people as research participants with indigenous insights and capabilities. As a result, this thesis suggests three key implications for this social design thinking approach in the Cambodian context. Firstly, by exploring the relationship between actors surrounding the situation, researchers would be able to problematise and engage with social issues from an unconventional perspective. Social design not only transcends its dominant association with social responsibility, but it also becomes able to catalyse and rearrange the social configuration within the situation. Secondly, by unlocking and eliciting the tacit knowledge of the participants, the community would be better equipped for an increased economic competitiveness and independence. Finally, by practising a programmatic, iterative approach to social design, rather than seeing it as a straightforward problem-solving project, the outcomes and impact of the practice can continuously be tested, reflected, adapted and evolved. In this process, social designers are expected to act as a facilitator, educator and imaginative storyteller that can catalyse the social interactions within the problematic situation. While designerly approaches are increasingly employed in a development context, relatively few studies have been conducted on these types of practices. Overall, this thesis offers an innovative approach to social design that can be useful for researchers and practitioners in the development context.

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#### **Abbreviations**

ANT Actor-network theory

CTTP Cambodia Traditional Pottery Project

GDP Gross domestic product GNI Gross national income

GTZ Gesellschaft für Technische Zusammenarbeit

IMF International Monetary Fund KCHH Kampong Chhnang Pottery MDG Millenium Development Goal

MDG-F Millennium Development Goals Achievement Fund

MoCFA Ministry of Culture and Fine Arts NGO Non-government organisation

OLPC One Laptop Per Child

SDG Sustainable Development Goal

SDTW The Social Design Thinking Workshop

SEQUA Stiftung fuer wirtschaftliche Entwicklung und berufliche Qualifizierung

STS Science and Technology Studies

UN United Nations

UNDP United Nations Development Programme

UNESCO United Nations Educational, Scientific and Cultural Organization

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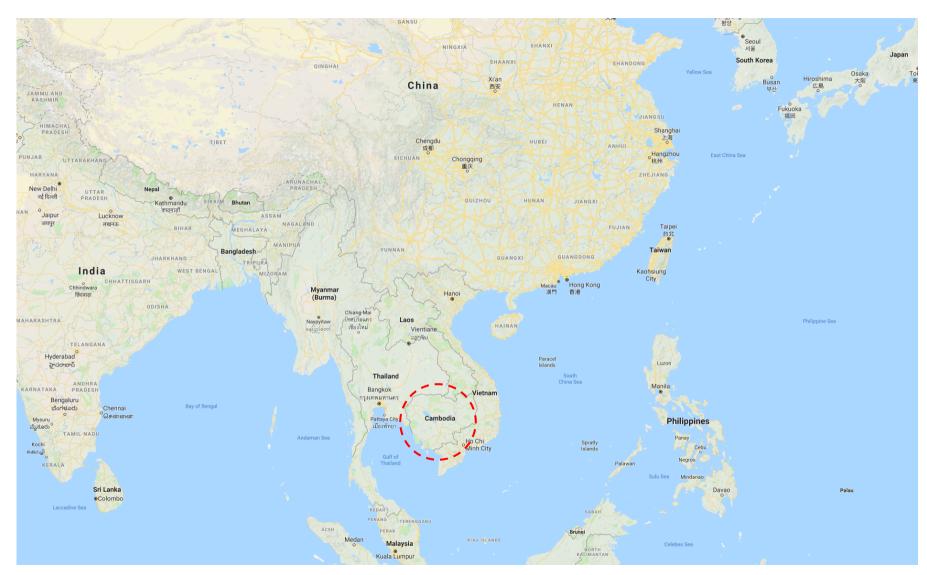
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#### **Author's declaration**

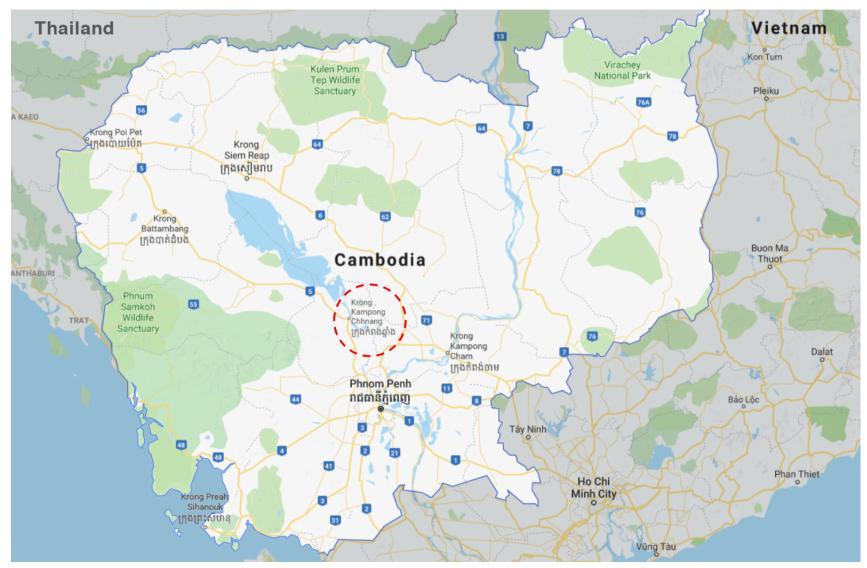
I declare that the research contained in this thesis, unless otherwise formally indicated within the text, is the original work of the author. The thesis has not been previously submitted to this or any other university for a degree, and does not incorporate any material already submitted for a degree.

Signed

Dated 7 February 2018



Map 1. Cambodia



Map 2. Cambodia, with Kampong Chhnang province in the dashed circle

### 1. Introduction

In the last two decades, social design and social policy experts have observed '[a] flood of initiatives to use design methods ... around the world' (Mulgan 2014: 1). During that period, there was a significant rise in a design movement towards social good and sustainable systems, as an alternative to existing technological and managerial approaches that seemed unable to resolve various societal concerns such as global recession, climate change, resources scarcity and inequality (Armstrong, Bailey, Julier and Kimbell 2014). As a consequence, social design and related concepts, such as service design, design activism and participatory design, have been given considerable attention in the design discipline since the early 2000s. Transcending the object-centred tradition of the design discipline, social design is now broadly perceived as a holistic, collective approach that may help to overcome societal challenges and contribute to public wellbeing (Armstrong et al. 2014; Manzini 2015; Chen, Cheng, Hummels and Koskinen 2016). Concurrently, social design began to emerge in academia in various forms, such as in university courses and research groups<sup>1</sup>; conferences and talks<sup>2</sup>; a particular report<sup>3</sup>; and as part of a special theme in a iournal<sup>4</sup>. The sheer amount of interest in this area may stretch even further when considering additional inputs made by design consultancies, including IDEO, Think Public, Engine, to name a few (Chen et al. 2016). Such a tendency sheds a positive light on the idea of social design. Nevertheless, it seems apparent that the contemporary conception of social design has been mostly debated and practised in Europe and North America. This research started with the premise that social design is largely a Western concept. I argue that recent models of social design that draw from service design (Parker and Heapy

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Occial Design (MA) at Maryland Institute College of Art, the US; Social Design Arts as Urban Innovation (MA) at the University of Applied Arts Vienna, Austria; Social Design (BA) at the Hong Kong Polytechnic University School of Design; Eco-Social Design (MA) at Libera Università di Bolzano in Italy; Social Design (MA) at Design Academy Eindhoven in Netherlands; Social Design Lab at Victoria University of Wellington in New Zealand; and Design for Social Innovation and Sustainability (DESIS) Network initiated by the Milan school and Ezio Manzini.

<sup>&</sup>lt;sup>2</sup> In the case of academic conferences, the Design History Society conference in Barcelona 2011 was entitled 'Design Activism and Social Change'; and the Design Research Society conference in Brighton 2016 discussed 'Design Innovation for Society' in a strand. The Social Design Talks, as part of the Mapping Social Design Research and Practice for the Arts and Humanities Research Council (AHRC), were organised approximately every month between November 2013 and July 2014.

<sup>&</sup>lt;sup>3</sup> The project report 'Social Design Futures: HEI Research and the AHRC' (Armstrong et al. 2014), from Mapping Social Design Research and Practice for the AHRC, was published on behalf of the University of Brighton and Victoria and Albert Museum.

<sup>&</sup>lt;sup>4</sup> The International Journal of Design has published their special social design issue in 2016 (Vol. 10, No. 1).

2006; Holmlid 2009; Kimbell 2009; Sangiorgi 2009; Meroni and Sangiorgi 2011), design thinking (Kimbell 2011, 2012), design activism (Bell and Wakeford 2008; Thorpe 2011; Markussen 2013) and participatory design (Ehn 2008; Bannon and Ehn 2012; Bjögvinsson, Ehn and Hillgren 2012a, 2012b) are little-tested in non-Western contexts. However, historical roots of social design partially reside in concerns for alleviating poverty and inequitable political structures in the so-called 'Third World' or 'developing countries' (Papanek 1984). What would it be like when social design meets developing countries? In search of the answer, the initial enquiry of this research has been developing, testing and analysing an inventive approach to social design in a marginal research setting. Through an extended programme of practice-based, in-the-field activities in a handcraft pottery in Cambodia, this thesis explores the implications in regard to social design which are specific to a non-Western context. It also explores, by comparing the fieldwork and theories, the ways in which these activities work together as a desirable approach to understanding the wicked problem, a notion that has been ill-structured and intertwined with a number of stakeholders, issues and values (Buchanan 1992). As a consequence, this thesis seeks to open up the potential of a social design approach for both researchers and practitioners in a development setting.

## 1.1. Research questions

This thesis provides a cross-disciplinary approach to social design by bridging development studies and design culture. Based on an empirical study conducted in a Cambodian handcraft pottery community over a period of 20 months, this thesis illustrates the process of problematising the situation and informing the community through action research. Central to the fieldwork was the Social Design Thinking Workshops (SDTWs), which consisted of 11 participatory design sessions that aimed to benefit the stakeholders by offering a set of useful and relevant designerly activities for their everyday work. More importantly, the SDTWs were intended to provide an opportunity for the researcher to: a) develop and test an experimental and pragmatic approach to social design in a development context; b) observe the course of activities and transformations made by the participants throughout its process; c) compare the findings from the practices with existing theories in regard to social design; and d) draw implications about social design

from the experience and reflections gained. In short, the thesis explores the ways in which these SDTWs and subsequent fieldwork can be engaged with theories as a knowledge contribution in the social design debate. It addresses the following questions:

- What are the distinctive qualities of grassroots approaches to social design applied to a Cambodian handcraft community?
- What are the possibilities and challenges of social design practices in a development setting, in light of the case tested in a Cambodian handcraft community?
- What are the social designers' roles in the broader development context?

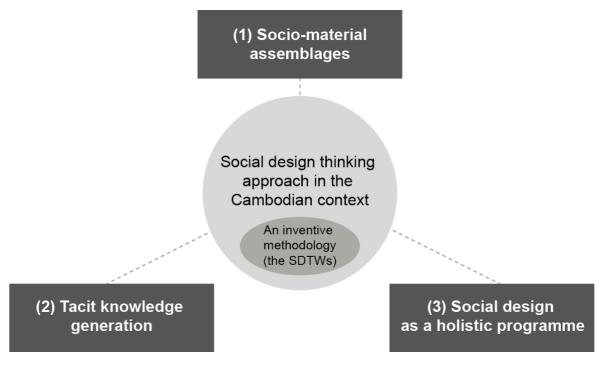


Diagram 1. Description of the implications of social design practices in the Cambodian context

The goal of this thesis is to explore and foster an approach to social design in a Cambodian context that is predicated on three considerations (see Diagram 1). The first is the exploration of the socio-material assemblages throughout the design practices. The second is the recognition and application of local tacit knowledge. The third is the need for a programmatic, iterative approach, rather than as a straightforward problem-solving, project.

Firstly, an exploration of the socio-material assemblages throughout social design practices helps the researcher to identify real-world problems from an unconventional perspective. The notion of socio-material assemblages, which have been consolidated by sociologists of science and technology studies (STS) and the actor-network theory (ANT) (e.g. Latour 2005; Callon 1987; Callon and Law 1997; Law 1992, 2008; Marres 2012), has recently come to provide useful insights for design researchers, particularly those who have been investigating the relationship between design, objects, technology and society (e.g. Balsamo 2011; Bannon and Ehn 2012; DiSalvo 2012; Julier 2014a; Kimbell 2012; Shove, Watson, Hand and Ingram 2007; Storni 2015; Yaneva 2005). It urges the researcher to perceive both human and non-human actors as equally substantial in the formation of a social phenomenon. In this thesis, I argue that overlooked actors, such as inkind donations and external aids, are often problematic because they can tend to cause a sense of dependency and inequality within a local community. At the same time, I demonstrate the process of developing and practising an innovative methodology, the SDTWs, that would stimulate the actors and stakeholders to redefine their relationship, in search of a collective knowledge and an ongoing progress.

Secondly, by presenting the significance of tacit knowledge as an integral part of preserving cultural distinctiveness and fostering local participation, this thesis proposes a novel methodology and social design thinking approach within the development context. Considering that previous interventions tended to neglect the local potters' capabilities in the creative and decision-making process, this research meticulously illustrates the ways in which implicit knowledge can be unlocked and elicited through non-verbal means and learning-by-doing approaches. By incorporating the tacit knowledge of the participants into the practice, it not only becomes possible to enhance the locality and differentiate the value of the products, but it is also a type of approach which stimulates behavioural and perceptual changes among the participants so that they become agents in the community transformation.

Thirdly, by **understanding social design as a holistic programme**, rather than as a one-off project, this thesis suggests an iterative and evolutionary process that embraces a series of actions, interactions, implementations, adaptations and reflections (Bjögvinsson et al. 2012b). The thesis asserts that it is imperative for the researcher to acknowledge the peculiarity of each research setting in order to identify contextual societal goals and the

values of a community. From this perspective, the stakeholders are able to concentrate on and commit to the matter at hand, which is directly related to their everyday lives. Such an organic collective consisting of local stakeholders, therefore, would lead to self-sustaining and ongoing development even after the completion of design activities and research.

As a result of these necessary considerations, I argue for a revised approach to social design thinking. This approach provides an understanding of the interconnectedness within the situation, which consists of different stakeholders and actors. It also acknowledges that the relationship between these participants is continuously changing through a series of interactions. This social design thinking approach finds a way of improving the situation by developing, adapting and practising an inventive methodology specific to the individual context. Not only does the methodology provide the stakeholders a ground to identify a problematic situation and use their knowledge and skills to overcome the issue, it also forms an agonistic space that can organically evolve through iterative practices and reflections. The methodology can be modified and adapted to individual situations. This methodology, and the social design thinking approach overall, aims to design conditions in which stakeholders can be engaged, stimulated and encouraged towards ongoing, fruitful participation.

# 1.2. The scope of the thesis

This thesis discusses the processes, constituents, challenges and implications of social design practice, drawing on empirical fieldwork in Cambodia. Although it aims to provide general insights into the development context, the scope of my research can specifically be defined in terms of space, timing and research focus.

Firstly, in terms of space, the fieldwork was conducted in the Kampong Chhnang Pottery (KCHH) workshop in Andong Russey village, in Kampong Chhnang province of Cambodia. Once the historic centre of Khmer ceramic production, this region has been in decline. Since there has been a lack of exposure to the globalised market, its geographic location entailed a sense of uncertainty and unpredictability that paradoxically proved to be a unique testbed for exploring a social design practice in a non-Western context.

Cambodia Traditional Pottery Project (CTPP)<sup>5</sup>, which was initiated by a group of Japanese potters and an entrepreneur back in 2009. The stakeholders, the Japanese management of the CTTP/KCHH, Khmer potters and me, shared similar interests. Prior to the completion of the CTPP in December 2015, the Japanese management had to ensure that the local potters had the capabilities<sup>6</sup> and confidence to run the pottery workshop by themselves. The Khmer potters, who had been trained for the previous five years or so, were concerned about their lack of knowledge and skills to take the responsibility, therefore, they wanted to consolidate their skills and techniques needed for the stable handover of the KCHH. As a researcher-designer, I was looking for participants who could join my investigation into social design practices in the development context. This was good timing as, at that point, the participants had advanced technical skills and knowledge by which they could embody their ideas in sketches and prototypes. The SDTWs aimed to help the participants enhance their knowledge and skills that would be useful during and after the handover of the CTPP/KCHH. However, it also meant that this research would only provide the evidence in which the local artisans were relatively familiar with modern techniques (in this case, proficiency in using modern kilns and glazing materials). Additionally, it was only possible to discuss the short- and medium-term effects of the SDTWs due to the limited timescale and access to further data (such as the financial sources indicating the changes in the profits made by the KCHH before and after the SDTWs).

Secondly, from the aspect of timing, the fieldwork interposed the later phase of the

Thirdly, in terms of the focus of the research, the subject of social entrepreneurship is beyond the scope of this thesis. Instead, this thesis mainly discusses the explorative process and implications of a social design thinking approach through the notion of socio-material assemblage. Likewise, in a limited timescale, the fieldwork was focused on facilitating the participants to problematise the situation (i.e. the lack of design knowledge and skills and the need to add value to the products) and to produce creative outcomes (such as sketches,

<sup>&</sup>lt;sup>5</sup> CTPP and KCHH refers to the same entity, funded by the Nippon Foundation in Japan. While CTPP specifically designates the project, KCHH refers to the venue, the community and brand.

<sup>&</sup>lt;sup>6</sup> The term *capabilities* throughout this thesis refers to Manzini's (2015: 97) interpretation of the word as 'people's abilities to choose among alternatives and achieve results' based on their understanding of local realities and personal means, such as their 'knowledge, organizational skills, entrepreneurial skills and design capacities'. This thesis focuses on illustrating the ways in which the SDTWs were designed and practised to enhance the capabilities of the participants so that the individuals could become familiar with the creative thinking process and their continuing personal development, instead of relying on external support.

ceramic prototypes and resultant branding materials), rather than covering additional activities for commercialisation or distribution of those outcomes from the SDTWs.

A part of this thesis, Chapters 2 and 8, was used in a published article (Kang 2016) that outlines the contemporary social design debate, and discusses the notion of situatedness and methodological approaches, as practised in the Cambodian context. Not only does this thesis explore the cross point of theories and practices that are related to social design, but also it provides a useful methodology for social design research, which was developed and tested during the twenty-month engagement within the research setting. This methodology might be applied, with some modifications, to several different cultural and socioeconomic contexts around the globe to help tackle the emerging problems of various post-industrial communities in transition.

# 1.3. Personal journey

This thesis is the outcome of my six-year academic journey, which began as an enquiry into the relationship between social innovation and design in Korea, and resulted in a cross-disciplinary research of social design practices in the Cambodian context (see Diagram 2). I feel that it is important to briefly sketch my personal journey in order to describe the trajectory of my thoughts, feelings, progress and approaches throughout the study. This section explains the research background and motivation that came up after a series of unexpected, but perhaps unavoidable, wandering and detour.

#### The beginning of the research

I initially became interested in social design during my Master's in Brand Development at Goldsmiths College, University of London. Having learned that the capacity of design and brand stretches well beyond materialistic consumption, I became aware of the social and ethical aspect of design. I was particularly interested in the ways in which social design could be explored from the standpoint of a graphic or branding designer.

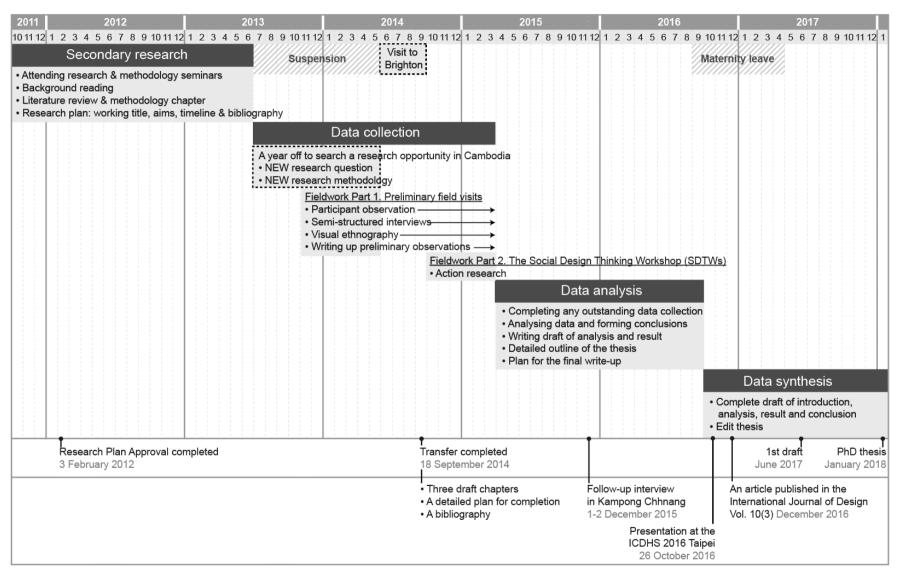


Diagram 2. The research timeline

The research first began in October 2011, with a primary objective to investigate ways into raising awareness about social innovation activities through visual design and branding methods in South Korea. Around that time, discussions about social design, service design and social innovation were burgeoning both in the UK and Korea. In the UK, the following occurred: service design emerged as the latest academic interest (The Madano Partnership 2012); the Young Foundation deployed a number of design projects using design as an important tool to shape the process of social innovation (The Young Foundation and Haig Strategic Design 2015; Woodcraft, Bacon, Caistor-Arendar and Hackett 2012); the Coalition Government's Big Society agenda demanded that central and local governments employ service designers to respond to social challenges in the public sector (Blyth and Kimbell 2011); and the *Social Design Talks*, a monthly event which was later developed into a published report 'Social Design Futures' (Armstrong et al. 2014)', provided important insights into design thinking and practices for social innovation.

Concurrently, in South Korea, social design was gaining popularity with the political debut of Park Won-soon, a new mayor of Seoul. Elected through a by-election in October 2011, Park claimed that he was a *social designer* rather than a politician, highlighting his background as a human rights lawyer and civil activist (Thorpe and Gamman 2013). During his multiple terms, he has paid particular attention to public design and design for social impact. As such, it was an interesting moment for social design research, and I was fortunate enough to talk to some of the people at the forefront of the discipline, including Lucy Kimbell and Mary Rose Cook.

#### Floundering in the 'swampy lowlands'

Around that time, I was undergoing an unproductive phase without any clear idea for my fieldwork and methodology. Now, it seems that this period of uncertainty was inevitable on my PhD journey. Neither the concept, methods, outcomes nor limitations of social design had been precisely defined (Armstrong et al. 2014). As a novice researcher, I ended up floundering in this 'swampy lowlands', which was filled with a series of ill-defined, openended and complex problems (Schön 1995).

#### Cambodia as a breakthrough

I realised it was time to become grounded by immersing myself in the real world to find out what social problems existed. This way, I would be able to clarify if social design practices could be any help, and if so, in what ways. I decided to spend some time in Kampong Chhnang province in Cambodia from August 2013 where my husband was working as a volunteer. A year's leave from the university allowed me ample time to explore research opportunities. It was a ground-breaking experience both academically and personally to witness the sheer contrast between the luxury cars and child beggars on the road, skyscrapers and the poor infrastructure of hospitals and schools. Explaining the gap between the developed and developing economies in terms of economic status and standards of living, Papanek claimed that:

They [people in developing countries] earn, on average, less than one-tenth of the income of the people of the rich nations; their life expectancy is only half that of those in the North. They can spend only three cents (per capita) on public health to every dollar spent in the developed world [...] Even these bare statistics cannot begin to tell the story of disease, malnutrition, starvation, and despair that stalks the lives of 2.6 billion people in the poor nations. (Papanek 1984: xviii)

More than 30 years on, the situation seemed to have deteriorated in Cambodia. The course of globalism appeared to have only widened the gap between the rich and the poor, along with prevalent dependencies on foreign aids (Springer 2010a). Trying to avoid being trapped in an emotional overflow, I concentrated on finding a research opportunity.

#### A pottery community in Kampong Chhnang

Not long after my arrival in Kampong Chhnang province I learnt that the region had been the centre of traditional Khmer ceramic production. Most of the locals worked individually at a household level, but few existed as collaborative workshops. In the process of observing and expressing my intentions for fieldwork, I discovered a workshop called Kampong Chhnang Pottery (KCHH), which had been run as part of the Cambodia Traditional Pottery Project (CTPP) funded by the Nippon Foundation. The aim of the CTPP had been to train Khmer potters in modern techniques, encouraging the use of locally available sources, and supporting them to achieve economic sustainability. When I contacted the KCHH, the Khmer potters and Japanese management were facing difficulties with the workshop's handover. As a consequence, the Khmer potters, the Japanese management and myself all agreed that my practical approach to social design might help them better prepare for the transition.

Since I did not want to patronise the local community as an outsider, I slowly began to visit them informally from August 2013. The conversation was made possible with help from a Khmer-English translator. From the beginning, I was aware of my position as a foreigner from a relatively wealthy country. Thus, I made the point of immersing myself in the local context, assuming that it would take a considerable amount of time and effort to build a relationship with them. Various research activities were accompanied, such as conducting interviews, taking photographs, observing and writing down my findings, along my visits to the pottery communities. This experience and engagement within the community became a starting point for my research. In addition, it formed an important part of constructing the investigation of social design practice in the Cambodian context, a lesser studied area in the academic field.

#### 1.4. Structure of the thesis

The thesis consists of nine chapters. The first chapter provides the research questions and their background. The literature review in Chapter 2 explores three main subjects: design culture, development studies and design practices in the development context. Firstly, a social design discourse through the viewpoint of design culture is discussed. It provides a useful understanding of the role of objects and their influence on design practices in contemporary society. Further, the socio-economic and political context that called for the rise of social design is presented. An array of recent movements, such as participatory design (Ehn 2008; Björgvinsson et al. 2012a, 2012b; Robertson and Simonsen 2013), design for social innovation (Manzini 2014, 2015; Jégou and Manzini 2008; Morelli 2007), social design in the public sector (Armstrong et al. 2014; Mulgan 2014) and design activism (Bell and Wakeford 2008, Thorpe 2011; Markussen 2013), has contributed to the social design debate by responding to the socio-economic shifts and unresolved issues. This chapter then builds on the notion of socio-material assemblage and infrastructuring to address social design as an agonistic process, rather than as a mere quick-fix solution. In order to situate my research in the wider discourse of development studies, this chapter pays particular attention to the rise of cultural development. The significance of indigenous culture and local empowerment has been underlined since the 1990s, in pursuit of sustainable development. Finally, previous design approaches practised in the development context are explored, particularly looking at the case of designers' interventions in handcraft communities. The literature review ends by describing social design as relevant and necessary in the development context.

Chapter 3 explains the methodology employed in this thesis. Action research was employed for the 'Social Design Thinking Workshops (SDTWs)', which was central to the fieldwork conducted in the Cambodian handcraft pottery community. The thesis draws on empirical fieldwork, which first identified the problematic situation, and then informed interventions within the research setting. The first part of fieldwork used participant observation and semi-structured interviews to investigate a social occurrence in the real world (Chapter 5). The second part of the fieldwork was conducted through action research to improve the problematic situation with the participants (Chapter 6). Visual ethnography was used throughout the fieldwork to demonstrate a sense of having been there with photographic records, and to evidence the participants' collaboration in the form of drawings and photographs.

Chapter 4 provides the contextual background of the research setting. A brief introduction to the turbulent contemporary history of Cambodia offers a better understanding of the socio-economic and cultural aspect of the Cambodian society today. Since the 1990s, the government has been attempting to revive the cultural heritage, but due to the lack of expertise, experience and budget, most of the initiatives have been led by multilateral organisations and international, non-government organisations (NGOs). Here, I introduce the handcraft pottery community in Kampong Chhnang province. This chapter concludes by illustrating my preliminary observations and personal communication with the stakeholders of the community to provide an overview of the research setting.

Chapter 5 begins by offering a navigational framework for the fieldwork. Then, I explain the process of problematisation by describing my visits to pottery communities in Kampong Chhnang and related government organisations. Drawing on my observations and interviews, it is shown that previous NGO interventions and donated kilns were rather troubling despite the good intentions they had in the beginning. Electronic kilns, top-down training by foreign experts and monetary gifts might have helped in terms of modernising the production. Nonetheless, these also appeared to have provoked a sense of dependency and inequality among the local stakeholders.

Chapter 6 illustrates the process, outcomes and reflections of the Social Design Thinking Workshop (SDTWs), an action research based approach to social design. The SDTWs, 11 sessions in total, were conducted to encourage the participants to articulate their innate creativity and tacit knowledge through sketches and prototypes for ceramic design. The chapter follows a sequential process of the SDTWs in chronological order, which consisted of four phases: *Understand, Create, Expand* and *Reflect*. The SDTWs aimed to enhance the participants' knowledge and skills in order to add value to their products. By doing so, the SDTWs ultimately intended to establish a platform which would continuously stimulate the stakeholders and to maintain engagement in an iterative, organic and ongoing evolvement.

Chapter 7 discusses findings from the fieldwork. It, firstly, offers the researcher's reflections and lessons learned from the experience. It, then, illustrates the attitudinal changes and responsive feedback made by the participants through anecdotal moments. The chapter further discusses the co-designed eco bag and leaflets as part of the fruitful outcomes from the SDTWs. In a materialised form of the collaboration, these objects stimulated the participation to become more active and engaging. At the same time, this chapter also addresses the challenges of social design practices, particularly in the development context. For an approach to social design thinking, it is required that the researcher: a) understand social customs of the research setting; b) build meaningful relationships with the local stakeholders; c) cooperate with unexpected circumstances; d) acknowledge and adjust to the unwillingness to participate; and e) instil confidence into the participants for mutual learning.

Chapter 8 provides an analysis of an approach to social design thinking by comparing the fieldwork and existing literature. It argues that a large number of socially conscious design approaches tended to pose dichotomist, top-down initiatives. Instead, this chapter proposes an alternative approach to social design, drawing on three distinctive considerations. Firstly, the notion of socio-material assemblage can help the researcher recognise and facilitate the implicit relationship between human and non-human actors surrounding a social phenomenon. This view offers an unconventional approach to identify and untangle the problem. Secondly, this social design thinking approach seeks to detect and elicit the tacit knowledge of the participants. This is desirable in order to enhance the local capabilities and add value to their products through a cultural distinctiveness. Thirdly, by

emphasising the significance of situatedness, it becomes important to design conditions for individual social design practice. The role of the social designer becomes critical in this process, as they have to act as a facilitator, educator and imaginative storyteller. By doing so, I propose an approach to social design that is a holistic, iteratively evolving programme, instead of a mere top-down, quick-fix project.

Finally, in Chapter 9, I conclude by summarising the research and addressing implications for the social design thinking approach. This chapter also specifies the contribution to the body of existing social design knowledge by considering this thesis among other studies on social design, particularly in the development context. The thesis concludes by indicating the limitations of the research and further directions for potential research.

This thesis seeks to fill the knowledge gap in three aspects. In the first place, the study suggests an unconventional way to problematise the situation by unveiling 'troubling actors'. Recognising that a number of social problems have been unmet by existing methods, this study focuses on investigating the practical benefits of socio-material assemblages. In this way, the thesis demonstrates the process of recognising human and non-human actors, and rearranging the relationship between them to improve the situation.

Moreover, the thesis offers an adaptive, designerly approach to development studies, where there has been the scarcity of inputs made by design scholars and practitioners. For example, this thesis presents an inventive and co-creative methodology that was developed and tested with the participants to generate knowledge relevant to their work. At the same time, it highlights Cambodia as a research setting, which had been marginal in design research and experience.

Thirdly, the thesis seeks to establish an ongoing, self-sustaining platform for an iterative and evolving development by empowering local stakeholders. I argue for the possibilities of social design, both as a conception and practice, that can have much more to offer than merely being a one-off do-good design. This also aligns with the purpose of action research, the main methodology of this study, which is to generate pragmatic knowledge for the public, and to seek 'the increased well-being – economic, political, psychological, spiritual – of human persons and communities, and ... a more equitable and sustainable relationship with the wider ecology of the planet' (Reason and Bradbury 2001: 2).

Overall, the study not only provides a useful approach to social design for researchers and practitioners in the development context, but it also offers a better understanding in sociomaterial assemblages as a means of rethinking and engaging with social challenges in developing countries.

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# 2. Literature Review

This chapter outlines existing literature in two areas: design culture and development studies, with an emphasis on the role of design to revitalise handcraft communities in a development context. It serves as a linchpin in the understanding of existing social design debates in three ways. Firstly, it unfolds the implications of social design by attending to the design culture literature. Emancipated from the previous, routinised dualism between theory and practice, object and subject and designers and users, design culture enables us to explore practices within the real world to recognise socio-material assemblage within situations, and to use design as a means for social innovation and development. The chapter also looks at participatory design, service design, co-design, design activism, and design thinking as the conceptual roots of social design. Consequently, it shows the ways in which lay designers' approaches, such as jugaad, have emerged as a form of social innovation. Jugaad, which originally began as an affordable and quick-fixing approach against adversity in India, has been extensively applied and discussed as an innovative way of improving the quality of life (Radjou, Prabhu and Ahuja 2011; Prabhu and Jain 2015; Birtchnell 2011). Chapter 2.1.5 discusses jugaad as an example of the idea of sociomaterial assemblage, a concept that penetrates this thesis.

This chapter also places social design in the context of development studies by explaining the concept of development, and the ways in which the focus of development studies has shifted from top-down economic growth to culture and empowerment. Cultural development has been advocated in terms of empowering local communities and eliciting lasting outcomes through a mutual understanding between the local stakeholders, researchers and practitioners. As such, social design is situated within cultural development in terms of its objectives, processes and sensibilities.

Finally, the chapter investigates previous design approaches applied to developing countries to offer background knowledge related to the fieldwork of this thesis. It specifically identifies handcraft as an important component for cultural development; hence, it looks at designers' interventions in handcraft communities in a development context.

This chapter also reveals a knowledge gap in the existing literature by explaining that the majority of social design research is West-oriented; therefore, empirical evidence in a development context is rare. While development studies have progressed as a multidisciplinary subject encompassing social sciences, economics, politics, anthropology, international relations, geography, environmental studies, gender studies, pedagogy and physical sciences (Sumner and Tribe 2008), the occurrence of design researchers' contribution in this field is scarce. Although some cases provide recent examples of a collaboration between designers and artisans in developing countries, only a few appear in the academic literature. Critical investigations with academic rigour into social design practices in developing countries are required to bridge the literature gap and to contribute to field practitioners, particularly when the cultural approach has been emphasised as a means of empowering communities and lasting impacts.

# 2.1. Social design discourse

This section outlines the concept of social design by looking at its historical roots, socioeconomic and political context that called for its rise, and the way it has been theorised and practised. It begins by outlining three examples that illustrate the failure of interventions in the development context.

I.

In 2010, it was widely publicised that a Korean construction conglomerate had donated 3,000 pianos to be distributed to rural schools across Cambodia (Kim 2012). This was lauded as a prodigious contribution to places which lacked arts and creativity programmes in public education. In short, it was a heart-warming story. However, the donated pianos were digital instruments, which meant that the majority of them could not be used because schools in rural areas did not have access to electricity. The story has been spread among volunteer workers in Cambodia as a source of amusement. Nevertheless, the donation continues to be publicised as a generous contribution to Cambodia (Kim 2012).

II.

The XO computers derived from the MIT One Laptop Per Child (OLPC) initiative was once claimed to be one of the most ambitious and cost-efficient solutions for educating children in developing countries. By 2017, 12 years after its launch, the project is seen as a failed example of 'digital utopianism' (Warschauer and Ames 2010; Ponte and Richey 2014). Besides unaffordability and design problems in both the hardware and software, the greatest mistake was in its implementation. The project was considered to be 'more of a sociotechnical network than a tool' (Warschauer and Ames 2010: 37; Kling 2000); however, it failed to connect the machines, the communities and its users. Recognition of local contexts, individual education curriculum and long-term training for teachers and students on the use of the machines were missing, which at the end of the day discouraged the students to make use of the XOs (Warschauer and Ames 2010; Nussbaum 2010; Kraemer, Dedrick and Sharma 2009; Ponte and Richey 2014).

#### III.

Toms is a shoe brand well-known not only for its distinctive look, but also for the philanthropic work during the past decade. Its 'One for One' campaign claims that with every purchase of a pair of shoes, a new pair of shoes is given to a child in an impoverished region (Toms 2017). It has become 'the brand of compassion' (Ponte and Richey 2014). Nevertheless, there are growing concerns on its effect. Such in-kind donation in developing countries is regarded as a top-down, short-term fix that focuses on making the customers simply 'feel good' about their altruistic act (Davenport 2012). On one hand, it was reported that no significant negative impact between the donation and the domestic market of El Salvador was proven (Wydick, Katz and Janet 2014). However, it has also been argued that such donations can deteriorate local economies that may become aid-dependent and unsustainable when free gifts from outside the community becomes the norm (Davenport 2012; Gramajo 2014).

It might be uncomfortable to admit, but similar situations can often be spotted across the developing world where unsuitable donations have been made by visiting designers wishing to contribute to a good cause. Since the 1970s, when Papanek (1984) urged designers to become conscious of their social responsibility for the people of developing countries, design interventions have increasingly taken the form of progressive grassroots activities, for which they have been acclaimed. Under the popular term *humanitarian* 

design, designers, architects, engineers and development practitioners have been providing design-based solutions to a multitude of problems related to clean water, electricity, emergency shelter, social housing, education, health, hygiene, micro-finance, environmental issues, landmines, and so on (Architecture for Humanity 2006; Bell and Wakeford 2008; Berman 2009; Johnson 2011; Pilloton 2009; Smithsonian Institution 2007).

There remains the question, however, about whether such good intentions result in positive consequences. Critical analysis and reflection on failures in humanitarian design practices have been rarely discussed. Only a few commentators point out that so-called do-good designs tend to be limited to mere technical fixes while, at the same time, giving rise to cultural imperialism over the people and communities of developing countries (Johnson 2011; Nussbaum 2010). According to Johnson (2011: 448), the movement around humanitarian design holds a 'modernist faith in the capacity of science to improve the human condition... [with] technological remedies for problems rooted in imperial histories and neoliberal restructuring'. It is also noted that such capital-oriented, technology-aided, top-down interventions might pose the danger of creating inequality among the communities they are seeking to help (Gramajo 2014). Indeed, opinions were already being expressed in the early 1980s that designers visiting developing countries appeared to be 'sweep(ing) into a native region like white missionaries, forcing their wisdom on the natives' (Papanek 1983: 153). Similarly, while there are an increasing number of design toolkits seeking to have a social impact, it should be questioned how relevant, adaptable, useable and productive they might be in the real world (Kimbell 2013). Is it not that we designers have tried to resolve multi-layered, complex, real-world problems with 'overly simplistic solutions'? (Warschauer and Ames 2010: 33).

Koskinen and Hush (2016) argue that much of current social design debate draws on a utopian dream that has been embedded in the Western tradition. While this utopianism, according to these authors, attracts more readers with names such as Victor Papanek and Buckminster Fuller, it tends to limit the definition and implications of social design to a design outcome such as Fuller's Dymaxion house (Neder 2008) and Papanek's tin can radio receiver (Papanek 1984). Instead, Koskinen and Hush (2016: 70) explain that through 'molecular approaches' designers become able to 'improve the world one notch at a time [...] (of which) the changes are small, particular to the issue and derive their

justification from the situation and its specifics'. Ultimately, the authors call for *sociological social design*, which uses social science theory to the social design debate. Such an approach can help designers investigate existing social relations between objects, processes, methods and people as individual entities by 'allowing a more explicit critique than that of molecular design and a more theoretically grounded position than utopian design' (Koskinen and Hush 2016: 68). Similarly, Armstrong and her colleagues propose to investigate social design through sociological perspectives drawing on STS and ANT, which provide useful insights on 'how the social is constituted' (Armstrong et al. 2014: 37).

The next section explains the ways in which social design can be defined through the notion of relationality, socio-material assemblage and the social, as an 'ephemeral and performative' entity (Armstrong et al. 2014: 37). This approach provides a refreshing view of design in a development context.

#### 2.1.1. The turn to design culture

The development of a design culture, which emerged in the 1980s along with 'an increased intensification of the dynamics between design production and consumption' (Julier 2013: 216), came to be commonly discussed in academia since 2000 (Julier and Munch forthcoming). By filling the gap that had not been covered by existing design history and design studies, design culture seeks to provide new ways of theorising and practising design in contemporary society by embodying itself as an object, discipline, and practice (Julier and Munch forthcoming).

Firstly, design culture, as an object of study, recognises 'the orchestration of networks of multiple things, people and actions' (Julier and Munch forthcoming: 2). While 'ocularcentric' visual culture divides the viewer and the viewed and emphasises visual representations of objects in static forms, design culture offers a richer understanding of design embedded into everyday life by investigating 'discursive systems of power, economic structures and dynamics or social relations' (Julier 2006, 2014a: 6).

Secondly, by acknowledging a hybridity of design culture in terms of its approaches, methodologies and knowledge, it becomes possible to understand design culture as a

discipline to enact discourse by shifting focus from 'history and theory' to experiences lived in practices (Julier and Munch forthcoming: 5). Design culture is a discipline providing the following: multi-disciplinarity, bringing different perspectives from several areas; inter-disciplinarity, aggregating multiple viewpoints to create a synthesis; and cross-disciplinarity, transcending and converting the boundaries of knowledge (Julier and Munch forthcoming; Barry and Born 2013; Thompson 2016). As an academic discipline, design culture may provide a better understanding by revealing the underlying meanings of the socio-political and economic context of our everyday world.

Finally, design culture as a practice provides holistic, participatory and complex approaches (Julier and Munch forthcoming). For example, design is increasingly used as a tool for organisational change (Deserti and Rizzo 2013). In design culture, the role of design is not merely limited to the creation of new concepts and objects; rather, it embraces the process of 'constructing new, viable solutions' by generating intuitive insights, accepting failure as a learning process and facilitating a collaborative and experimental approach (Deserti and Rizzo 2013: 55). As Manzini (2016: 53) points out, 'the focus of design has shifted away from "objects" [...] towards "ways of thinking and doing". Likewise, functionality and efficacy that were sought after through managerial design approaches yield their way to 'complex, hybrid, dynamic entities' (Deserti and Rizzo 2013; Manzini 2016: 56).

The notion of design culture as practice becomes particularly relevant to social design because it fundamentally challenges the way we view and engage with the world. In her argument on design thinking and materiality, Kimbell (2012: 136) expands on the subject of design from an object or service to a composition of 'designers, customers [...] endusers [...] other elements of practice such as knowledge, feelings, and symbolic structures' that are iteratively reinterpreted, adjusted and restructured in an unfinished form. Similarly, Ehn (2008) proposes two conceptual ideas to enact design practices in a holistic way that are *designing for use before use* (that is, prototyping) and *designing for design after design* (for example, end users' appropriation of the original design or given technology). In this way, Ehn asserts the need for *infrastructuring*, that is to facilitate an agonistic space for open and flexible discussion for unpredicted appropriation (Ehn 2008; Björgvinsson et al. 2012a, 2012b). A customary project-based problem-solving approach tends to focus on individual designers, their visual styles and design approaches while posing a dualistic

separation between thinking and practising, designer and the object and the context of being designed (Kimbell 2011; Julier 2014a). Instead, design culture seeks to encompass 'the interactions and relationships of the activities of designers, producers, consumers and objects, images and spaces [...] to form specific networks' (Julier 2014a: 230); hence, it provides a refreshing perspective with which to understand the world ontologically (what comprises the world) and epistemologically (how we come to know this) (Kimbell 2012: 133).

As the recognition of materiality becomes important in design practices, so does the role of objects. It is important to clarify two different connotations of objects. Firstly, conventional design approaches focus on designing objects [1], a visual or tangible form of artefact, as a finished outcome from the design process. Secondly, objects [2], as part of a socio-material assemblage, act and interact with each other, thus creating and rearranging the interconnected relations between constituents of practices and phenomena (Kimbell 2012). The latter interpretation of object leads to the notion of practices as a 'more dynamic, creative and constructive' embodiment, rather than merely perceiving design through a strict dualism dividing object and subject, designer and user, knowledge and action, and project and implementation (Kimbell 2012). The role of the object has been mainly discussed by scholars in STS and ANT, who paid particular attention to the human and non-human actors and their interactive associations with each other within their assemblage (Latour 2005; Callon 1987; Callon and Law 1997; Law 1992, 2008; Marres 2007, 2012). This does not mean that such an object-oriented view poses a technocratic idea; rather, it provides a richer understanding for the interconnectivity of practices and the world at large (Marres 2007). Callon states, on the attributes of ANT, that:

The actor network is reducible neither to an actor alone nor to a network [...] An actor network is simultaneously an actor whose activity is networking heterogeneous elements and a network that is able to redefine and transform what it is made of. (Callon 1987: 93)

Adapting such notions of human and non-human actors, materiality and their relational configurations, design culture scholars have unfolded the socio-economic implications of our everyday lives (Julier 2006, 2014a; Kimbell 2011, 2012; Julier and Munch forthcoming; Shove et al. 2007; Balsamo 2011; Ehn 2008; Yaneva 2009; Björgvinsson et al. 2012a, 2012b). For example, Julier explains the way ANT can be used in design culture studies below:

[T]he emphasis is on the practices themselves providing a starting point for analysis and understanding. Within this, therefore, things are seen to have agency just as people are. Humans and non-humans are actors within networks. From this thinking flows actor-network theory (ANT), which has figured prominently in the social sciences and, for them, brought the role of design increasingly into view. (Julier 2014a: 231)

In short, design culture offers researchers the opportunity to traverse the routinised boundary of an epistemological frame that once dominated dualistic, object-centric [1] design analysis. It becomes important to acknowledge that 'objects [2] and materials are crucial to the unfolding of practice' within its assemblage (Kimbell 2012: 142). This way, design researchers become able to explore the implications of a particular phenomenon, designers' work and their effects by investigating the relationship between different actors within a situation (Kimbell 2012; Julier 2014a: 240).

#### 2.1.2. The growing need for social design

Acknowledging the 'cultural role of contemporary design in society' (Julier 2006: 64), design culture can provide useful ways to view and approach social problems through design-based practices. Why should design be used to solve social problems? Why should design be practised in a development context? Having failed to meet the needs through technological and managerial approaches (Deserti and Rizzo 2014), design has been discussed as an alternative to resolve the complex issues of contemporary society. More precisely, socioeconomic and political changes in the world have forced design to transcend its customary relationship with the world (Julier 2014a). The reason for propounding design against social issues is possibly due to the following: the change to a service economy; the call for sustainable growth; designers being increasingly engaged with political decisions; and the need for multidisciplinary approaches as comprehensive solutions.

Firstly, the shift from a manufacturing to a service economy has led to a fundamental change in thinking by focusing on relationalities and processes (Kimbell 2009; Meroni and Sangiorgi 2011; Prendiville 2016). By the early 2000s, the service industry of the world's most developed economies appeared to be the fastest-growing sector, amounting to nearly three-quarters of their gross value (Parker and Heapy 2006). As a consequence, service design arose 'as a response to the growth of the service sector in post-industrial

economies' (Julier 2014a: 61). Accordingly, the fundamental meaning and role of design has shifted from a 'product-oriented design culture and practice towards a (predominantly) service orientation' by centrally locating invisible interfaces between people and objects while treating physical artefacts as the evidence of the service experience (Manzini 2011: 5). In other words, in the design process of a service economy, relational and interactive systems begin to replace static objects. Such transformation provides new perspectives when approaching complex social problems that could not be resolved by existing methods, like in-kind donations, linear problem-solving formulas or technocratic<sup>7</sup> paradigms.

Moreover, the growing need for sustainable growth has aroused designers' participation in society. For example, the global financial crisis in 2008 turned out to be evidence of a market-oriented, consumerism-based economy that caused inequality and social injustice. An increasing number of academics and practitioners call for design activism as the new 'norms', suggesting that it is an alternative approach to social problems (Fuad-Luke 2009; Thorpe 2012; Julier 2013).

Thirdly, designers are gradually taking part in politics by offering user-centred approaches (Blyth and Kimbell 2011). While designers used to be criticised for being 'apolitical' and for relying solely on the market for the last 30 years or so (Thorpe 2012: 27; McGuirk 2013), new technologies and decentralisation policies (the Big Society commenced in 2010 in the UK) give rise to design platforms and initiatives at community levels (Blyth and Kimbell 2011). In other words, 'design has become much more useful to politics' by providing a link between the government and the public (McGuirk 2013). The public have been encouraged to take part in the process of decision-making, co-designing and implementing ideas. It is controversial, though, whether such a situation that drives designers to devise and propose alternatives for politics is desirable or not. For example,

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<sup>&</sup>lt;sup>7</sup> While Wilson (2006: 501) argues that the term 'technocratic' has been used as a 'pejorative descriptor' in the development context, this thesis defines technocracy as 'a government or social system that is controlled or influenced by experts in science or technology' (Technocracy 2017). In this way, I attempt to address the issues that were caused by the external ceramic specialists, such as a division between designer and technician, and teacher and student. This dualism seemed to diminish the Khmer cultural distinctiveness and their tacit knowledge of local stakeholders within the pottery community. This thesis, however, mostly agrees with Wilson's suggestion to move away from 'the classic technocratic concept of knowledge elite' and move towards an understanding that 'professionals and the population learn together and synthesize new knowledge' (2006: 519).

McGuirk (2013) argues that the growing tendency of designers' involvement in politics is no more than 'get[ting] people to do the government's job for it'. Thus, there appears to be a tension when perceiving the relationship between designers and politics, either as civic engagement or shifting the responsibility to individuals (Blyth and Kimbell 2011).

Finally, innovative approaches are increasingly sought after as the majority of social issues tend to cut across organisational and sectorial boundaries. Instead of already-established methods and conventional structures, the development of information and communication technologies boosts such a movement by enabling networked connectivity between people, collaborations and discussions cutting across regional and disciplinary boundaries (Mulgan, Tucker, Ali and Sanders 2007; Manzini 2011; Mulgan 2014; Kimbell 2009; Stickdorn and Schneider 2010).

Under such circumstances, an array of design approaches has come to the forefront as an answer to existing social challenges, based on its abilities to generate problems, facilitate collaborations, ideate visual explorations and prototypes and user-led solutions (Kimbell 2009; Meroni and Sangiorgi 2011). Likewise, designers are expected to multifunction as *triggers* to start new social conversations, *facilitators* in the course of collaborations and *design activists* to initiate and disseminate design initiatives that are significant in social terms (Manzini 2015: 70). It should be noted that many of the grassroots activities and practitioners tend to 'remain below the radar', raising questions about their impact and scalability (Armstrong et al. 2014: 17). Nonetheless, the academic debates and practices in regard to social design are expected to become more expanded and sophisticated as the discourse actively develops in recent years.

# 2.1.3. Academic approaches to social design

The conceptual root of social design can be found in participatory design, co-design, service design and design activism. The origin might be traced further down to design thinking, which is 'meant to encompass everything good about designerly practices' (Kimbell 2011: 289). Originated in the 1960s from the design methodology movement, design thinking has been providing a framework for identifying designer's roles and to understand the design processes and methods while investigating the ways in which design problems should be addressed (Cross 1982, 2001; Kimbell 2011). Participatory design has

emerged as a consequence of the social and political movements of the 1960s and 1970s to achieve social innovation through democratic decision-making and collective action (Emilson 2014; Robertson and Simonsen 2013). Similarly, co-design advocates 'design with, for and by society', recognising everyone in the stakeholder group as designers and applying their abilities to contribute to the design process and its outcomes (Burns, Cottam, Vanstone and Winhall 2006; Chapman and Gant 2007: 37).

More recent movements around service design tend to focus on systemic design processes (Kimbell 2009, 2011b; Meroni and Sangiorgi 2011; Sangiorgi 2009, 2011; Mager and Sung 2011; Mulgan 2014; Stickdorn and Schneider 2010; Thorpe 2012). Through the creative process from exploration, ideation, visualisation to implementation, the final outcome of service design is not merely a journey map or a single experience, but 'action platforms', which are expected to enable manifold interfaces between people, objects and services (Manzini 2011: 3). Finally, design activism combines design thinking and taking action, particularly against the current market-driven economy to elicit social, political and economic sustainability (Fuad-Luke 2009; Markussen 2013; Thorpe 2012; Julier 2013). Based on these conceptual accounts, social design is mainly associated with innovation, social entrepreneurship, socially responsible design and design activism (Armstrong et al. 2014).

Research on the ways to investigate design interventions in a development context seems to be in its infancy. Despite the rise of a general interest in do-good designs in impoverished regions, only a few studies can be found in this field. Among those, the majority of research on participatory design interventions in a developing context are from the information system design discipline (Hussain, Sanders and Steinert 2012). For example, this can be seen in: Puri, Byrne, Nhampossa and Quraishi (2004) on investigating health systems in South Africa, India and Mozambique; Byrne and Sahay (2007) on the importance of developing participant capacities and health systems in a South African context; and Winscheirs-Theophilus, Bidwell and Blake (2012) on examining dilemmas and challenges of practising participatory design in Southern African communities.

Minimal research on design interventions other than within information system design can also be found. These include: Hussain et al. (2012) on designing prosthetic legs for marginalised people in Cambodia; Wang, Bryan-Kinns and Ji (2016) on co-creating an

interactive drama in Rural China; Del Gaudio, Franzato and Oliveira (2016) on exploring the designer's role when partnered with a local NGO in Brazil; Rosenqvist and Mitchell (2016) on redesigning wastewater governance in Indonesia; and Schiffer (2016) on participatory design for alternative energy in Gambia.

More relevant studies to this thesis, which investigate the relationship between design, development and craft, can be found in other doctoral students' works. The examples include Subramaniam (2017) on the collaboration between traditional artisans and designers in India; Shaikh-Farooqui (2017) on Pakistani crafts and entrepreneurship for community development; and Jehom (2017) on the ways in which traditional Iban weaving crafts can be sustained and promoted in Sarawak, a Malaysian state in Borneo. These all suggest that there are increasing academic interests in design practices in a development context, attempting to unfold research settings that have been marginal in design literature. This thesis regards such studies and practices as relevant approaches to social design enquiry, which seeks to connect design practices with social innovation and sustainable development.

### 2.1.4. The turn to 'new' social design

As explained in the beginning of this chapter, the turn to design culture not only invoked 'ways of thinking and doing' but also 'a means to tackle widely differing issues, adopting a human-centered approach [...] for designing solutions to complex and often intractable social, environmental, and even political problems' (Manzini 2016: 53). Furthermore, Koskinen argues that the object and conceptual framework of social design has changed over the past decade, with the focus shifting from social responsibility to investigating 'social structures, processes, and forms of actions' (Koskinen 2016: 1). Likewise, Tonkinwise draws a useful outline for what social design is and ought to be:

Social Designing with respect to unmet needs that is more than remedial, that resists the danger of being a kind of marketizing service design of government and non-government sectors, must afford significant social change. Its outcomes must be substantial sociotechnical innovations. These are political acts, but ones that make use of design's particular transdisciplinary research-led expertise with respect to the sociomaterial, even and especially in social media context. (Tonkinwise 2015: 9)

This idea of 'new social design' (Koskinen 2016: 1) can refer to three distinctive strands: the notion of socio-material assemblage in design culture and design thinking (Julier

2014a; Kimbell 2011, 2012; Julier and Munch forthcoming); infrastructuring (Björgvinsson et al. 2012a, 2012b; Ehn 2008); and agonistic design (DiSalvo 2012; Björgvinsson et al. 2012a). By acknowledging that social design is more about the process of rearranging the relationship around the situation, rather than a mere fix or marketing tool, it becomes possible to seek realistic social innovation. The new social design approach is realistic because such an approach acknowledges that the world does not provide a neatly prepared set of problem-solving formula; instead, it is filled with wicked problems, that are ill-defined and intractable situations (Buchanan 1992). This approach also allows for the perception that objects are as important as designers and other humans (Latour 2005). It further encourages an exploration into a world of uncertainty by understanding the interconnected relationalities between constituents of an event or phenomenon, instead of examining each element in isolation (Latour 2005; Marres 2012; Lury and Wakeford 2012). In this way, it is possible to unfold an agonistic space where there is a shift 'from design with predefined groups of users' towards engagement with publics around controversial issues' (Björgvinsson et al. 2012a: 127). The notion of agonism originally connotes a form of democracy that accepts the continuing state of conflict and contestation among engaged people, instead of presuming a consensus and the possibility for rational problem-solving (Mouffe 2000; Björgvinsson et al. 2012b). When appropriated to social design, agonism may work as a constructive platform in which multiple facets of a phenomenon, its constituents, including human and non-human actors and their different perspectives, are interwoven through the process of observing, designing, testing, confronting, reflecting and reiterating. This idea aligns with the notion of *infrastructuring* by the Scandinavian school of participatory design, which addresses 'the challenge of design as ongoing and as anticipation or envisioning of potential design that takes place in use after design in a specific project' (Bjögvinsson et al. 2012b: 104). Such a perspective acknowledges that the outcome of design is never set in a finished form, but it is shaped along the way as it is used, interpreted, articulated, implemented and adapted (Bjögvinsson et al. 2012b). Infrastructuring, in other words, is an ongoing process before, during and after the design practice that is to be nurtured through open participation and iterative reflection, as explained below:

Infrastructuring entangles and intertwines activities at project time (e.g., selection, design, development, deployment, and enactment) with everyday professional activities at use time (e.g., mediation, interpretation, and articulation), as well as with further design in use (e.g., adaptation, appropriation, tailoring, re-design, and maintenance). (Bjögvinsson et al. 2012b: 108)

This aligns with what DiSalvo calls 'adversarial design', which evokes political issues, challenges existing power structures and reconstructs political conditions through agonistic design practices (DiSalvo 2012). Adversarial design offers three tactics: 'revealing hegemony' to identify power structures and their influence in contemporary society; 'reconfiguring the remainder' to recognise actors that were omitted from political and social consensus, and rearranging them within the design; and 'articulating an agonistic collective' to design 'a participatory space of contest' where challenges, modifications and reinterpretations are constantly enacted (DiSalvo 2012: 118).

Through the notion of socio-material assemblage, infrastructuring and adversarial design, design scholars become able to unfold so-called wicked problems through agonistic approaches that encourage 'creative innovations [more] than [a] rational decision-making process' (Björgvinsson et al. 2012b: 129).

#### Limitations of existing literature and practices

Despite the increasing number of studies on social design, it should be noted that social design is at an embryonic, 'discursive moment' in terms of establishing its definition, process, methods and impact (Armstrong et al. 2014: 26). For example, in their special issue on social design, the editors of the International Journal of Design remarked on a number of different understandings and approaches to theories and methods of social design. These authors described social design as being engaged with multiple concepts, ranging from action research, participatory design, co-creation to social innovation and power structures (Chen et al. 2016).

At the same time, primary research on social design practices and materiality in a development context has received the least critical attention. While design culture commentators provide useful insights on socio-material assemblage in relation to design practices, empirical evidence is rare, and most of these have been focused on the Western context: Scandinavia (Ehn 2008; Björgvinsson et al. 2012a, 2012b; Lindström and Ståhl 2012), the UK (Kimbell 2011, 2012), the US (DiSalvo 2012) and Italy (Deserti and Rizzo 2013; Manzini 2014). This might be due to the fact that design as a means of social innovation was first conceived and developed in the West.

While there are few design toolkits available for practitioners (such as Frog Design 2013; IDEO 2015; Nesta 2013, 2014; Service Design Toolkit 2014; D-school 2014), it is not clear to what extent these toolkits have contributed to the actual processes and outcomes in the field. For example, Nesta's 'Development Impact & You (DIY)' toolkit (2013) provides a set of methods and worksheets in a do-it-yourself style, with the aim that anyone could easily use its tools as a means of social innovation. However, the toolkit seems to be limited in terms recognising a wide spectrum of potential users. It appears to overlook the fact that its users may not always be familiar with the western-centric, quasidesign thinking approaches. Therefore, it becomes questionable whether these toolkits would be applicable without a designer's guidance. At the same time, design toolkits have been criticised for being a quick fix solution, rather than providing a fundamental process of diagnosing the problem in the first place (Julier 2014b).

In the following, I explain *jugaad* as an example of a socio-material assemblage that has opened an agonistic space for further design adaptations and discussions.

# 2.1.5. Jugaad as an example of socio-material assemblage

Campbell (2017) states that many professional designers positioned within a development context have been unable to genuinely engage with local communities, attend to indigenous insights or effectively make use of the vernacular setting. Instead, he calls for grassroots innovation by *lay designers*. According to the author, lay designers are common people who do not have a professional or educational background in design, but who are able to devise the best possible solutions for their own problems through efficiently improvised design approaches and locally-available resources. Such frugal innovation approaches recall appropriate technology or intermediate technology, as it was originally coined, which is 'affordable, easy to maintain, compatible with existing infrastructure, efficient in the use of scarce natural resources, environmentally benign, and partial to small-scale' (Akubue 2000: 39). Examples of appropriate technological descendants include 'do-it-yourself or DIY (United States), hacking (England), *jugaad* (India), 自主创新 or *zizhu chuangxin* (China), Trick 17 (Germany), *gambiarra* (Brazil)' (Campbell 2012: 32).



Figure 1. A jugaad truck in a market town in Sawai Madhopur district, Rajasthan (Photo: Willy Logan)

Here I take *jugaad* as an example (see Figure 1). In terms of jury-rigging, affordable, customised and flexible approaches, jugaad was conceived by the lay designers of India. It has also recently become a popular practice against adversity (Radjou, Prabhu and Ahuja 2011; Prabhu and Jain 2015; Birtchnell 2011). It started as a 'quick fix' solution (as seen in bicycle conversions to load more goods and people); it not only claims to be an innovative and entrepreneurial approach against scarcity and deficiency of resources and infrastructure, but it is also a strategy that can possibly reach the mass market (as in Tata's Nano as a revolutionarily, affordable and visually appealing car) (Radjou et al. 2011; Kaur 2016; Singh, Gupta and Mondal 2012; Birtchnell 2011; Williams, Meth and Willis 2009; Brem and Wolfram 2014). Jugaad seems to be increasingly expected to uplift the local livelihood and economy, as innovators are reaching out to consumers at the bottom of the pyramid (BOP) by providing product-solutions that are closely linked to the improvement of quality of life (including water sanitation, sustainable energy systems, hygienic toilets, transportation and telecommunications) (Singh et al. 2012; Brem and Wolfram 2014). As jugaad offers quick, low-cost solutions through newly created perspectives, and as 'new businesses grew out of creative ideas, and inventive slum dwellers became small entrepreneurs' (Brem and Wolfram 2014: 4), it seems to have become a good example of explaining the socio-material assemblage. This is the point where human and non-human actors are recognised, stimulated and reconfigured in the process of forming a social

phenomenon (see Chapter 8.1). For example, in the process of jugaad, heterogeneous actors, including lay designers, farmers, Indian rural communities, adverse infrastructure, agricultural products requiring transportation, remodelling of vehicles and random water pumps, come together around an identified problem (Brem and Wolfram 2014). In this process, the relationship between each actor might be rearranged such that lay designers become innovative entrepreneurs, farmers develop into collaborative designers, random water pumps become engines and a remodelled vehicle turns into an authentic Indian response to rough countryside roads. The relationship might even be extended to the market outside the community where the remodelled vehicle might reach other farmers in similar situations in other villages. Moreover, the relationship can be iteratively changed and evolved in which the farmers may want to renovate the vehicle according to their needs.

While jugaad has been mostly discussed in a positive light, Birtchnell claims that 'jugaad impacts on society in negative and undesirable ways' (2011: 357). According to him, jugaad has been imprudently associated with global businesses and innovation by providing cheap and remedial jury-rigs. As a consequence, not only did jugaad come to put its lay designers at risk (such as in the improvisation of vehicle designs), but also the pedestrians and other drivers on the road (Birtchnell 2011). Without thorough investigation into the fundamental socio-technical problems and systemic jeopardy of India, jugaad is seen as nothing more than a risky quick fix. However, as noted earlier, jugaad has been praised for its efficiency, creativity and flexibility by a number of commentators (Radjou et al. 2011; Prabhu and Jain 2015; Singh et al. 2012). The reason might be that jugaad successfully demonstrated to the world the Indian ethics of creating and enterprising with 'limited access to capital, resources and infrastructure' (Mantri 2010: 1). This might have fitted well within the wider neoliberal mantra of doing more with less. Birtchnell (2011) argues that corporations in emerging markets have been exploiting such indigenous insights and practices to apply to their strategies and management. For example, jugaad equals 'guanxi (China), blat, mir (Russia), quan he (Vietnam) and ubuntu (South Africa)' (Kiggundu and Ji 2008: 80).

In summary, alongside designerly interventions in a development context, there has been an array of lay designers' efficient practices to improve the status quo through the local knowledge and resources at hand. Although jugaad is often claimed to be a successful

example of socio-material assemblage, it also poses the neoliberalist idea of exploitation that does not offer a fundamental and systematic transformation of a problematic situation. Jugaad invites lay designers and users to adapt and modify its use, creates and rearranges the public and the collective through the process of production, sales, distribution and promotion and further opens a space for contestation and conflict. However, it offers a good example with which to understand the notion of socio-material assemblage, infrastructuring and agonistic design, as explained in the previous section. The next section outlines the existing literature from development studies with a particular focus on cultural development.

# 2.2. Development studies

This section outlines key ideas in development studies to provide an understanding of the research setting in Cambodia in which the fieldwork of this thesis took place<sup>8</sup>. I first look at the definition and implications of development to build a common ground for the term throughout this thesis. I further explain the paradigm shift in development approaches during the past sixty years, which led to the rise of cultural development. With an emphasis on the significance of indigenous culture and local empowerment, I also discuss design approaches in handcraft communities in developing countries. By reviewing previous studies on the collaboration between designers and handcraft artisans in a development context, I highlight the knowledge gap in the existing literature, and establish a foundation for my fieldwork.

#### 2.2.1. The concept of development

Whereas the term has been widely used in both academic and practical fields, development does not precisely fall into a single definition. McGregor outlines two contrasting views of development. Generally, development can be explicated as a 'broad process of change or evolution', yet from the 'trusteeship' viewpoint, development is regarded as 'a specific set

<sup>&</sup>lt;sup>8</sup> Cambodia is classified as one of the least developed countries (LDCs) by the United Nations Conference on Trade and Development (UNCTAD) based on three measures: per-capita income, human assets and economic vulnerability (UNCTAD 2016). The GDP per capita of Cambodia was 1,269.91 USD in 2016 (World Bank 2017a).

of projects embedded with power relations and reacting to the destructive impacts of change' (McGregor 2008: 6).

**MDGs** aimed to achieve eight goals which included 18 targets and 48 indicators for measurement, by 2015. The main goals included:

- 1. To eradicate extreme poverty and hunger
- 2. To achieve universal primary education
- 3. To promote gender equality
- 4. To reduce child mortality
- 5. To improve maternal health
- 6. To combat HIV/AIDS, malaria, and other diseases
- 7. To ensure environmental sustainability
- 8. To develop a global partnership for development

### Specific targets included:

- Halve, between 1990 and 2015, the proportion of people whose income is less than 1 USD a day.
- Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.
- Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate.

In 2015, **SDGs**, officially titled 'Transforming our world: the 2030 Agenda for Sustainable Development', succeeded the MDGs as below:

- 1. No poverty
- 2. Zero hunger
- 3. Good health and well-being
- 4. Quality education
- 5. Gender equality
- 6. Clean water and sanitation
- 7. Affordable and clean energy
- 8. Decent work and economic growth
- 9. Industry, innovation and infrastructure
- 10. Reduced inequalities
- 11. Sustainable cities and communities
- 12. Responsible consumption and production
- 13. Climate action
- 14. Life below water
- 15. Life on land
- 16. Peace, justice and strong institutions
- 17. Partnerships for the Goals

Box 1. UN's MDGs and SDGs, adapted from: Sustainable Development Goals Fund (2017)

According to McGregor (2008), the former generalist perspective of development embraces attempts to improve the quality of life by ensuring the stable state of services in hygiene, education, water sanitation, health, housing and electricity. For example, the

'Millennium Development Goals (MDGs)' and the 'Sustainable Development Goals (SDGs)' deployed by the United Nations (UN) have been widely used to introduce this generalist idea of development (Sustainable Development Goals Fund 2017; Box 1). Likewise, this thesis sees development as a means for improving living conditions and quality of life by ending hunger and poverty, enhancing health and education systems, promoting gender equality, protecting the environment and so on.

On the other hand, the latter 'trusteeship view' addresses questions in relation to colonialism, exploitation of labour and resources and unilateral knowledge flow from the developed to developing countries (Escobar 1995; McGregor 2008; Chant and McIlwaine 2009). For example, Simon Springer, a geographer who specialises in the Cambodian socio-political context, notes that 'the development discourse has effectively normalized the right of the Global North to intervene, control, and reshape the practices and ways of life of the Global South' (2010a: 27). Development in this thesis refers to a progress in general. At the same time, the underlying implication throughout this thesis is to address the 'trusteeship' views on existing approaches to development interventions.

Understanding the complexity of the concept, classifications of countries and terminology in development studies should be cautiously acknowledged because these point to the question of 'who has the power to decide what should be valued and what denigrated' (Willis 2011: 16). There are a number of different ways to designate developing countries, mostly drawing on economic or political aspects. The distinction between the First World (rich capitalist nations in North America and Europe), the Second World (Union of Soviet Socialist Republics and other socialist states in Europe), and the Third World (most countries in Africa, Asia and Latin America) seems to have become outdated because the political conditions that once conceived such a distinction has now faded along with the collapse of communism and the rapid economic growth of many countries outside of Europe and North America. Moreover, the term Third World often seems to be misinterpreted by implying that the countries of the Third World are in third place in a hierarchical sense (Willis 2011).

Other terminology divides the world in binary systems. The use of Global North (industrialised nations) and Global South (the rest) might cause confusion because not all Global North nations are located on the northern side of the globe (such as Australia and

New Zealand) (Willis 2011). The 'Developed/developing' dichotomy gives an impression that 'developed' is the final state of culmination, although there exist inequalities 'within supposedly developed countries' (Jones 2000; Willis 2011: 17). Other terms such as more economically developed countries (MEDCs) and less economically developed countries (LEDCs) are alternatively adopted in some cases, highlighting economic status as the most relevant constituents of development (Willis 2011; Chant and McIlwaine 2009). However, such nomenclatures fail to recognise other political, cultural and social aspects that form the nature of development (Willis 2011).

A recent article on the World Bank's elimination of the term 'developing country' from its data vocabulary (Fernholz 2016) indicates the need for explicit terminology and classification drawing on accurate data. Whereas MDGs were supposed to encourage developing countries to achieve the goals by 2015, in their newer version, SDGs appear to urge the need for all nations to strive for their own development. A middle-class family in a developed country, for example, might have their own development challenges (Fernholz 2016). Another problem of the nomenclature within a development context is that it is impossible to embrace a vast spectrum of developing countries under just one category. Hence, it might not be appropriate to divide the world simply through a binary system. With the World Bank's initiation of a change in the way to categorise the world, an alternative term is likely to emerge that comprehensively reflects the diverse aspects of development and which is reciprocal in terms of geography and politics. For now, this study adheres to the use of 'developed and developing countries' because it is still the most widely used in most UN sources. I also assume that the term implies the general concept of development as improvement in multiple areas.

# 2.2.2. Paradigm shift in development approaches

Although there had been a long tradition of social reform in European history, the idea and practice of development came to the fore in the United States (US) during President Harry Truman's inaugural speech in 1949, as shown below (Schech and Haggis 2000; Willis 2011):

For the first time in history humanity possesses the knowledge and the skill to relive the suffering of these people [...] What we envisage is a program of development based on the concepts of democratic fair dealing... Greater production is the key to prosperity and peace. And the key to greater production is a wider and more vigorous application of modern scientific and technical knowledge. (Truman quoted in Escobar 1995: 3)

As seen above, development approaches began with *modernisation theory*, focusing on the use of modern technology across all sectors of economy to bring about 'industrialisation, urbanisation, social mobilisation, differentiation, secularisation, media expansion, expansion of political participation, increasing literacy and education' (Schech and Haggis 2000: 11; Willis 2011) (Table 1).

During the 1950s and 1960s, modernisation theorists perceived development to be synonymous with economic growth, which would bring increased productivity and improved standards of living to non-Western nations; as a consequence, modernisation-based development has resulted in the Westernisation of developing nations (Schech and Haggis 2000). Indigenous traditions and values were regarded as harmful and a hindrance to be eliminated as local cultures were seen 'as barriers to the expansion of western cultural attributes and development' (Radcliffe 2006a: 11).

In the 1970s, the *basic needs concept* arose counter to the previous top-down approaches of modernisation theories and its failure to improve the rate of poverty in developing countries (Schech and Haggis 2000; Willis 2011). The basic needs approach extended the boundary of development beyond economic growth by raising awareness of humanitarian and social justice issues, improving conditions for health and education and promoting gender equality (Willis 2011). Simultaneously in the design discipline, Papanek, in his book *Design for the Real World*, urged designers to participate in the shaping of a better society by rebelling against 'colonialism or neocolonial exploitation' (Papanek 1983: xiii). However, his proposal was perceived to be 'an attack on Detroit mixed with a utopian concern for minorities' by the professional design society in the US (Papanek 1983: xvi). It seems that the humanitarian approach became part of development studies from the 1970s onwards; however, it was too early for the design discipline to accept such a concept as a mainstream practice.

Main approches	Period	Emphasis	Descriptions	Key authors / thinkers
Modernisation thoeries	1950s - 60s	Economic growth	"The Third World should follow the western standard of economic and industrial development."	<ul><li>Walt Rostow (1960)</li><li>W. Arthur Lewis (1964)</li><li>Samuel P. Huntington (1971)</li></ul>
Basic needs approaches	1960s - 70s	Economic growth	"Humanitarian aid approach needs to be delivered in development."	- World Bank under the presidency of Robert McNamara (1968-1981) - Paul Streeten (1981)
Dependency theories	1960s - 70s	Economic growth	"The disadvantaged condition of the Third World was derived by the developed countries' exploitation."	- André Gunder Frank (1967) - Celso Furtado (1976)
Neoliberalism	1980s -	Economic growth Liberal democracy	"The role of market should be emphasised, instead of the state's intervention."	- Deepak Lal (1983) - Bela Balassa (1971, 1981)
Grassroots activities and participation	1980s -	Diversity Empowerment	"Local knowledge and indigenous culture should be considered."	- Jo Rowlands (1998) - Van Rooy (2008)
Sustainable development	1980s -	Environmental protection	"The environment should be protected in the process of industrialisation and development."	- Jennifer A. Elliott (2006)
Post-development	1990s -	Critical view on Eurocentricism	"Development is the process of posing the idea of Eurocentricism and neo-imperialism."	- Arturo Escobar (1995, 2007) - Aram Ziai (2007)
Cultural development	Late 1990s -	Cultural diversity Empowerment	"Cultural context and ethnic communities should be considered to empower the local stakeholders."	- Susanne Schech & Jane Haggis (2000) - Sarah A. Radcliffe (2006a, 2006b)

Table 1. The paradigm shift of development approaches, adapted from: Willis (2011: 28, 225) with modifications (descriptions) and additions (by key authors/thinkers)

Along with the basic needs approach, *dependency theories* emerged, which viewed development as a result of the West's exploitation of the developing economies through unequal trade of raw materials and imbalanced power relations (Frank 1967; Furtado 1976; Schech and Haggis 2000; Willis 2011). Those who advocated dependency theories held the view that '[e]conomic development and underdevelopment are the opposite faces of the same coin', but which are indeed related to each other (Frank 1967: 9). Up to this point, it seemed that development commentators regarded developing countries as passive and incompetent objects that were incapable of propagating their own progress.

The global economic crisis of the 1980s and previous failures in development models resulted in the *neoliberal approach*, which not only reduced the budget for international development, but also made the West focus on decentralisation. The role of companies and NGOs were expanded while government involvement was seen as 'detrimental' in development (Willis 2011: 225). Decentralisation fitted well with neo-liberalist development in both economical and political aspects, as it provided cost-efficient ways to budget and manage projects and encouraged the public to take part in the decision-making process (Willis 2011). This approach seems to be treating 'endless growth as the solution to poverty', giving economic and political power to the external experts, donor states and indigenous elites (Springer 2010a: 27-28). The dominant definition of development up until this point seemed to be largely shaped by economic and political terms in which the primary objective of development was to achieve economic growth and liberal democracy.

Bottom-up *grassroots activities and participation* emerged along with the rise of neoliberalism and decentralisation in the 1980s, which began to consider local knowledge and indigenous culture as vital in development (Rowlands 1998; Van Rooy 2008). NGOs became important actors in this process by facilitating participation of local communities and stakeholders.

Sustainability also has become a key approach in development to balance economic growth and environmental preservation (Elliott 2006). Since the UN addressed an action plan for sustainable development at the UN Conference on Environment and Development (UNCED) in 1992, sustainability has become 'a key element in development theorizing and policy-making' (Willis 2011: 179). This approach pursues development with a

particular focus on the protection of natural resources and the environment, hence ensuring a 'high quality of life' for both current and future generations (McGregor 2008: 183). The recent *post-development* approaches perceive development as a representation of Eurocentrism and neo-imperialism that imposes Western values on the rest of the world (Escobar 1995, 2007; Ziai 2007). Post-development theorists affirm the need to prioritise local community and the indigenous context in the course of development, instead of forcing the western agenda as a global standard. However, this idea also faces criticism in that development does not necessarily work in a stereotypical superior-North-versusinferior-South image; rather, it is better to be considered as a diverse and dynamic constellation with varying actors, communities and socio-political contexts (Willis 2011). To sum up, the main approaches of development have shifted from modernisation, the basic needs concept, dependency theories, neo-liberalism, grassroots approaches, sustainability to post-development, transferring and expanding its focus from economic growth to democracy, sustainability, local participation and cultural diversity. Such a transformation of the definition and role of development towards an inclusion of indigenous culture and local empowerment led to the rise of cultural development in the 1990s. The next section on cultural development serves as a theoretical background for my fieldwork, which explored social design thinking approaches in the Cambodian context.

## 2.2.3. The rise of cultural development

Culture is a complicated concept to be defined in a singular term; however, Schech and Haggis provide a two-fold meaning of culture in the development context through an anthropological view as: 'the meanings, values, and ways of life of a particular group' that pursues social cohesion and continuity; and 'the social practices which produce meaning', such as languages, rituals, symbols and activities (2000: 21). Both definitions are interrelated and appreciate indigenous knowledge and traditional values that have shaped communities and bound people together.

As explained above, researchers and practitioners in the early days of development saw culture as an obstacle to development and indigenous people as 'primitive' who needed to be civilised by the West (Schech and Haggis 2000: 18). However, culture emerged in the development theories and practices from the late 1990s against previous modernisation-based approaches that caused an environmental crisis and dissolution of indigenous

communities (Schech and Haggis 2000; Radcliffe 2006a, 2006b). Academic commentators argue that the significance of culture became apparent as a result of the rise of neoliberalism (Schech and Haggis 2000; Willis 2011; Radcliffe 2006b) while a number of reports from multilateral organisations link cultural development to the progress of human development. On cultural development as a part of a larger political and economic transformation, Radcliffe (2006b) notes that neoliberalism has rediscovered culture as an arrangement of material objects and idiosyncratic behaviours; therefore, *culture-as-products* became to be perceived as profitable. Furthermore, Radcliffe makes a strong argument to place cultural development in the context of globalisation and neoliberalism:

[C]ultural development thinking needs to be understood within the context of a globalizing capitalist market economy, rather than as – or in addition to experiments of – a grassroots "alternative" development model. Recognizing how global political economies work through difference, culture-as-product plays to the market opportunities opened up for culturally unique goods and services. (Radcliffe 2006b: 234)

Similarly, Beatty and Gibson (2009) explain that neoliberalism situated in a development context encouraged nations to seek the point of differentiation in order to generate economic competitiveness in a global market, and they argue for the benefits of cultural distinctiveness. By understanding the indigenous particularity of each local context, empowering local communities and encouraging people to participate in the making of their own socio-economic progress, culture has become increasingly practised as a holistic and integrated approach to enhance individual capacities and achieve lasting development (Beatty and Gibson 2009).

Multilateral organisations and NGOs also advocate cultural development as a way of establishing a ground for human development<sup>9</sup> that can help locals to 'achieve a more satisfactory intellectual, emotional, oral and spiritual existence' (Richard 2007; Maraña 2010; see Box 2). For example, supporting traditional craft artisans does not only contribute to income generation and poverty reduction of the community, but it can also empower women by raising their status as the main agents of economic activities (Beatty and Gibson 2009; Maraña 2010).

<sup>&</sup>lt;sup>9</sup> UNESCO enacted conventions on the 'World Heritage' in 1972, 'Safeguarding of the Intangible Cultural Heritage' in 2003 and the 'Protection and Promotion of the Diversity of Cultural Expressions' in 2005.

Cultural development has become an important approach, yet it is worthwhile to note its criticisms. For example, Colombia-based, economic anthropologist Gramajo (2014) argues that while market penetration into the traditional ceramic community of La Chamba in central Colombia contributed to technological improvement and economic growth, it also produced an economic gap and certain inequalities within the community (Gramajo 2014).

**Example 1.** Declaration of the Principles of International Cultural Cooperation (UNESCO 1966) addressed the following themes:

- 1. Each culture has a dignity and value which must be respected and preserved;
- 2. Every people has the right and the duty to develop its culture;
- 3. In their rich variety and diversity, and in the reciprocal influences they exert on one another, all cultures form part of the common heritage belonging to all mankind.

**Example 2.** UNESCO enacted the World Decade for Cultural Development between 1988 and 1997, with four objectives:

- 1. Take into account the cultural dimension of development:
- 2. Affirm and enrich the cultural identities;
- 3. Broaden the participation in cultural life;
- 4. Promote international cultural cooperation.

**Example 3.** United Nations Conference on Trade and Development (UNCTAD) has been publishing annual reports on creative economy, by stating that "[a]dequately nurtured, creativity fuels culture, infuses a human-centred development and constitutes the key ingredient for job creation, innovation and trade while contributing to social inclusion, cultural diversity and environmental sustainability" (UNCTAD 2010: xix).

**Example 4.** United Nations Population Fund (UNFPA) noted in 2008 that 'culture is and always has been central to development. As a natural and fundamental dimension of people's lives, culture must be integrated into development policy and programming' (UNFPA 2014).

Box 2. The emphasis on cultural development made by UN-related organisations

While the policy-oriented approaches by UN bodies, mainly led by United Nations Educational, Scientific and Cultural Organization (UNESCO) tend to celebrate the

significance of cultural aspects through successful cases, Gramajo's (2014) study draws attention to the negative consequences of cultural economic activities. Likewise, Escobar, an anthropologist and a post-development scholar, offers a critical perspective in that he sees development as the Western nations' *discovery* of poverty in developing countries and imposition of cultural imperialism in the post-colonial era (Escobar 1995, 2012; Reid-Henry 2012). Therefore, it becomes important to conduct cultural approaches without forcing cultural imperialism in the process. This research proposes an approach to social design, which can explore the problem and solution space, and facilitate participation and continuing development. This way of practising social design seeks to counter the widening economic gap and inequality that might be created in the process of top-down development interventions.

# 2.3. Design approaches in handcraft communities in developing countries

In previous sections, I have explained two distinctive movements in the discipline of design and development: the emergence of social design as a means of social innovation; and the rise of cultural development as a sustainable approach to preserve indigenous cultures and generate extra income in local communities. Such tendencies have been shaped by the simultaneous larger movement of the world toward industrialisation and globalisation. Social design came to the fore in response to a stalemate in which social problems could not be solved through existing methods while cultural development arose in relation to neoliberalism and cultural protection. In this section, I indicate cases of design interventions practised in handcraft communities in developing countries. By doing so, I demonstrate the ways in which design approaches have been used as an effective tool to make positive changes in handcraft communities.

#### 2.3.1. Handcraft for cultural development

As culture emerges as a significant part of development, it is important to pay attention to handcraft communities and artisans in developing countries. As briefly explained in the previous section, cultural production has been increasingly considered as a means of

poverty reduction and preservation of culture (Schech amd Haggis 2000; Radcliff 2006a). Consequently, the significance of handcraft is to be acknowledged. The definition of craft and artisanal products is sufficiently described below:

Artisanal products are those produced by artisans, either completely by hand, or with the help of hand tools or even mechanical means, as long as the direct manual contribution of the artisan remains the most substantial component of the finished product. [...] using raw materials from sustainable resources. [...] (They are) utilitarian, aesthetic, artistic, creative, culturally attached, decorative, functional, traditional, religiously and socially symbolic and significant. (UNESCO 1997: 6)

This suggests that the nature of craft not only consists of aesthetic and functional aspects, but also skills, knowledge and traditional values that have transcended generations. Artisans and communities of indigenous handcraft culture can form a crucial part of cultural development not only in terms of cultural sustainability, but also for economic progress and social cohesion through increased employment. For example, the World Commission on Culture and Development of UNESCO saw the craft industry form about twenty-five percent of small and medium enterprises in the developing world (Filho, Diehl and Crul 2010).

Despite the growing interest in the crafts in cultural development, crafts are situated in somewhat complex contexts. As explained earlier, indigenous cultures and traditions in developing countries used to be disregarded under the dominance of the modernisation theories of the 1960s and 1970s (Willis 2011; Schech and Haggis 2000). It was not only the outsiders that considered local culture as a hindrance for development, but also the locals generally neglected their own culture. However, multilateral organisations, mainly led by UNESCO, raised public awareness on the significance of cultural approaches in development, and the concept became one of the main driving forces in the theories and practices of development.

While globalisation has forced artisans to gradually disengage from the contemporary market, excluding them from the process of designing, marketing, distributing and sales, there appears to be a growing niche for original, creative and authentic products distinct from the standardised homogenous products from global corporations and brands (Craft Revival Trust, Artesanias de Colombia S.A. and UNESCO 2005; McIntyre 2010). An increasing number of consumers are becoming aware of crafted products and the cultural values attached (Lin 2007; Moalosi, Popovic and Hicklin-Hudson 2007; Tung 2012). In an

attempt to support handcraft industries, a number of Asian nations have been adopting the 'One Village One Product (OVOP)' initiative, originating in Japan to consolidate and promote distinctive handcrafts product by local artisans (Rana 2008; Tung 2012).

# 2.3.2. Designers' interventions in handcraft communities in a development context

Designers' intervention has been increasingly discussed as a means of preserving and revitalising traditional handcraft culture in developing nations (Filho et al. 2010; Craft Revival Trust et al. 2005). The role of design and designers are explained as below:

Design has an important role in ushering in economic and social change... encouraging environmentally sustainable and economically viable models of craft activity, and helps in the empowerment of marginalized groups [...] Designers work as catalysts, where intervening to involve hitherto excluded groups in craft activity, or in helping existing artisans deal with new clients through packaging, transportation, education and training. (Craft Revival Trust et al. 2005: 6)

In this sense, designers are expected to connect rural artisans and urban markets, reinterpret traditions in a modern way and help artisans' traditional skills and knowledge to be matched by the globalised market demands. Design interventions can help artisans to understand the customer/market sensitivity by learning about new markets, consumer demands, trends and preferences while raising awareness among artisans of the need to appropriate their 'methods, materials, tools and processes that serve as value addition to their craft' (Craft Revival Trust et al. 2005: 5). The process of handcraft revitalisation may involve a number of practices. These include the process of developing skills and documenting traditions and work processes, as well as a restoration of traditional motifs and design techniques and an experimentation with new materials (Craft Revival Trust et al. 2005). There are further planning and administrative aspects such as costing, quality control, production and marketing strategies that are involved (Craft Revival Trust et al. 2005). Another useful addition would be information technology, which might be used as a means of researching the market and design sources, including online platforms for distribution, sales and marketing. This may lead artisans to explore new markets, participate in trade fairs and exhibitions and communicate with potential customers interested in indigenous culture and crafts.

In recent years, there have been a number of projects that have attempted to revitalise handcraft traditions through a collaboration with designers and/or social enterprises. For example, Folkk, an entrepreneurial collective with loose creative networks and online business platforms, has been linking skilful artisans and young designers in the Balkans. In this process, Belgrade-based Folkk aims to revitalise and promote endangered traditional crafts by young designers while offering jobs for marginalised people and selling their products through its online platform (Đorđević 2017a, 2017b; Gavrilović 2017).

Nonetheless, this movement towards a collaboration between handcraft culture, designers and social enterprises is rarely found in the academic literature. Hence, there appears to be a gap between the academic literature which has been focused on social design cases in the Western context, and individual cases which have been trying to connect craft, design and social enterprises in development settings but without academic investigation.

#### Conclusion

In this chapter, I outlined the key literature of design culture and development studies to provide an understanding of social design through a cross-disciplinary perspective. The notion of socio-material assemblage, as advocated in design culture, not only helps researchers and practitioners overcome conventional dualisting thinking, but also leads to rearranging of the tangled relationship between human and non-human actors around social issues. It also contributes to the unfolding of complex situations and opens an agonistic space for ongoing changes that are to be made by the stakeholders. This chapter also provided certain leading debates in development studies for a comprehensive understanding of the research setting for this thesis. This thesis is particularly engaged with cultural development approaches, which appreciate the significance of indigenous knowledge and cultural distinctiveness to draw lasting impact. The chapter highlighted the role of handcraft in cultural development, and previous interventions made by designers in handcraft communities in developing countries.

By looking at both design and development disciplines, this chapter addresses the gap in knowledge in three ways. Firstly, although design culture has provided useful insights to social design discourse particularly through the notion of socio-material assemblage, most practices have been tested in the West, notably in Scandinavia. Secondly, while development practitioners have made a number of design interventions in local communities, their cases are less visible in the academic literature (as in IDEO 2015;

Đorđević 2017a, 2017b; Gavrilović 2017). Finally, acknowledging the scarcity of designer contributions to the development discipline suggests that studies in social design practices might offer meaningful additions both to academic and practical fields. Although the existing literature provides a useful conceptual background to establish the theory and practices of social design, there is no comprehensive study that discusses design practices in a development setting with the notion of socio-material assemblage. The interrelationship between designers, stakeholders, objects, methods, processes, ideas, emotions and the context is to be considered in the exploration of a 'new' social design approach. Consequently, I argue for the need for further investigations in social design practices in developing countries, with a focus on handcraft as a means of cultural development.

The next chapter explains the methodological approach of this thesis, consisting of action research, participant observation, semi-structured interviews and visual ethnography.

# 3. Methodology

In this chapter I explain my methodological approach, and how it was developed during the period of my empirical fieldwork in Cambodia. I also demonstrate the ways in which chosen methods, that are action research, participant observation, semi-structured interview and visual ethnography, engaged with the social design enquiry in a development setting. I also discuss the importance of recognising and reflecting on the researcher's ontological position throughout the research and the ways in which the former two affected the fieldwork and subsequent research in terms of its epistemological stance.

# 3.1. Methodological turn to an empirical fieldwork

As explained in Chapter 1.3. Personal Journey, this research had little clear focus until the time of the fieldwork in Cambodia. The research initially began investigating the relationship between social design and its communication in Korea through observation and within grounded theory. However, through my new research interest in the Cambodian handcraft pottery community, I became doubtful if observation alone could collect sufficient data to generate new knowledge on social design. The literature review and preliminary field visits led to the question: how should I investigate social design, which involves both an emerging subject (social design) in a lesser studied research setting (development context)? The need for an innovative research methodology came to the fore.

It seemed logical to conduct an empirical fieldwork, considering that such an approach would allow for an exploration and understanding of social design practices. The qualitative research framework remained; however, the set of methods had to be reconsidered. Cambodia as a research setting also meant that I had to extend the literature review to development studies (see Chapters 2 and 4). To explore the implications of social design and the designer's role, it became important to immerse myself within the context and interact with the participants and their situation, instead of merely observing the research subjects as out-thereness (Lury and Wakeford 2012; McNiff 2013). Action research, as one of the data collecting methods, not only helped in terms of understanding

the real-world situation, but also in devising an inventive approach to social design in the development context. The fieldwork emphasised the facilitation of local participation in ceramic production in the Cambodian handcraft community. The fieldwork included the process of collecting local tacit knowledge, eliciting Khmer cultural distinctiveness, instilling confidence and informing the stakeholders of the outside market. During the course of events, I had to consider the relationship between certain multi-layered entities, including the stakeholders, actors, the situation, methods and processes (Lury and Wakeford 2012; Guba and Lincoln 1994; Lincoln and Guba 1985).

Researchers of design, sociology and development studies have been calling for an experimental outlook to methodological approaches (Lury and Wakeford 2012; Marres 2012; Michael 2012a, 2012b; Newbury 1996; Escobar 2012). For example, in the design literature, Newbury advocates the significance of practice-based research by arguing that '[r]esearch should not simply be about the application of predefined methods, but should involve the development of methodology itself' (1996: 10). This idea implies that the researcher should become innovative with his/her research approaches, which is to be engaged with the research setting, subjects and participants.

Similarly, ANT scholars and other sociologists propose to use socio-material assemblage to explore the relationship between actors, phenomenon, methods and processes (Latour 2005; Lury and Wakeford 2012; Marres 2012). They suggest that an individual idea or phenomenon cannot exist on its own, but in relation to other entities; therefore, one cannot find out what is happening through a customary, rational approach. To understand and unfold a real-world problem, attention must be paid to the 'constantly changing constellations of things, procedures, abstractions, mediations, sensitivities and socialibilities in the apparatuses, configurations or assemblages of social research' (Lury and Wakeford 2012: 9).

In development studies, Escobar (2012) argues to overcome the conventional tendency towards fundamental dualisms that can be seen in the divide between human and non-human, individual and collective, developed and developing, and so on. According to Escobar, these dualistic ideas originated from the tradition of rationalistic, objectivist and colonialist philosophy, and they do not provide sufficient answers for the complex issues which have been emerging in the contemporary world. Such an argument against

dichotomies can be traced back to the notion of *knowing-in-action* and *reflection-in-action* by Schön (1983), which suggested that researchers build theories from lived experience, interactions and participation within the research context, and from our understanding and interpretations of these. These approaches enable researchers to acknowledge *wholeness*, which does not necessarily separate theories and practices, but instead seeks to generate knowledge that reciprocally develops through dialogue between theories, empirical practices and reflections (Reason 1998; Schön 1983). I found this knowing-and reflecting-by-doing approach useful and relevant to my personal philosophy as well. Conducting social design practices in Cambodia not only broadened my capability for critical thinking, but it also contributed to my personal development as a design practitioner-researcher.

As a consequence of seeking a well-rounded empirical research, I take design anthropology as a methodological approach by adopting ethnographic methods in my social design thinking enquiry. Clarke argues that design anthropology 'is emerging as a methodology as much as a discourse' (2011: 10), which can provide an alternative perspective to understanding the world away from dualistic thinking. This is possible since design anthropology combines the theoretical and methodological tradition of anthropology (through 'cultural interpretation... contextualization... and holistic explanation') and the practicality of design (through the use of visual tools, an interventionist approach for social transformation and an interdisciplinary collaboration) (Otto and Smith 2013: 3-4). Just as design has been using anthropologic theories and practices (i.e. participant observation) to rebel against its conventional focus on 'function and form' and become more focused on a 'human-centered approach', anthropology has been paying attention to a design thinking approach to escape from the preconceptions around what the fieldwork should be like (Bichard and Gheerawo 2011: 51). Through this novel hybrid, design anthropology can reveal 'the entanglement of everyday life... that could not have been imagined through more formal methods of questionnaires and interviews' (Prendiville 2015: 196). My methodogical approach demonstrates the ways in which ethnographic methods (i.e. participant observation and visual ethnography) can be incorporated into the designery way of thinking and doing (i.e. collaborative action research workshops). This proved to be useful both for my research and the participants of the handcraft pottery community since design anthropology can provide exploratory ways to 'critically look at, and construct, our worlds, in more inclusive ways' (Escobar 2012:13).

# 3.2. Main approaches

To explore the practice and implications of social design in a Cambodian handcraft pottery community, a combination of action research, participant observation, semi-structured interview and visual ethnography were employed as a means of data collection. This section explains the ways in which these chosen methods served the research objectives and process throughout the fieldwork.

#### 3.2.1. Action research

Action research is known to be closely associated with the ideas of social change, participation, democratic process and improvement of human and environmental conditions (McNiff 2013; 2014). The objectives of action research are defined below:

(a) The generation of new knowledge, (b) the achievement of action-oriented outcomes, (c) the education of both researcher and participants, (d) results that are relevant to the local setting, and (e) a sound and appropriate research methodology. (Herr and Anderson 2005: 54)

Similarly, Kemmis and McTaggart (2005: 560) describe three distinctive characteristics of action research as the 'shared ownership of research projects, community-based analysis of social problems, and an orientation toward community action'. Throughout this research, action research proved to be useful in the process of exploring the implications of social design practices in three ways. Firstly, action research allows the researcher to investigate real-world problems at a community level. In response to my research questions, enquiring about what was happening and what could be done to improve the situation in the handcraft pottery community of Cambodia, action research fitted well in seeking social change through a collaborative and democratic work process within a small group of local stakeholders. It allowed me to immerse myself in the context, participate in the community and experiment with a set of methodological approaches to social design with the locals. As action research embraces the idea of improvement and involvement (Robson 2011), it proved to be useful for the SDTWs - the action research based approach used in the fieldwork

Secondly, action research not only leads to knowledge generation, but it also enables a mutual learning experience for both the researcher and participants. This helped to build

mutual respect that became crucial throughout the fieldwork. Action research is a social process because it involves a series of interactions between people, and it helps to generate collective knowledge in the world where we 'live with the consequences of one another's actions' (McNiff 2013; Kemmis and McTaggart 2005: 563). At the same time, its nature as a spiral and iterative process enables both the researcher and the participants to constantly reflect on the practice for further improvement (McNiff 2014; Robson 2011; Schön 1983). For example, throughout the SDTWs, the participants were able to improve their creative thinking skills and rethink their work, aspirations, challenges and life as part of the workshops. At the same time, action research led the researcher to consider her positionality and epistemological approach within the fieldwork, which later contributed to the establishment of the key argument in this thesis. In other words, action research provided a chance not only to collect and produce knowledge, but ultimately to facilitate the personal development of the researcher and the participants. It is worthwhile to note that such a personal learning experience was an important part of action research because social change starts with the processes of personal transformation (McNiff 2013).

Finally, action research allows the researcher to devise a viable action. It pushes the boundary of traditional armchair scholarship, not only in terms of knowledge creation, but in its enactment (Schön 1983). This is particularly important in the development context, as '[k]nowledge generation is not an end in itself, but a means contributing to the improvement of natural and social conditions' (Molteberg and Bergstrøm 2000: 7). Through the early observation, I realised that what I was going to research would be directly related to the everyday life of the local stakeholders, and that my research would affect them in a positive or negative way. For instance, it was possible that the research resulted in an exploitation of their time and energy that could otherwise have been invested in their livelihood. A number of previous interventions made by external experts appeared to be problematic, according to my observations, failing to deliver substantial outcomes and only creating a sense of cynicism and dependency among the community. Hence, two core objectives were sought after: to achieve academic rigour and to conduct fieldwork that would be useful for the people in terms of their personal development and profit-making. At the same time, I tried to be realistic in terms of doability, such as the scope and timeline of the fieldwork, through several rounds of planning (see Chapter 6.2) and preparatory field visits (see Chapters 4.4.2 and 5).

Commentators stress that action research is strongly associated with socio-political intent as it starts with a researcher who problematises the situation with an intention to improve it (McNiff 2013; Kemmis and McTaggart 2005). The questions about what is regarded as knowledge, who decides it, what to improve for whom and why become important points with which to initiate thinking about the relationship between knowledge and power relations. I follow Foucault's view on power as 'the multiplicity of force relations' (1979: 92), rather than simply seeing it as a tool of oppression (Lukes 1974) or biasing (Bachrach and Baratz 1970). In this view, power is embodied through relational networks of discourses and practices that define the boundary of actions and possibilities (Gallagher 2008; Gaventa and Cornwall 2001). Instead of dividing the advantaged and disadvantaged, or the researcher and researched, Foucault's (1979; 1980) idea on knowledge/power can enable us to explore the world through the relational and dismantling nature of power because 'through access to knowledge, and participation in its production, use and dissemination, actors can affect the boundaries and indeed the conceptualization of the possible' (Gaventa and Cornwall 2001: 72).

In the similar vein, action research can help the researcher test the ways in which new kinds of knowledge are 'framed and given voice' based on indigenous insights and local conditions (Gaventa and Cornwall 2001: 75). Cautious consideration should be given in this process, however, not only because people often tend to resist change and prefer 'familiarity [which] often gives security' (McNiff 2013: 126), but there is also the risk of ignoring the plural and egalitarian voices in the name of consensus as well as the possibility of unconsciously internalising dominant thoughts (Gaventa and Cornwall 2001). Therefore, the researcher has to be reflective by constantly questioning himself/herself: is this what the participants want or is it my wants? Acknowledging that such intentionality can be embedded in action research, I was keen to not impose my thoughts on the participants throughout the fieldwork. I had invested more than a year building trust with the stakeholders of the pottery community in Kampong Chhnang. From this foundation, the participants decided to join the SDTWs, and felt able to express their ideas and feelings comfortably. Consequently, this approach bound us all until the end of the SDTWs since we were able to work together as a like-minded group with a shared goal.

The decision to employ action research as a means of conducting the SDTWs aroused a set of ontological and epistemological notions which had been iteratively considered before, during and after its practice. The following sections outline the process of establishing the researcher's positionality and epistemological stance.

### Researcher's Positionality

As action research was adopted as the main method, the issue of the researcher's positionality became a major consideration. This arose during the first contact with the stakeholders of the pottery community in Kampong Chhnang. Although I introduced myself as a researcher who was planning to conduct a fieldwork there, the locals tended to regard me either as a wealthy buyer or an NGO staff member who might release money for them. Therefore, it became important to position myself correctly as a researcher to avoid any misunderstanding in the course of the fieldwork. I repetitively explained who I was, what I planned to do, why I wanted to work with them and how it would proceed. Above all, I emphasised the need for their participation. There were two main aspects to consider in terms of setting and communicating my positionality.

Firstly, in terms of an internal perspective, I had to define my position as a practitioner-researcher. This included revisiting my personal background, all the elements that constituted me: where I grew up, how I was educated, what kind of lifestyle I had, what kind of ideology I favoured, my values, religious views, socio-political stance and cultural perspective. In other words, I underwent a process of what could be called an ontological realisation about myself. My personal identity seemed to be different to those of the local potters at every level. I would not be able to communicate with them in the same way I did with my family, friends and colleagues in Korea and the UK. This realisation let me to repeatedly question myself about certain ontological issues, positioning myself as a practitioner-researcher from the outside, and trying to learn about the local culture and values.

Secondly, in consideration of external factors, I had to decide what kind of relationship I wanted to establish with the participants. In collaborative practice-based research, the researcher's positionality directly influences the research itself (McNiff 2013). This includes the following questions about whether to perceive and treat the others as: a research subject, an 'It'; or as participants who have a mutual relationship with the

researcher, a 'Thou' (McNiff 2013: 28). Following the precepts of the 'I-Thou' relationship, I avoided being known as a teacher or someone who might seem to be superior to the locals. Being a teacher could have hindered their empowerment, participation and potential for honest discussion. This is particularly true in the development context where external knowledge is often seen as 'an instrument of power' (Briggs 2005: 106). Hayward (1998) builds on this idea by seeing power as boundaries, which enable and constrain possibilities for action. Instead, I was keen on positioning myself as a researcher and facilitator, who was there to work *with* them. The Khmer potters were respected as the research participants, not as a research subject or an 'It'.

It should be noted that the language difference was challenging to a certain extent during the fieldwork. The participants and I communicated through my Khmer-English translator. Nonetheless, I invested additional effort into learning Khmer, which enabled me to use some words and have short conversations with the participants. This helped to establish rapport with them.

### Epistemological stance

The ontological realisation and establishment of 'I-Thou' relationship (McNiff 2013: 28) led to an epistemological consideration. When the researcher collects data and create outcomes with the participants, what can be claimed as knowledge? How can you explain that you came to know it? How can you claim that the knowledge is valid, relevant and rigorous? (Schön 1995; McNiff 2013).

Conventional approaches in epistemology and methodology can be problematic when applied to a development context because existing theories and methods often do not work the same way they do in a traditional academic field (Sumner and Tribe 2004). How is it possible to produce legitimate knowledge in collaboration with the Khmer participants, who have hardly any knowledge of 'design'? Schön (1995) offers some insights. He identifies two types of knowledge: traditional and scientific academic knowledge, known as *high ground*; and knowing-in-action, which later develops into *reflection-in-action*. It is based on practice and experience, which he calls *swampy lowlands*. Traditional academic knowledge consists of rational and analytic approaches, positivistic theories and techniques to solve manageable problems. On the other hand, knowing-in-action researchers explore the swampy lowlands filled with ill-defined, open-ended and complex problems by

experiencing and reflecting on a series of trials and mistakes. Through the iteration of practices, reflections, modifications and new findings, researchers become able to grasp evidence that may lead to a generation of living knowledge grounded in their experience. Equally, knowledge is never static, but it continually interacts with the researcher (Molteberg and Bergstrom 2002; Sumner and Tribe 2004).

These knowing- and reflection-in-action approaches allow for an explorative and reflective process of practising an experimental approach to social design. By acknowledging the significance of tacit knowledge, the relationship, thoughts and emotions of the participants, these sources all become valuable data to be used for investigating the implications of social design in a Cambodian context. Such an approach led me to understand and reconfigure the constituents of the research setting. This became possible through the 'I-Thou' relationship with the participants by accepting their wisdom and experience as part of an embodied learning process. By emancipating knowledge from dominating rational, technocratic episteme, action research can become a useful research approach as a means of data collection and relationship-building.

### 3.2.2. Participant observation

Participant observation provides an opportunity to witness the course of actions, interactions and events within phenomenon in the real world, allowing the researcher to be 'active, reflexive and flexible' (Robson 2011: 145). Its strengths come from the ability to allow the researcher 'direct experiential and observational access to the insiders' world of meaning' (Jorgensen 1989: 15). Participant observation allowed me to situate and immerse myself in the research setting. Through this, I could closely watch the work and interaction between the participants, objects, events and their everyday surroundings within the pottery community in Kampong Chhnang. The collected data was recorded in a research journal in the form of descriptions, anecdotes and personal reflections. Here, I outline three benefits of using participant observation: understanding reality, reinforcing a sense of belonging and recognising socio-material assemblage, and I further address certain issues to be considered.

### Understanding the reality

Participant observation is commonly used in ethnographic approaches in anthropological studies, particularly due to its ability to provide a subjective reality (Yin 2003; Robson 2011). As the real-world consists of 'subjective meanings and experiences constructed by participants' within the research setting (Robson 2011: 319), the researcher's participation and immersion within the situation makes it possible to better understand and interpret the situation (Robson 2011). While the sole use of the interview method may pose 'notorious [...] discrepancies between what people say that they have done, or will do, and what they actually did or will do', participant observation may provide additional insights to complement such inconsistencies (Robson 2011: 316).

Throughout the fieldwork, participant observation took the longest time, spanning the twenty-month period of empirical research in Cambodia. It played an important role in the preliminary phase of the research in which there was the scarcity of resources to understand the contextual background. Participant observation can be particularly useful at the exploratory stage as it helps to 'find out what is going on in a situation as a precursor to subsequent testing out of the insight obtained' (Robson 2011: 317). As such, this hands-on method was suitable to investigate the Cambodian context of pottery production prior to conduct the SDTWs.

### Reinforcing a sense of belonging

Participant observation helps to form a sense of belonging by offering a 'privileged access to meanings through the researcher's empathetic sharing of experience in the worlds he or she studies' (Platt 1983: 380). Earlier in this chapter, I explained the importance of positioning the researcher's ontological stance to be able to immerse in the community and build mutual trust with the participants. Participant observation performed an important role in this process in terms of understanding and learning about the culture of the research setting, unfolding parts of myself to them and forming a consensus regarding my research. Similarly, Robson notes that:

(Participant observation) involves not only a physical presence and a sharing of life experiences but also entry into their social and 'symbolic' world through learning their social conventions and habits, their use of language and non-verbal communication, and so on. (Robson 2011: 319)

Not only did this approach help the researcher to strengthen rapport with the participants, but it also enabled a rich contextual understanding of the community. Consequently, the researcher becomes able to recognise and reconfigure the socio-material assemblage within the research setting, as explained in the next section.

### Recognising the socio-material assemblage

Participant observation also aligns with the overall theme of this thesis, which is to recognise the notion of socio-material assemblage. Robson claims that whereas 'the pure observer (with structured methods) typically uses an observation instrument of some kind, the participant observer is the instrument' (2011: 319). To build on Robson's argument and treat the participant observer as an instrument for the research, the role of the observer can be seen in two ways. First of all, s/he needs to have an attentive eye to detect the multi-dimensions of 'space, actors, activities, objects, acts, events, tie, goals, and feelings' of the research setting (Spradley 1980; Robson 2011: 320). Secondly, the observer as a research instrument is required to have a 'great sensitivity and personal skills for (processing, interpreting and generating) worthwhile data' (Robson 2011: 320).

Through participant observation, I could explore, rather than merely depicting, the continuing progress within the handcraft pottery community of Kampong Chhnang. In a meticulous manner, participant observation can enable the researcher to recognise, understand and reconfigure a series of heterogeneous human and non-human actors and their rhizome-like arrangements, which might lead to an unfolding of particular social issues (Latour 2005; Lury and Wakeford 2012; Latour and Woolgar 1979).

#### Issues to consider

In some cases, participant observation may be an object of negotiation, and the researcher may need to prove his/her usefulness in order to gain access to it. In his investigation into collaborations between designers and scientists in scientific research, Peralta argues that he became 'a trading tool with which to negotiate and obtain access to scientist and scientific settings'; and, therefore, he was 'more able to find suitable case studies' (Peralta 2013: 50). In this fashion, I proposed offering my design skills to Ake, the Japanese coordinator of the KCHH who also acted as a gatekeeper for the KCHH, when expressing my intentions to conduct fieldwork with the potters. Not only would I be able to gain access to the community for participant observation, but I was also able to co-design the eco bag and

leaflets with the participants, which were fruitful outcomes of the fieldwork (see Chapter 7.3). Once accepted for participant observation, it can be easier to gain access to subsequent research opportunities because the relationship built during the process of participant observation can lead more smoothly to the next step.

It should be noted that the researcher needs to be aware of biases that might affect the process of participant observation. These may include the risk of developing selective memory, selective attention (toward a certain participant or object), selective encoding (drawing on prejudice) and partiality to specific members over others (Robson 2011: 328). To avoid such dangers, the researcher is required to record findings immediately on the field journal, reflect on the fieldwork consistently and be open and agnostic to resist the 'rush to judgement' (Robson 2011: 328). By doing so, the researcher may be able to consciously broaden their horizons and avoid being trapped within stereotypical modes of thinking.

#### 3.2.3. Semi-structured interviews

Interview has been widely used as a means of data collection in qualitative research. Whereas structured interviews focus on following predetermined questions with fixed wording and orders, semi-structured interviews allow a relative freedom and flexibility as they form part of everyday dialogue (Legard, Keegan and Ward 2003; Robson 2011). When employed in combination with participant observation, interviews can provide a fuller understanding of the research subject (Robson 2011). The participants were interviewed before, during and after the SDTWs. In order to gain a rounded insight into the social happenings within the handcraft community in Kampong Chhnang, the interviewees were carefully selected based on their background, experiences and expertise. They included the participants (that is the Khmer potters of the KCHH), the Japanese management of the KCHH, other Khmer potters in different villages in the Kampong Chhnang province and also certain officials within the local authorities.

According to Legard et al. (2003), semi-structured interviews provide four key features. Firstly, they give flexibility to the researcher to alter and improvise the wording, duration and sequence of questions in response to the interaction with the interviewee. During this time, it is beneficial to elicit spontaneous responses from the interviewee, which may

reveal their tacit knowledge and emotions (Flick 2009). Secondly, semi-structured interviews can encourage the researcher to establish a mutual respect with the interviewees through an open-ended and in-depth dialogue. Thirdly, semi-structured interviews allow the researcher to ask responsive questions about what the interviewee has said, hence providing the possibility of pursuing clarity and detail in their answers. Finally, semi-structured interviews act as a 'construction site for knowledge' since the interaction between the interviewer and interviewees functions as a process of attaining the interviewees' experience-based knowledge by a thorough process of questioning and listening (Kvale 2007: 7).

The combination of open-ended questions and structural flexibility during the interview process can allow the researcher to seek depth to dispel misunderstanding, inspire cooperation, build trusting relationships and discover 'unexpected or unanticipated answers which may suggest hitherto unthought-of relationships or hypotheses' (Cohen, Manion and Morrison 2011: 357). For example, during my conversation with Oun on how he perceived the SDTWs so far, Ake (the Japanese coordinator of the KCHH) intervened and asked Oun to articulate his feelings about everyday work at the KCHH compared to his previous factory job in Korea (see Chapter 8.3.1). Through this, I gained unexpected additional insight into the matter, but I also noticed that Ake, and possibly other Japanese management members of the KCHH, had been influenced by the SDTWs along the way. According to my basic level of observation, Ake often entered into conversation with the other participants only when needed, mostly in regard to delivering orders and technical issues. This incident revealed that Ake was developing an interest in the participants' emotions and thoughts, possibly suggesting that the relationship within the KCHH was being reconfigured through the SDTWs.

Due to the nature of semi-structured interviews, it is necessary to balance the structure and flexibility by preparing interview guides and practising pilot interviews. During my fieldwork, this helped in terms of ensuring a smooth process and allowing for responsive improvisation when required. Acknowledging that semi-structure interviews enable the interviewees to 'express their own understanding in their own terms' (Patton 2002: 348), data was audio- and video-recorded to capture the nuances and richness of both verbal and non-verbal expressions (Legard et al. 2003).

Based on the combination of open-ended, non-judgmental questions and responsive improvisation, the interviewees were encouraged to share stories that I had not anticipated, which not only described their work experience, but also their personal feelings and reflections on their relationships within the community.

### 3.2.4. Visual ethnography

Visual ethnography arose in the 1990s along with the development of photographic technology to provide interdisciplinary, reflexive methods for ethnographic inquiries that were related to 'subjectivity, experiences, knowledge and representation' (Pink 2013: 3). The notion of visual ethnography may vary in terms of philosophical and practical approaches. Whereas Prosser (1996) suggests predetermined formats to achieve objectivity and generalisability, Pink argues against such a scientific approach to anthropology, noting that 'images should be regarded as an equally meaningful element of ethnographic work and therefore visual images, objects or descriptions should be incorporated when it is appropriate' (Pink 2013: 10).

### Key aspects of visual ethnography

Pink's (2013) emphasis on images is particularly relevant within this thesis since this study has been a conscious journey to trail and unfold entangled relationships within the Cambodian handcraft pottery community that is too vast to portray through mere verbal description. Visual ethnography provides a means of documentation, and it can also enable the researcher to become more reflexive, engaging and explorative within the research setting. Throughout the fieldwork, visual ethnography was employed extensively for the reasons discussed below.

Firstly, by capturing and preserving images directly from the fieldwork, visual ethnography helped to arouse and recollect experiences and emotions during the analysing process of the research. As 'photographs sharpen the memory [...] [and lead to] realistic construction' of research findings (Collier and Collier 1986: 106), it can be useful for both the researcher (by recalling memories in the process of data analysis) and the readers (by offering a sense of having been there). In this research through visual ethnography, I was able to record the ceramic production process (that is, pottery-making, decorating, firing and refining), and I was able to recognise the surrounding circumstances that were not

apparent at first sight. For example, on my first few visits to the handcraft community in Kampong Chhnang in the second half of 2013, I focused on capturing images of finished ceramics displayed on shelves: kilns made of red bricks and local people making ceramics. However, later photographs I took between January and March in 2014 prove my new interest lay in people's working environments, as depicted in the pictures of: little children playing around their parents who are busy forming ceramics; babies sleeping in hammocks, which young mums swing from time to time while they take rest from work; and the people having dinner in darkness watching the firing process that would last 72 hours. In this sense, visual ethnography can be clearly distinguished from other objective approaches to the photographic record because 'ethnography is the study of people in naturally occurring settings or "fields" by methods of data collection which capture their social meanings and ordinary activities' (Kumar 2005, Brewer 2000:6).

Moreover, visual ethnography can complement other methods, such as action research and interview, and stimulate the process of generating richer knowledge. 'Photo-elicitation', the process of invoking ambiguous ideas, can encourage the participants to extract insights from and discuss given images through careful examination (Banks 2001: 87). For example, during the SDTWs, I acted as a proxy for the participants who would have liked a field visit outside the community, but who could not make it (see Chapters 6.3.4, 6.3.8, and 7.4.2). I visited places that would have inspired them, including museums, hotels, restaurants, souvenir shops and other pottery workshops, and took photographs. These images were used to give a sense of having been there for the participants during the ideation process. Furthermore, visual ethnography can be useful when combined with semi-structured interviews since the awkward atmosphere can be dispelled as the interviewer and interviewee discuss certain images (Collier and Collier 1986; Banks 2001).

Thirdly, visual ethnography can stimulate collaboration and/or co-creation between the researcher and the participants in terms of image production (Banks 2001). It should be noted that this process is more likely to be a 'production of knowledge and ways of knowing', rather than a 'collection of data' (Pink 2013: 35). Similarly, Banks argues that 'social research has to be an engagement, not an exercise in data collection' (Banks 2001: 178-179). Acknowledging the ontological (I-Thou relationship) and epistemological (participants as informants, rather than passive respondents) position of the research, the participants were given an active role in producing visual outcomes throughout the

SDTWs. These 'participant-produced images' (Pink 2013: 50) formed a significant part of my research, providing new perspectives, tacit knowledge and multidimensional insights contributed by the participants. These included a set of photographs, drawings, visual references, mood boards and ceramic prototypes produced by the participants (see Chapters 6.3.2 - 6.3.7), and co-designed eco bags and leaflets (see Chapter 7.3). For example, each participant was given a disposable camera and asked to respond to a list of questions through their photographs (see Chapter 6.3.3); it enabled access to the context of their everyday lives, which would be difficult for me to enter otherwise (Pink 2013).

Banks (1995) categorises visual methods into three areas: 'making visual representations (studying society by producing images)'; 'examining pre-existing visual representations (studying images for information about society)'; and 'collaborating with social actors in the production of visual representations'. The last approach proved to be relevant and useful throughout the fieldwork of this thesis. Similarly, Pink (2013: 50) proposes 'the practice of creating [or co-creating] visual interventions' to better respond to contemporary phenomenon through empowerment and participation.

### Blog as an online journal

The intentionality, processes and outcomes of action research are always intertwined with a socio-economic, political and historical context, reflecting 'the current mood of the times' (McNiff 2013: 176). Since action research seeks to enact social change through a dialogical process, it is important to attend to and record the relationship between the research, accompanied actions and interactions (McNiff 2013). As such, my research process and findings were partially recorded on a blog<sup>10</sup>. As Pink notes, '[t]he blog serves as an ongoing documentation' of the research, which can also be assessed by the participants, scholars and other practitioners (Pink 2013: 209). Likewise, my blog not only enabled regular documentation of the fieldwork and reflections, but it also helped me to discuss the progress with my supervisors in the UK throughout my time in Cambodia. It also enabled communication with online visitors who were interested in social design and pottery communities in Kampong Chhnang.

<sup>10</sup> http://chhnang.wordpress.com

### 3.3. Ethical considerations

This research had been built on an empirical fieldwork which involved ten Khmer participants. The university's research ethics were reviewed and signed prior to the fieldwork, acknowledging ethical considerations for a real-world research. I outline two issues in particular. Firstly, this thesis intentionally presents the participants' names, instead of giving them anonymity. Although providing protection for the participants through anonymity is the norm (Robson 2011), action researchers may find different approaches useful. For example, Zeni notes that 'the ethical safeguards of the outsider doing qualitative research (anonymous informants, disguised settings) may defeat the action researcher's goal of open communication and dialogue' with the participants (1998: 10). Equally, Lincoln claims that without confidentiality and anonymity regulations, the participants may act 'as full, cooperative agents' (1990: 279-280). In my case, the participants consented on non-anonymity, which turned out to be helpful in the reconstruction of an open and iterative dialogue between the participants and the fieldwork during the analysis process. However, anonymity selectively was given where sensitive privacy was involved. It is necessary that the researcher carefully consider the advantages and drawbacks of anonymity.

Further to this, the notion of power relations should be informed. In practising visual ethnography, Pink (2013) and Banks (2001) raise the following ethical concerns related to the notion of power structure: the risk of exploiting the participants knowledge and effort while the researcher is 'swooping god-like into other people's lives and gathering "data" (Banks 2001: 179). Banks argues that such an approach is not only morally problematic, but also 'intellectually flawed' (Banks 2001: 179):

All image production by social researchers in the field, indeed all first-hand social research of any kind, must be collaborative to some extent (because) [t]he researcher's very presence amongst a group of people is the result of a series of social negotiations (Banks 2001: 119).

To avoid the danger of knowledge exploitation, Pink also suggests that the researcher should direct conscious effort into the collaborative process, so that 'agency [can become] shared between the researcher and participant' and both parties can be 'rewarded by the

project' (Pink 2013: 65). In this light, the process of collaboration and co-designing visual outcomes with the participants throughout the SDTWs is elaborated in Chapter 6.

#### Conclusion

The social design enquiry required the researcher to consider ontological and epistemological notions to better prepare for the interactions with the participants and research settings. Schön's (1983) idea of knowing-in-action and reflection-in-action proved to be useful in the process of generating and reflecting on lived knowledge. The main approaches used for the fieldwork included action research, participant observation, semi-structured interviews and visual ethnography. Action research allowed the researcher to immerse in the research setting and co-create outputs through the SDTWs to improve the current situation. Participant observation was employed extensively throughout the fieldwork, allowing the researcher to understand the situation and to become aware of the socio-material assemblage. Semi-structured interviews were useful in drawing out the participants' spontaneous responses about their experiences, emotions and reflections before, during and after the SDTWs. Moreover, visual ethnography offered some intriguing outputs. It vividly illustrated the fieldwork and also offered an opportunity for the participants to express their ideas through a set of drawings, photographs, and ceramic design prototypes. Equally, the process of visual ethnography enacted a deeper engagement and potential for active participation.

Most importantly, these research approaches not only provided a means of data collection, but also led the researcher to iteratively explore the relationship between the participants, work, objects, research settings, community and fieldwork through an ongoing process of observing, interacting and reflecting throughout the analysis. These enabled me to problematise the situation through an unconventional perspective (see Chapter 5.3). Thus, I was able to conduct the action research based SDTWs with the participants (see Chapter 6), identify the challenges and issues of practising social design in a development context (see Chapter 7.4) and ultimately discuss the implications of an approach to social design in a development setting (see Chapter 8).

# 4. Cambodia as a contextual background

This chapter provides a contextual background to situate the enquiry of social design in the Cambodian handcraft pottery community studied in this thesis. Based on certain academic literature, reports by multilateral organisations, newspaper articles and personal experiences, the chapter outlines the historical, socio-political, economic and cultural background of the country. It further focuses on the subject of Cambodian pottery to provide a link between social design and the context of which the thesis is empirically grounded.

The chapter begins by outlining the contemporary history of Cambodia. It shows that the Khmer Rouge's fanaticism in agrarian totalitarianism resulted in societal and cultural destruction across the country. The chapter explains the turmoil during the 1960s and 1970s, which still affects the society in the form of poverty, inequality and corruption. Despite its rapid economic growth, Cambodia still faces a number of societal challenges, which require transformation. There has been a cultural revival movement since the 1990s, which aligns with the cultural development explained in the literature review (see Chapter 2.2.3). Finally, the chapter centres on the handcraft pottery community in Kampong Chhnang province where the fieldwork was conducted. It explains handcraft pottery as an important cultural heritage and source of income in the community, and it offers the contextual background of the fieldwork.

# 4.1. The socio-political context of Cambodia

Cambodia has been mostly famous for the UNESCO World Heritage *Angkor Wat*, the 'killing fields' and a poor economic situation under decades of dictatorship (Schlund-Vials 2010). Officially known as the Kingdom of Cambodia, the country is under a constitutional monarch and the sole dominant Cambodian People's Party, which has been led by the Prime Minister, Hun Sen, for the past three decades (Winter and Ollier 2006). The population of the country is estimated to be 15,474,460 (National Institute of Statistics 2008), its GNI per capita amounts to 1,140 US Dollar (USD) (World Bank 2017b), and it

is ranked 94<sup>th</sup> out of 137 countries in the World Economic Forum's Global Competitiveness Index (Schwab 2017: 13).

Cambodia is one of the fastest-changing countries in the region, economically, socially and politically (UNDP 2012; Madhur and Menon 2014). The country has been recovering from its turbulent contemporary history, particularly from the Khmer Rouge's socio-economic annihilation, which sought for an agrarian utopia (Slocomb 2010). The most obvious achievement is rapid economic growth. The Cambodian economy began to recover from 1993 onwards, based on a combination of grants and soft loans from the World Bank and the Asian Development Bank and also through official development assistance (ODA) (JICA 2002; Slocomb 2010). The country's annual gross domestic product (GDP) growth rate was recorded at a 7.7 per cent average over the last two decades (Madhur and Menon 2014). Cambodia is categorised as one of the 'dynamic low-income countries that started their economic take-offs in the 1990s', and which has recently been elevated to the position of a low middle-income country (MIC) (Madhur and Menon 2014: 2; UNDP 2018). In general, the country is trying to urbanise from a rural and agriculture-based nation to a modern society through industries of garment manufacturing, tourism and construction (Chandler 2008; UNDP 2012). Traditional divisions of agriculture, forestry and fisheries are still the major contributors to its GDP (Slocomb 2010). Apart from economic progress, another major achievement can be found in the Human Development Index (HDI), which measures life expectancy, education and the standard of living quality. Cambodia was observed to have improved from the previous measure of 0.44 in 2000 to 0.54 in 2012, scoring 138th out of 187 countries in total. This implies the country's progress in public health, expansion of universal primary education and democratisation (UNDP 2012).

On the other hand, the country is facing a number of challenges in terms of socio-economic and political reforms. First of all, poverty and social injustice seem to cause huge divisions in this society. Springer (2010b) targets the process of neoliberalisation occurring in Cambodia as the culprit. For him, while 'neoliberal reforms such as liberalization, privatization and deregulation are accepted as an opportunity for enrichment by local elites in authoritarian settings like posttransitional Cambodia... neoliberalization becomes a useful part of the existing order' that empowers indigenous elites as a 'rationalizing force' for controlling the nation's market and politics (Springer 2010b: 932-

933). As explained in Chapter 1.2, the sheer contrast between the rich and poor across the country was easy to notice during the early observation phase of this research. Although Springer (2010b: 947) predicts the eventual decline of neoliberalisation within Cambodia on account of 'new discursive performatives that may provoke a chain reaction of awakening from the spell of the prevailing commonsense', it may require years of endurance and protests due to the current system, consolidated by the totalitarian government.

Hun Sun has been blamed not only for the government's connivance and overt engagement with corruption and injustice, but also for 'his inability or unwillingness to crack down on widespread corruption in the government and to divert revenue from the army and other favoured bodies to the countryside impeded economic progress and discouraged long-term foreign investment' (Chandler 2008: 293). International bodies including the Japan International Cooperation Agency (JICA) have also addressed criticisms to the Royal Government of Cambodia by asserting the need for 'structural reform and stricter monitoring of the reform process' through transparent election, legislation of laws and eradication of widespread corruption (JICA 2002; Slocomb 2010: 24). Since more than half of the government's annual budget has been assisted by foreign aid, it seems unfeasible that an independent decision-making process can be achieved about the country's own economy (Slocomb 2010).

Another problem is closely related to the ill-balanced structure of urban-rural development, caused by increasing migration from rural to urban areas (Slocomb 2010). Moreover, the country's tendency for its economic growth to depend on manufacturing industries is seen as rather unsustainable:

In the city and the special economic zones around the port, factories produce goods destined for foreign markets with materials imported from other foreign markets. Their presence in the country depends on the supply of cheap, unskilled labour and preferential trade agreements stemming from Cambodia's status as a least developed country. Paradoxically, in order to develop, Cambodia has to remain poor. (Slocomb 2010: 286)

Although a number of NGOs have been working on improving education, healthcare and social infrastructure, the shortage of human resources, especially in the rural part of the country, and the lack of finance make it difficult for many of them to sustain projects (JICA 2002).

### 4.2. Cultural revival movement

In the twenty-first century, Cambodia is a country that has been scarred by its recent past and identifies itself closely with distant periods. It is the only country in the world that boast a ruin on its national flag. (Chandler 2008: 10-11)

As seen above, David Chandler, one of the leading scholars of Cambodia's history, describes the peculiarity of the country in terms of its representation. Likewise, Schlund-Vials (2010: 47) argues that there exists 'the stark contrast' between ruination and reconciliation within Cambodian culture. The nation's culture and heritage were severely sabotaged, for example, to the extent to which 'ninety percent of the artists performing the *sbek thom* [traditional Khmer shadow puppet performance] perished' during the Khmer Rouge regime between 1975 and 1979 (Pech 1995: 34).

The Royal Government of Cambodia began to realise the significance of their cultural heritage and its role in reconstructing the nation, enhancing social cohesion and contributing to the economic growth (UNESCO 2014a). As a consequence, the Ministry of Culture and Fine Arts (MoCFA) was founded in 1997. However, the government was not able to preserve and develop its cultural heritage due to a lack of human and financial resources (UNESCO 2014a). Simultaneously, there had been a revivalist movement in the early 1990s to restore the Cambodian culture, driven by the students who returned to their home country after finishing their arts education abroad (Muan 2001). One of the most significant achievements is the 'Inventory of Intangible Cultural Heritage of Cambodia' jointly published by the MoCFA and UNESCO in 2004. This was the first attempt to document the extensive amount of intangible heritage of Cambodia, some of which were in a danger of extinction. Intangible heritage is defined as 'the practices, representations, expressions, knowledge, skills... [that are] transmitted from generation to generation... with a sense of identity and continuity' (UNESCO 2018). The publication also documented three main categories of Cambodian intangible heritage: traditional performing arts (dance, drama, music and circus); oral cultural heritage (languages, oral folklore and oral literature); and artisan skills and traditional Cambodian handcrafts (silk weaving, silversmith, pagoda painting, mask making, basket weaving, cotton weaving, stone carving, wood carving, pottery, lacquerware and kite-making-flying) (Ministry of Culture and Fine arts and UNESCO 2004: 13).

Another case of cultural restoration is the establishment of the 'Living Human Treasures' system led by UNESCO, which is to safeguard intangible cultural heritages in Cambodia by identifying the masters of that heritage and to encourage them to transmit their traditional skills and knowledge to the younger generations (UNESCO 2014b). Living Human Treasures is defined as 'persons who possess to a high degree the knowledge and skills required for performing or re-creating specific elements of the intangible cultural heritage' (UNESCO 2014b). UNESCO supports a number of countries to protect their intangible cultural heritage through this scheme, by assisting budgets and providing professional guidelines. For the legitimation of decree, a National Working Group was created consisting of civil servants and representatives of civil society to arrive at a definition of the Living Human Treasures; to discover and identify masters of Cambodian traditional performing arts across the country; and to examine their abilities based on collected information and provide recommendations to the MoCFA (UNESCO 2014b).

While UNESCO has been working on shaping systems and legitimation for cultural preservation and development, more hands-on intervention has been practised by the Creative Industries Support Programme (CISP) between 2008 and 2011 (MDG-F 2011). A number of various parties participated, including the UNDP, UNESCO, International Labour Organisation (ILO) and several governmental departments of Cambodia. With the budget around 3 million USD, the programme was run by the UN Millennium Development Goals Achievement Fund (MDG-F) 'to promote both the social inclusion and cultural rights of indigenous peoples and to provide their sustainable income generation and livelihood improvements' (MDG-F 2011: 5). The programme supported the training of more than 800 indigenous artisans in the production of textiles, baskets, carving and pottery in four particular provinces of Cambodia where there was less infrastructure and more indigenous, ethnic communities (MDG-F 2011). The programme achieved an 18% increase in the sales of handcraft products, and it enhanced the connection between the production of cultural crafts and tourism.

These activities suggest that it is important to focus on the Cambodian handcraft culture as a means of preserving the indigenous culture, generating a source of income for the less privileged and for contributing to a sustainable economic growth through craft production. The importance of cultural handcrafts is explained in the following:

Cultural expressions of the intangible are not static, but rather exist in a continually evolving process of change. It is also the rate of change, however, that can undermine the integrity and continuity of these cultural traditions. Efforts need to be mobilized in order to recognize the inherent value intangible expressions have for cultural diversity and peace, as they are a collective expression of all Cambodians, of all gender, age, and ethnic background. (Ministry of Culture and Fine Arts and UNESCO 2004: 14)

With an aim of proposing an approach to social design in the Cambodian context within the arena of cultural development, I now illustrate the handcraft pottery community in Kampong Chhnang province where I was engaged with my fieldwork for the period of 20 months.

## 4.3. The Cambodian handcraft pottery

This section illustrates an overview of Kampong Chhnang as a research setting by providing a historical account of the Cambodian handcraft pottery as an important cultural heritage of the region, and giving a detailed description of pottery communities as a background to the fieldwork.

## 4.3.1. A historical account of Cambodian pottery

For centuries earthenware pots have served the spiritual and domestic needs of people across South-East Asia. From the moment of birth they have been the chosen vessels in which to bury the placenta; in death they cradle the fragmented bone and ash of a loved one. Throughout everyday life they are used to store drinking water, brew medicine, distil whisky, cook food, ferment fish paste and present offerings to the spirits. The forms, developed slowly over time and little changed with its passing, are innately practical and striking in design. (Shippen 2005: 15)

Earthenware, defined as an 'object made of high-iron red-firing clays that are fired at relatively low firing temperature', has been one of the indigenous Cambodian handcraft objects since the 9<sup>th</sup> century (Stark 2003: 211). Cambodian earthenware has been closely engaged with everyday life, and its history provides a deeper understanding of the nation's 'social, political, economic, and ritual milieus' (Stark 2003: 210). Traditional earthenware pots are still commonly seen in the local kitchens, which are mostly used for cooking and storing water. A charcoal stove is another form of earthenware in high demand, which is

used to cook daily meals. Pots made in Kampong Chhnang tend to be in simple, circular shapes in a terracotta colour, low-fired, mostly without glazing, and for utilitarian use in local households.

There are a few regions that have traditionally produced handcraft pottery in Cambodia. The most representative region is Kampong Chhnang province whose name literally means 'pottery port' (Shippen 2005: 127). Other places with the handcraft pottery tradition include Kampong Speu, Ratanakiri and Siem Reap. Although handcraft pottery has transcended generations in Cambodia, the tradition has almost been extinguished. Traditional pottery artisans are seen 'as being outdated and meaningless' among the locals (Shippen 2005: 11).

### 4.3.2. Handcraft pottery communities in Kampong Chhnang province

Kampong Chhnang province is located 91km northwest of Phnom Penh, the capital of Cambodia. The population of the entire province is estimated to be 471,616 people; 42,809 of them live in the urban parts of the province, and most of them work in agriculture or fishery (National Institute of Statistics 2008). About 20 percent of the working population (aged between 15 and 64 years old) are identified as 'craft and related workers' (National Institute of Statistics 2015: 72).

As the name suggests, Kampong Chhnang province has been one of the traditional centres of Khmer handcraft pottery production (see Figure 2). However, it is rather difficult to estimate the number of pottery workshops and potters, not only because there are no statistics regarding handcraft pottery production in Kampong Chhnang, but also because each workshop tended to be individually managed, rather than functioning as part of a cooperative. Through a series of preliminary field visits prior to the SDTWs between August 2013 and May 2014, I visited five pottery workshops (most of which were operating as home workshops), and I conducted interviews with eleven potters. Most locals produced pottery in traditional, basic methods without the use of glazing or high-temperature kilns, and sometimes even without a potters' wheels. The use of wood fires, instead of kilns, was commonly seen on the roadside. Interviewees explained that most local potters prefer to employ basic techniques because they could not afford the materials nor the facilities for the glazing process (B. Ok, interview, 24 October 2014; S. Kuen, interview, 24 October 2014).

Traditional techniques are passed down through family members, usually the maternal lines, as the female plays a pivotal role in pottery production (H. Ake, interview, 15 February 2014). Whereas the men tend to provide the muscle by moving heavy materials and kneading clay, women focus on the creative part of the production, such as shaping and decorating. The main goods include plates, bowls, flower vases, cups and tea light lamps for everyday use. Mostly the potteries were bisque-fired without glazing, in a basic form of earthenware.



Figure 2. Traditional pottery production on an open fire. Andong Russey village in Kampong Chhnang province, Cambodia

Throughout my visits, I learned that these potters had received occasional support from international NGOs in the past. Nevertheless, the community appeared to be disconnected from the outside economy because the majority of potters sold their products to middlemen, and did not know exactly where and for what prices these could be sold. This is explained by a female potter below:

"I am not sure (where my products are sold), because wholesalers first head to Phnom Penh. But I heard the products are sold quite well in Rattanakiri and Mondolkiri. I think they are mostly sold in souvenir shops in Phnom Penh, and few of them are bought in other provinces." (K. Smok, interview, 14 February 2014)

Almost identical products could be found across the village, with similar patterns and shapes at similarly low prices (such as a 30cm round water pot for 1 USD). Most of these potters were earning between 80 and 200 USD monthly, depending on the scale of the production and workshops. When asked to explain what they wanted to improve on, they mentioned techniques for shaping and decorating, and knowledge and skills for promoting their products. An interviewee states that:

"I'd like to advertise, but I don't know how to. We also have difficulties when decorating (carving) the pottery." (K. Smok, interview, 14 February 2014)

"I'd like to make different kinds of products. I find it most hard when making the mouth of pots. It would be great if someone visits here and teach us how to shape." (E. Sson, interview, 14 February 2014)

It was interesting to note that the majority of interviewees mentioned previous visits from foreign experts, and expressed their wishes to have other 'teachers' (B. Ok, interview, 24 October 2014; E. Sson, 14 February 2014; T. Yung, interview, 24 October 2014). Some of them enthusiastically expressed the shortage of money and infrastructure, as if they were talking to an NGO staff. The first impression of the pottery community in Kampong Chhnang province was that despite previous interventions, the average level of knowledge and skills in production, distribution and sales remained rather basic. Nonetheless, the potters appeared to believe that their shortcomings would be overcome by external support. In order to understand the kinds of interventions that were implemented, and why the potters still desired to be taught by external experts, I continued to observe, interview and collect related materials through online and offline sources.

### The Kampong Chhnang Pottery (KCHH) workshop

Through a series of preliminary field visits, I developed a relationship with the KCHH in Andong Russey village of Kampong Chhnang province. Located in the middle of spacious rice paddies, the KCHH consisted of ten Khmer potters and a few other Japanese stakeholders, as it had been run as a part of the CTPP project for the previous five years funded by an overseas organisation. I initially contacted Hiroshi Ake, the Japanese coordinator of the KCHH, who was a gatekeeper of the community. Through several conversations with him over seven months, I learnt about their work, explained my research and intentions for the fieldwork and expressed the possibility of working together. According to Ake, the KCHH was 'not a company, but a cooperative; it was more like a

loose network' that fairly shared the profit with its Khmer members (H. Ake, interview, 13 February 2014). I continued participant observation and interviews with the Khmer potters working at the KCHH on a regular basis through weekly visits to gradually build a relationship with them.

Through a series of interviews and visits, I discovered that the CTPP/KCHH project initially began in 2006 when the provincial government of Kampong Chhnang sent a request to the Japanese government about the ways in which to improve its pottery industry<sup>11</sup> (H. Ake, interview, 13 February 2014). In response to the request, a few specialists from *Mashiko* town in *Tochigi* prefecture visited Kampong Chhnang between 2006 and 2008 to examine the quality of the glaze sand in the area, and to observe the techniques and abilities of the local potters. According to Ake (interview, 13 February 2014), the project had been developed in three phases. Phase one began by building a high-temperature kiln in Andong Russey village and teaching shaping and glazing techniques to local potters, which ended in 2013. Phase two focused on selling, marketing and finding customers until 2015. The third phase would mainly cover the handover of the KCHH to its Khmer members. Successful handover and implantation of the KCHH have been a major concern for the stakeholders. When asked about his experience and reflection on working with the local potters, Ake claimed that:

"At first, this workshop was run like a training school. 50-60 villagers came here to learn new techniques, but we couldn't pay them at that time. Most of them were disappointed and left, and only eight female potters remained. So, about money, I suppose they were not happy. But as students, I assume they were satisfied because they could learn new techniques which enabled and would enable them to earn more money on their own. They like to try new ways of making pottery, such as glazing, trying new different colours, new technical forming, and so on. Now, we have become able to pay small salary to our potters, so I hope they are happier now." (H. Ake, interview, 13 February 2014)

Whereas most Khmer potters were concerned with the technical aspects of production, such as ensuring the quality of glazing and preventing breakages during the firing process, Ake's main concern was that the local potters were not able to create new designs from scratch. The potters were good at replicating existing designs by their Japanese teachers; however, if they were asked to create a new design, they seemed unable to do so (H. Ake,

<sup>&</sup>lt;sup>11</sup> The reason the Japanese government was consulted would be not only due to the renowned quality of Japanese ceramic production, but also the fact that Japan had been one of the major donor countries in Cambodia since early in the 1980s.

interview, 15 February 2014). Although they had been trained by Japanese potters who occasionally visited the community, the scope of training was limited to technical knowledge and skills.

As a researcher-designer with a background in graphic/branding design, I began to identify their challenge as a lack in creative design thinking skills. While their technical skills have been continually honed and practised, the territory of design thinking, visual approaches and understanding the market and customers appeared to be neglected in the KCHH. Thus, the Khmer potters could end up as mere technicians even after the takeover of the KCHH. Such fieldwork findings led me to think of an empirical approach to social design through action research and visual ethnography that can help to empower the participants in terms of drawing out their tacit knowledge, exploring innate originality and collectively generating knowledge in the form of visual outcomes. However, this idea was not well-formed at the time of the preliminary fieldwork. Although I was able to identify the problem and sketch possible ways to approach it, the research aim was still my creation, which needed to take the perspective of the Khmer potters of the KCHH into account. Therefore, the early part of action research based SDTWs consisted of an *understand* phase, which enabled the participants to problematise their own situation, rather than imposing my premise onto them. This process is illustrated in detail in Chapter 6.

### Conclusion

This chapter outlined the socio-political and economic situation of Cambodia to provide an overall understanding of the research setting. The country's cultural revival movement coincided with the rise of cultural development as a significant occurrence in development studies in the 1990s. The alignment implies the significance of the cultural approach in a development context as a means of enhancing local participation, increased economic independence and lasting impacts. This contextual background helps to situate Cambodia as an important research setting in the wider discourse of cultural development. The chapter also demonstrated the significance of the handcraft pottery culture in Cambodia by providing both a historical account and empirical findings from the field visits. It described the process of contacting a handcraft pottery community in Kampong Chhnang and expressing my research intentions over a period of ten months. The research participants, ten Khmer potters, did not have any experience or knowledge in art and design. However, shortcomings of this nature led to the careful planning and implementing of the SDTWs,

which is discussed in Chapter 7. Likewise, the scarcity of resources and lack of understanding in design enabled me to become inventive in my approach to social design in a development context by making use of pragmatic means within a minimal budget. The contextual knowledge explained in this chapter supports the following chapters on the fieldwork and ensuing discussion (see Chapter 5, 6, 7 and 8).

# 5. Fieldwork (1): Observation and problematisation

This chapter describes the empirical process of identifying the problematic situation within the handcraft pottery community in Kampong Chhnang over a period of ten months. Two main approaches were considered throughout the fieldwork. Firstly, to explore an approach to social design in the Cambodian context, the fieldwork was intended to test and improve on a previously tried methodology that could be useful in a development context. Emphasis was given to understanding the peculiarity of the situation and adapting the design approach which has been mostly practised in the West. Secondly, the fieldwork aimed to contribute to existing knowledge, and it also sought to offer useful approaches for the local stakeholders of the pottery community. This idea was consolidated once I started to build a relationship with the local potters. The research was connected to their livelihood because I had to ask for their time and commitment away from their daily jobs. Therefore, I contemplated ways in which the fieldwork could both fulfil academic rigour and benefit the participants. With these considerations, this chapter begins by providing a navigational framework for the fieldwork to aid a better understanding of the research process and structure. It further illustrates a series of field visits to pottery communities and related government organisations, based on data collected through participant observation and interviews. Finally, the chapter highlights the problematic situation of the research setting by revealing the kilns to be the troubling actors in this scenario. By doing so, it proposes to problematise the situation through the notion of socio-material assemblage by rethinking the role of objects, hence establishing a ground for a new approach to social design in the development context.

# 5.1. Navigational framework for the fieldwork

This section serves as a navigational framework for the fieldwork to help understand the process and structure of the empirical research conducted in the Cambodian handcraft pottery community. The fieldwork was divided into two phases: observation and problematisation (between August 2013 and May 2014); and action research based SDTWs (between October 2014 and March 2015) (see Diagram 3).



Diagram 3. The timeline showing the navigational framework for the fieldwork

The following sections in this chapter describes the first part of the fieldwork in which the priority was given to understanding the contextual background of the research setting and building trust with the local stakeholders. During this period, a series of participant observations and interviews were employed to collect the primary data related to the research enquiry. The next sections illustrate the field visits to three different pottery communities in Kampong Chhnang and to the local authorities. These visits enabled me to understand the problems and challenges faced by the local stakeholders. In this process, it became apparent that previous NGO interventions and donated kilns resulted in being troubling actors in the process, causing a sense of dependency on and cynicism about external support. From an understanding of the relationship between the different pottery communities in Kampong Chhnang, local stakeholders, objects, work processes and methods, and previous NGO interventions, I was able to design detailed plans subsequent to the fieldwork.

Chapter 6 will illustrate the second part of the fieldwork, which describes the SDTWs. The name of the Social Design Thinking Workshops (SDTWs) implies that much of their conceptual and methodological approaches were inspired by contemporary studies in design thinking (Kimbell 2011, 2012). The term 'social' was added to highlight the notion of socio-material assemblage that has been useful throughout my approach to social design in the Cambodian context. The SDTWs were conducted every 1-2 weeks, 11 times in total. Each session lasted three hours. Action research and visual ethnography were principally employed, together with semi-structured interviews and weekly participant observation. The SDTWs produced rich outcomes (that is, drawings, photographs, mood boards, ceramic prototypes, and co-designed eco-bags and leaflets) that became useful resources for analysis and discussion about a social design thinking approach in the Cambodian context. Throughout Chapters 5 and 6, I aim to provide a description and interpretation of the social happenings and interconnected relationships within the pottery community of Kampong Chhnang through an ethnographic approach. A series of participant observations, semi-structured interviews and visual ethnography were used to investigate a real-world enquiry and collect rich data with a sense of having been there. Such an approach also aids in a more adventurous exploration of social design in the Cambodian context since within ethnography 'the central focus of your study and detailed research questions will emerge and evolve as you continue your involvement' (Robson 2011: 144).

Similarly, Latour (2005: 168) noted that '[a] culture is simultaneously that which makes people act, a complete abstraction created by the ethnographer's gaze, and what is generated on the spot by the constant inventiveness of members' interactions'. Rather than pursuing 'naïve' realism that offers 'knowledge of unquestionable validity', the research chose 'subtle' realism that acknowledges multiple subjective perspectives on the phenomenon (Hammersley 1992; Robson 2011: 145). It also helped the process of writing the thesis by constructing a dialogue between the fieldwork and analysis. Overall, Chapters 5 and 6, consist in a detailed ethnographic illustration of the methods, processes, outcomes and reflections throughout the fieldwork, which provide useful resources for understanding the research context. They also propose an approach to social design thinking in the Cambodian context through the notion of socio-material assemblage.

## 5.2. Understanding the research context

This section describes my visits to pottery communities in Kampong Chhnang province, the dialogue with the local potters and my encounters with local government organisations. Through deskwork on previous interventions in the pottery communities of Kampong Chhnang, primary methods of participant observation, semi-structured interviews and visual ethnography, I attempted to understand the research context and gain insights that could be useful for subsequent fieldwork. The first part of my fieldwork was conducted between August 2013 and May 2014.

### 5.2.1. Pottery communities in Kampong Chhnang

As its name literally means 'pottery port' in Khmer, villages in Kampong Chhnang province have been traditionally producing pottery for centuries (Shippen 2005: 127; see Figure 3). The province consists of 69 communes in 8 districts. Most pottery productions are focused in the *Rolea B'ier* district (C. Chhour, interview, 24 October 2014). Among these, I visited three villages: *Banh Chhkol* in *Chrey Bak* commune, *Andong Russey* and *Trapeang Spov* in *Srae Thmei* commune (see Figure 3).

One of the biggest difficulties throughout the research was the absence of reliable statistics on the population of the pottery production in Kampong Chhnang province. Only limited and outdated information was available, which was provided by the international NGOs. The locals would give random numbers if asked about the pottery population because no one had previously counted the total. Therefore, the fieldwork started by counting the number of houses and pottery workshops that had production facilities from riding on the back of a motorbike. It was only completed in Andong Russey village as it was the largest pottery-making community, and where I was hoping to conduct the fieldwork. I also visited three workshops in other villages in order to understand the context better. The following section briefly illustrates the encounters and conversation with Khmer potters in different villages, which later helped to problematise the situation and plan for the action research based SDTWs for the second part of the fieldwork.



Figure 3. Kampong Chhnang Province map: the marked locations indicate pottery-making houses and workshops

### Banh Chhkol village

Banh Chhkol is located in Chrey Bak commune, which is just below Srae Thmei commune. I visited two in-house workshops. The first visit was to Beong Ok (a fifty-four-

year-old female), who was running a family-run business in her house. Three women were working in the backyard while little girls were helping them (see Figure 4). As with most other workshops in the village, work was completed by hand, from the preparation (drying clay, breaking crumbs, sieving and kneading) to shaping and firing (see Figure 5). They had a clay processing machine that breaks and grinds clay into powder, which was an unusual possession compared to the neighbours. The majority of these house-workshops were run manually because they could not afford machines and electricity (B. Ok, interview, 24 October 2014). The work process and infrastructure were basic, but previous aid from the international NGOs left some improvement. For example, cut wooden columns were changed to proper turning wheels in 2008; hence, there was no more need for a person to keep swirling around the column while shaping a round pottery piece (B. Ok, interview, 24 October 2014) (see Figure 6).

The main products ranged from moneyboxes and decorations to cooking pans and water jars, all handmade and unglazed (see Figure 7). The potters seemed to have difficulty designing the items as Ok notes: 'I had no idea how to shape a mouse, so what I had to do was to observe alive rats very thoroughly! It would be nice to create more animals because they are popular, but I don't know how to' (interview, 24 October 2014). According to her, some animal decorations are more expensive than others because of their elaborative style, yet they only cost around 700 - 1000 Cambodian Riel (0.17 - 0.25 USD). The finished products would be placed in open storage (see Figure 8). The sales and distribution were only possible through middlemen who regularly collected the products and sold them in the local markets of other provinces.



Figure 4. Typical house-workshop (left); Children helping finish the products (right)



Figure 5. A woman kneading clay (left); another woman breaking clay crumbs with her hands (right)



Figure 6. Manual potter's wheels (left); improved potter's wheels (right)



Figure 7. Pig moneyboxes (left); elaborated peacock decoration (right)



Figure 8. Storage for the products (left); transportation of the products by motorbike (right)

Next, I visited Sokha Yung (a twenty-nine-year-old female), who was the director of a cooperative. Having studied pottery-making for a month in Siem Reap four years ago, she has been running the business with four other families. The place benefited from a previous NGO intervention in 2008 (see Figure 9), which had provided them with a kiln, potters' wheels and training on pottery-making techniques (S. Yung, interview, 24 October 2014). However, Yung seemed unhappy with the kiln because it was not capable of high temperatures; it reached 800°C at most, and it could place only two Kimchi pots at once (which would take 12 hours for firing) (see Figure 10). She was hoping to be given a new kiln; the current one cost 5,000 USD, but the one she wanted to buy would cost 40,000 USD. Besides, she expressed the need for a larger space in another location to expand her business and hire more workers (S. Yung, interview, 24 October 2014). During my visit, she explicitly expressed her wishes to receive further support from the NGOs not only in terms of infrastructure, but also for 'training on knowledge and skills' (S. Yung, interview, 24 October 2014). However, when asked about the type of knowledge and skills she was hoping to learn, she seemed to find it difficult to articulate this. It was my general observation that the local potters had the vague thought that they needed more advanced skills and knowledge for production and sales, but they lacked specific ideas and plans.



Figure 9. Workshop built by the SEQUA project in 2008



Figure 10. Kiln built by the SEQUA project in 2008 (left); traditional firing process (right)



Figure 11. A woman using a potter's wheel (left); a woman carving a chicken decoration (right)



Figure 12. Carved chicken (left); glazed items (right)



Figure 13. Storage for the products

I also talked to Thy Yung, who was elaborately carving the surface of a chicken decoration (see Figure 11). She said she makes five chickens every two days, and each one cost 10,000 Riel (2.50 USD) (see Figure 12). She explained that she had learned shaping and carving techniques from a Japanese potter, and colouring skills from the Germans. The colouring and glazing techniques from this workshop seemed to be advanced compared to the others; nonetheless, the colour was limited to a red tone, and the quality of glazing appeared to be low. When asked about the challenges and difficulties of her job, Yung answered (interview, 24 October 2014): 'before the Germans came, we the villagers didn't have any knowledge in design at all. Still, I find it hard to explain to others how to make

things right when they don't understand how'. She was interested in what I was planning to do through the fieldwork.

The finished products were placed in storage, waiting to be collected by the middlemen (see Figure 13). Having visited two workshops in Banh Chhkol, I was beginning to get a sense of the pottery community in the area in terms of their working style, infrastructure, previous help given from the international NGOs, the products, distribution, sales and the people.

Although I had an interpreter, there were many more Khmer conversations going on beyond translation and my understanding. On our way back, my interpreter amusingly reported that 'Sokha said she seriously needed financial support from the NGOs, but she wouldn't allow them [the NGO staff] to intervene in her workshop; she just wants to control them all' (L. Mey, personal conversation, 24 October 2014). This suggested that Sokha Yung might not have been satisfied with the way she was treated and trained by the external experts previously; therefore, she expressed a desire to be part of the ownership of production.

### Trapeang Spov village

In Trapeang Spov, I visited a workshop run by Seotuen Kuen (a fifty-five-year-old male), which started with a one-off funding from an international religious NGO, five years ago (see Figure 14). On the subject of the difficulties of his job, Kuen (interview, 24 October 2014) mentioned his inability to build a new kiln due to financial restraints. He owned a kiln donated by an NGO, which could fire up to 800°C, but he wanted an advanced model that is capable of reaching 1200°C. It was the exactly the same need expressed by Sokha Yung in Banh Chhkol. Because he did not have this, he had to travel to Siem Reap for every firing. I asked if there was any chance of borrowing kilns located in other villages within Kampong Chhnang, instead of travelling 8-10 hours to Siem Reap. It seemed unlikely, according to Kuen (interview, 24 October 2014), because each village had different preferences in their working style. For example, potters in Trapeang Spov tended to work together with other families while people in Banh Chhkol and Andong Russey preferred to work individually (S. Kuen, interview, 24 October 2014). This meant that even though the infrastructure has been provided by the NGOs, it does not necessarily mean it will be useful or that it will be equally shared among the locals.





Figure 14. Unglazed decorations

Whereas both Seotuen Kuen and Sokha Yung expressed their technical deficiencies and the need for new kilns, I paid attention to design, display, branding, packaging and sales. The products ranged from dishes to teapots, in a typical Kampong Chhnang style, that is unglazed pieces with flower or botanical motifs, that could have been observed in Andong Russey. The design and quality of the products across the pottery-making villages in Kampong Chhnang province appeared to be almost identical to each other. Throughout the observations, I strongly felt the need for originality in their designs, not only because of my background as a designer-researcher, but also considering that a lack of differentiation would eventually bring a fierce competition and damage the livelihood of the local potters.

At the end of the visit, I bought a few items and Kuen's wife wrapped them for me, with ripped off notebook sheets. Unfortunately, one of them turned out to be broken when I opened them later. Pottery is fragile, especially when it is unglazed. Perhaps, this was the time to think about elements beyond technicality and production, such as packaging, branding, displaying, communication and customer service. This is because the number of foreign visitors were slowly increasing in these pottery communities.

# Andong Russey village

Finally, in Andong Russey, I talked to Beol Yeom (a female of 42 years), the owner of a workshop who had also benefited from a previous NGO intervention in 2008, similar to S. Yung's workshop in Banh Chhkol. On the question of the difficulties in running the workshop, she answered:

"The broken kiln is my headache [see Figure 15]. It wouldn't make much difference even if the kiln were fixed. I need a new one that is capable of a higher temperature, so that it can fire glazed items. I already have three kilns which were constructed in 2000 by the Germans, but their quality is not good." (B. Yeom, interview, 24 October 2014)

As with the other workshops I visited, products were randomly placed in storage (see Figure 16). Outside the workshop, there was a sign in the corner, which was a gift from an NGO in 2008 (see Figure 17). Having visited four workshops in three villages, this abandoned sign seemed to be a symbol of the problems left behind by the previous NGO interventions in the same way that the kilns were broken and abandoned, and the potters' dependency on technicality and external aid and their lack of knowledge in design and sales also seemd to have fallen by the wayside.



Figure 15. Broken kiln



Figure 16. Products in storage



Figure 17. Left-out sign

# Wrap-up notes

This observation started with the aim of understanding the geographical dispersion of the pottery communities in Kampong Chhnang province and to sketch the research context. I visited four workshops in three villages, Banh Chhkol, Trapeang Spov and Andong Russey, and talked to the local potters. The intention was to find out about their working environment, their relationship with other workshops and potters in different villages and the problems they faced. Each village had experienced NGO interventions to some extent in the past, and they had benefitted from the installation of certain infrastructure (mainly kilns, workshops and potters' wheels) and the implementation of particular training programmes. However, there appeared to be a lack of originality and knowledge to add value to their products. A lack of knowledge in design, branding and marketing inevitably caused this lack of differentiation in the products, which led to a price competition and poor profits. Most of the goods were daily necessities and small decorations for the locals, only costing between 500 Riel (0.13 USD) and 10,000 Riel (2.50 USD) according to my observations. It was discovered during the interviews that young people tended to treat pottery production as a declining industry, and that they preferred to work in the urban factories to make more money and to be able to move into the city. Therefore, I saw the challenge not only in terms of their economic independence, but also about their personal development, their need for a confidence boost and cultural preservation.

#### 5.2.2. Previous NGO interventions

Cambodia is known as the country with the second highest number of NGOs per capita in the world, after Rwanda; there are about 3,500 registered NGOs, implying that NGO activities directly affect 2-30% of the population (Domashneva 2013). Pottery communities in Kampong Chhnang have also experienced interventions aimed at improving the technicality of ceramic production since the late 1990s. This was around the time when the Ministry of Culture and Fine Arts was founded (1997). There was also a wider discourse in process on sustainable development through cultural approaches driven by UNESCO's World Decade for Cultural Development (1988-1998) (Goncalves 1998). The pottery communities in Kampong Chhnang were regarded as cradles of cultural heritage, but at the same time, they 'desperately need(ed) support' (Ludwig 2012: 2). Prior to conducting the SDTWs, it was important to understanding previous NGO interventions in the research setting to learn about their influence up until the current day and to avoid a repetitive approach. I managed to reconstruct the previous NGO approaches in Kampong Chhnang by patching pieces of information through my deskwork, the interviews and the data provided by the insiders of the projects. The two main NGO projects are chronologically identified below.

# The SEQUA project: The introduction of kilns and potters' wheels<sup>12</sup>

In mid-1990s, the Koblenz Chamber of Crafts and the *Stiftung fuer wirtschaftliche Entwicklung und berufliche Qualifizierung* (SEQUA) of Germany saw that traditional pottery production in Kampong Chhnang was in severe decline (Ludwig 2012). With its wider aim to increase the capabilities of the local potters, the project had a two-fold approach: building infrastructure and training local potters. Five ceramic centres were built in three villages<sup>13</sup>, which included a studio, roof, toilet, water pump, kiln and display shelves. Much of the emphasis was given to the introduction of new technology and handcraft techniques, such as potters' wheels and kilns (Ludwig 2012). With the new potters' wheels, the Khmer potters were able to produce evenly-surfaced pots that would not break during the firing process. The kilns also enabled them to produce stronger pieces at higher temperatures, compared to their previous open fire process which basically was to fire pots covered in straws (Ludwig 2012). Ceramic experts from Germany, Japan and

<sup>&</sup>lt;sup>12</sup> The project was run between 1998 and 2007.

<sup>&</sup>lt;sup>13</sup> Banh Chhkol, Andong Russey and Tropeang Spov.

the Royal University of Fine Arts Phnom Penh taught 120 Khmer potters as part of their 'Basic Vocational Training Course in Ceramics<sup>14</sup>' between late 1998 and January 2001; among those, four Khmer potters were given training opportunities at a vocational school in Germany for three months (Ludwig 2012). This early project influenced the pottery communities in Kampong Chhnang to a certain extent, preparing the ground for modern pottery production by being introduced to and trained in the use of kilns and potters' wheels. During my visits to the pottery communities, almost everyone I met mentioned the 'German teachers who gave us potters' wheels and taught us advanced techniques' (K. Smok, interview, 24 October 2014; B. Yeom, interview, 24 October 2014; T. Yung, interview, 24 October 2014). The SEQUA's report published in 2012, four years after the completion of the project, notes that the project helped to stop the decline of the ceramics industry in Kampong Chhnang, and contributed to an increased income in 450 pottery-producing households in the province (Ludwig 2012).

However, there appeared to be a few issues with this intervention. Firstly, the kilns caused inequalities among the local potters. Each kiln was built in five ceramic centres in three villages, and they were to be shared by the community members (Ludwig 2012). However, it was observed throughout my fieldwork that this was not the case. Dissimilar preferences in working styles between different villages seemed to have resulted in a monopoly of the kilns and equipment by certain ceramic centres.

Secondly, as for the usability of the kilns, according to the internal report of the *Deutsche Gesellschaft für Technische Zusammenarbeit* (GTZ) produced in 2009, five ceramic centres appeared to have reverted to their traditional ways of working because the local potters preferred 'less firewood and less work to prepare the kiln' (GTZ 2009: 1). It was also observed during my visit that three out of the five kilns built during this project had been broken and abandoned for years, and that the locals were hoping to be given new high-temperature kilns.

Thirdly, the project failed to establish any lasting impact. Although the local potters were taught glazing techniques with *imported* materials, they could not afford the glazing colours after the completion of the project; therefore, they returned to making bisqueware,

<sup>&</sup>lt;sup>14</sup> 12 two-week workshops were conducted by a Germen ceramist.

the style they used prior to the SEQUA project (GTZ 2009; B. Ok, interview, 24 October 2014).

# Kampong Chhnang Pottery Design Competition<sup>15</sup>

The project aimed to upgrade the value chain by improving product quality and marketing (GTZ 2009). The project was led by a consultant hired by GTZ, whose role included running the competition, identifying outstanding potters among the participants, reproducing the selected ceramic designs from the competition, and submitting the products to exhibitions in Phnom Penh (GTZ 2009). An internal report informed that the overall project lasted 22 days between March and June 2010.

The most visible outcome was the 'Pottery Design Competition' held in 2010 (GTZ 2010b), which matched university students from Phnom Penh with potters in Kampong Chhnang to create prototypes of new ceramic designs (see Figure 18). 19 students from Phnom Penh teamed up with 25 potters in Kampong Chhnang. As a combined group, a student would draft the ceramic designs and a potter would reproduce it as a prototype. The top three designers and potters were awarded 100 USD (N. Oeur, interview, 2 March 2015). The criteria included the degree of originality, aesthetic quality and technicality, such as framing the clay and decorating by tools (GTZ 2010a). This programme was expected to improve product quality, encourage the use of different raw materials, introduce new techniques and develop new, yet authentic Khmer designs (GTZ 2009).

This project might have stimulated the local potters of Kampong Chhnang by encouraging work with design students and by instilling pride and confidence in terms of their techniques. The potters would have been interested in participating since this was the first competition in the community, and it also offered substantial monetary awards (a factory worker usually makes 80-100 USD per month). I found that the competition event has been treated as a source of pride by the local authority.

 $<sup>^{15}</sup>$  The competition was conducted by the GTZ  $\,$  and Deutscher Entwicklungsdienst; DED) in 2010.



Figure 18. Leaflet produced through the Pottery Design Competition in 2010

Nonetheless, the project leaves many questions in terms of its potential for increasing the potters' capabilities and its continuity. At a glance, this competition might seem to be an

improvement from previous SEQUA projects, which focused on top-down training by foreign ceramists. Instead, this project sought to collect original designs by Khmer students, which would then be created into prototypes by Khmer potters. However, why should Kampong Chhnang ceramics be designed by students from Phnom Penh? Why not let the potters design their own products? Why divide the role between designer and technician? The objectives of the project included upgrading the value chain by developing ceramic designs and by connecting the production to the market. This would not be possible if the local potters remain as mere technicians, without knowledge and skills in creative design and trades. The project limited the role of the local potters, failing to provide them with opportunities to take an active part in the creative process.

This also leads to the question of the distinctiveness of pottery in Kampong Chhnang. Would the design students from Phnom Penh be able to understand the unique characteristics of the pottery culture and production in Kampong Chhnang? Would they know all the precise details of locally available materials? Would they be able to reflect on their designs properly? In order to design ceramics that represent the region, the local potters should have taken larger part because they have innate knowledge. Indeed, it turned out that some of the potters thought this competition was missing the point because in many cases the students from Phnom Penh brought impossible designs to be made, lacking an understanding of the materials, structure and functioning of Khmer ceramics (N. Oeur, interview, 2 March 2015).

Although this was regarded as a significant event in the pottery community in 2010, its influence was hardly visible by the time I was collecting data in 2014. There was neither any collaboration between the design students from Phnom Penh and the potters in Kampong Chhnang. The awarded items, which were coloured and glazed to ensure high quality, could not be reproduced thereafter due to their unaffordability. Not only was the outcome of this project halted, but also the records of the project seemed to have disappeared. I would have to rely on the fading memories of the local potters if I was unable to gain access to the insider report by the *Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)* with help from a member of staff. There was no public information available regarding the project, except a twelve-page booklet. A lack of credible records on previous practices could discourage further practices and research

because without a proper record, it is possible to repeat the same work, thus wasting time and resources.

By exploring the past history of the handcraft pottery villages, previous NGO interventions and their influences, I was able to avoid repeating their work, and I also gained a sense of the dynamics around the community. Previous interventions have contributed to the modern construction of the pottery industry in Kampong Chhnang through a long-term support. A part of their legacy is positively regarded, including the distribution of the potters' wheels and handcraft techniques. However, the management and the use of the donated kilns and glazing techniques appeared to have been neglected. This left me with several questions: why have the kilns been abandoned? Why did the local potters revert to their old ways of production? Why has their profit and value chain not been significantly improved subsequent to this? Why has the kiln become the most desirable object in these communities? What is it that would fundamentally change the production process and improve the value chain? Can creativity play a role in capability building? In what ways can social design practices be adopted and engaged within this context? This background research and the questions it raises helped identify the problematic situation and arrive at ideas for the SDTWs that are situated within a specific context. These ideas were created in collaboration with the participants throughout the second part of the fieldwork.

#### 5.2.3. Related government organisations

In the beginning of the fieldwork, I visited the Department of Commerce in Kampong Chhnang, a subsidiary of the Ministry of Commerce. Through this visit, I aimed to: a) gain information on a previous pottery project conducted by the GTZ; b) collect statistical figures related to pottery production in Kampong Chhnang; c) learn the role of department in terms of cultural development in Kampong Chhnang's pottery production; and d) find out if there would be an opportunity to collaborate with local authorities throughout my fieldwork. I was particularly interested to learn about the GTZ project, which I had discovered on YouTube previously (GIZ Cambodia 2012). In the video clip, GTZ had attempted to improve design and marketing approaches of pottery production in Kampong chhnang through the 'Pottery Design Competition' in 2010 (GIZ Cambodia 2012). I was keen on learning exactly what they did, so that I could not only gain some ideas for action research, but also to avoid duplicating their work.

Chanthan Chhour, the director of the department, knew little about the GTZ project because he was not employed at that time (C. Chhour, interview, 24 October 2014). However, he kindly offered to take me on a short trip around pottery villages I have not yet visited. For the next four hours, he guided me around several pottery-making communities in Kampong Chhnang. He seemed eager to introduce me to his potter friends and show me as many places as possible. On our way back, he proposed another trip to a bamboo craft village. He even bought me a small set of cooking pots as a gift. I appreciated this, but I also was curious about his overzealousness, considering the notorious inhospitality of public officers in Cambodia. I discovered that I had been mistakenly introduced as an NGO member of staff, and not as a PhD student by my translator. Perhaps, Chhour is a kind person by nature, but his misunderstanding possibly led him to perceive me as a potential donor. This partly explained why some potters I met on that day eagerly expressed their concerns about the outdated kilns, and their wishes for financial support.

The above anecdote serves to show that the role of the local authority tended to be more of an intermediary between international donors and local stakeholders, rather than as an executive organisation of cultural policies. The lack of budget seemed to be one of the major concerns of culture-related government organisations. In an interview, Pagnarith Kong, the deputy director of the Ministry of Industry and Handicrafts, reported that the ministry was preparing a proposal to map out handcraft clusters in Cambodia for the first time (P. Kong, interview, 11 March 2015). Kong admitted that 'we are in the position to ask NGOs to support us; we don't have enough budget to pay the staff and proceed with projects as planned. This in return deteriorates our staff interests at work' (P. Kong, interview, 11 March 2015). Although this thesis does not cover a collaboration with local authorities, further research is needed to explore the ways in which government organisations can inform the process of cultural development through the social design thinking approach.

# 5.3. Identifying the problematic situation

Throughout this thesis, I argue for an approach to social design that not only addresses social issues through local empowerment and participation, but also recognises and rearranges the social relationship around a phenomenon. This can affect the ways in which we view and live in the world, how we interact with others. Drawing on the standpoint of science and technology studies (STS), Marres (2007: 776) claims that 'the enactment of public concern involves the mobilization of socio-ontological associations that mediate actors' involvement in the issues at stake'. Inspired by STS and the actor-network theory (ANT), I focus on the process of problematisation, and how a social design thinking approach enables us to see and act differently, compared to the conventional dualistic problem-solving formula. I claim that the donated kilns and previous NGO interventions are the *troubling actors* within the relational constellations of the pottery community, weakening the relationship between the local stakeholders, objects and the community.

# The social design thinking approach for a real-world problem

The findings from the observations and interviews with the local stakeholders throughout the first part the fieldwork showed that the local potters wanted to improve their knowledge and skills for ceramic production and sales, but that they lacked the knowledge on where to begin. It seemed important for them to add value and increase their profits not only in terms of improving the community economy, but also as a means of cultural preservation, considering the significance of the handcraft pottery as a Khmer heritage in the region. Understanding that contemporary social problems often tend to be 'open, complex, dynamic, and networked' (Dorst 2015: 127), I focused on developing a social design thinking approach through the notion of socio-material assemblage as seen in STS and ANT (Lury and Wakeford 2012). Dorst (2015) argues that instead of adopting a conventional problem-solving approach overly focused on separating solution from problem, designers need to co-evolve problems and solutions by iteratively exploring the problematic space and solution. Similarly, Schön's (1983) idea of reflection-in-action suggests that instead of taking a linear, dualistic problem-solving process, researchers and designers should be able to frame a problematic situation. Instead of separating ends from means, doing from thinking, and solution from problem, this new approach enables a

greater deal of flexibility and mobility with which to explore the problematic situation and how to unfold the issues at hand.

This can be particularly useful in a social design enquiry, which seeks to act against complicated and fuzzy situations that cannot be dealt with a single, straightforward solutions. This approach to social design thinking can lead us to construct the problem by navigating the situation through our own actions, interactions and reflections, rather than taking the problem as given (Buchanan 1992; Cross 1982; Dorst 2003, 2015; Kimbell 2011). In this way, we do not necessarily follow the traditional problem-solving process rooted in the 'dichotomies of technical rationality' (Schön 1983: 69), but frame the situation to unveil the underlying relationships within a phenomenon, and explore the ways in which the problem can be constructed and should be dealt with (Dorst 2015). Through this process we can discover the multifaceted cause of the problematic situation, and devise an innovative methodology to improve the constructed problem. At the same time, we are able to perceive the problematic situation as an ongoing relationship with its constituents, that is the stakeholders, kilns, external interventions, attitudes, knowledge, feelings and profits; therefore, the need for an organic, iterative approach becomes important to rearrange this constellation angled for a lasting impact.

# Problematisation: Revealing kilns as troubling actors

The first part of the fieldwork revealed that previous NGO activities in the pottery communities in Kampong Chhnang appeared to have provided conventional problemsolving approaches largely drawing on technocracy and external aids. Most external experts during that period had fixed the problem to be that of poor quality pottery products, primitive skills, poverty, lack of infrastructure for production and a weak value chain (GTZ 2009; Ludwig 2012; H. Ake, interview, 13 February 2014; S. Saruta, interview, 6 December 2014; Y. Yamazaki, interview, 15 January 2015). Consequently, most previous interventions had been focused on providing the infrastructure and equipment for ceramic production, and training the local potters with new skills and techniques by ceramists from Germany and Japan. These constitute by no means unhelpful modes of support; indeed, they have contributed to the modern construction of pottery production. However, ultimately these resulted in infrastructural inequality. For example, the SEQUA project built five ceramic centres in three villages so that community members could share kilns

and other equipment (Ludwig 2012). However, it was observed during the field visits that the infrastructure was not equally shared among the locals because each village had different preferences in working styles (individual versus cooperative). Moreover, three out of the five kilns were broken and abandoned, and instead of fixing these, potters wanted *to be given* new high-temperature kilns (see Figure 19). While their old kilns could only reach up to 800°C, the new kilns could fire up to 1250°C, hence producing a better quality glaze and a higher resistance to breakages (S. Yung, interview, 24 October 2014; H. Ake, interview, 13 February 2014). Ironically, most local potters had reverted to their traditional ways of working because they preferred 'less firewood and less work to prepare the kiln' (GTZ 2009: 1) and could not afford imported glazing materials. Moreover, the intervention appeared to pose the questions of a weak continuity, lack of capability building and a dependency on the technicality and NGO aids.



Figure 19. Broken kiln

Indeed, these NGO interventions appeared to have failed to perceive and treat the Khmer potters as creative artisans with indigenous knowledge and creative abilities. Without considering the relationship within the communities and the potential consequence of imported technicality and training, it resulted in growing dependencies and a lack of confidence in the people and pottery communities. In other words, previous NGO activities left the challenge of participatory knowledge generation, capability building, lasting development and fundamental social transformation. This was the first step towards

problematisation, that is perceiving the donated kilns and previous NGO activities as troubling actors within the network of pottery communities, Khmer potters and the ceramic production. It appeared that the kilns and other technical skills brought by foreign NGOs came to form a significant part of the pottery communities. Without allowing much space for independency and creativity, it resulted in a division between the external experts and local stakeholders, designers and technicians, teachers and students, donors and recipients, and modern and indigenous knowledge. It seemed to me that the kilns were creating a new kind of relationship in the community, which made the locals feel trapped in technocracy, NGO aids and top-down training.

The reason that I call previous NGO interventions and donated kilns troubling actors derives from the notion of socio-material assemblage, as explained in the literature review. Acknowledging both human and non-human actors as important constituents in a social constellation, I argue that objects, donated kilns in this case, have their own agency, affordance and politics (Latour 2005; DiSalvo 2012; Marres 2012; Gibson 1986). Just as the highway overpass bridges on Long Island, New York were seen to 'achieve a particular social effect' in obstructing black people and the lower classes from going to the beaches (Winner 1980; DiSalvo 2012), the donated kilns in the pottery communities of Kampong Chhnang are also seen as troubling actors. These troubling actors complicate the ongoing relationship between the local potters, their work process and methods, materials, emotions, the community and their potential collaboration with other external experts. The role of objects is acknowledged and adopted for a social design thinking approach in the process of rearranging the relationship between the actors within the problem situation since objects can offer a number of actions and interactions, as suggested below: In addition to 'determining' and serving as a 'backdrop for human action', things might authorize, allow, afford, encourage, permit, suggest, influence, block, render possible, forbid, and so on (Latour 2005: 72).

According to DiSalvo (2012), even though Winner focused on 'the intention of the designer' who created these bridges barring people who belonged to certain socioeconomic groups, Latour expanded the role of objects as 'dynamic and contingent' (DiSalvo 2012: 24). He argues that '[o]bjects and design still have political significance and effect, but that significance and effect are always shifting' (DiSalvo 2012: 24). Likewise, the donated kilns in the pottery communities in Kampong Chhnang betrayed

somewhat benign intentions conceived by external experts, and hence became troubling actors through a continual shift within the social constellations within the pottery community, during several interventions over the past two decades. It is possible that donated kilns on their own could not fully enact the local potters' spontaneous development because they were detached from the social constellations of the pottery community. A series of top-down trainings, short-term piecemeal projects, in-kind donations of infrastructure and equipment, imported materials, a one-off design competition and dualistic approaches that separated local stakeholders from taking part in creative roles all seemed to have prevented the kilns from establishing a mutual relationship with the community. Such a circumstance appeared to be a result of neocolonialistic approaches, as argued by the post-development thinkers (Escobar 1995; Ziai 2007). Such problematisation led me to think of alternative ways to rearrange the constellations of the pottery community to encourage the local potters to reach beyond technocracy by exploring their indigenous knowledge, experimenting with their innate creativity and eliciting an organic, ongoing development even without my presence. In the next chapter, I illustrate the process of collaborating with the participants to elicit productive outcomes for their ceramic production, and ultimately to open an agonistic space for continual progress.

#### Conclusion

This chapter offered an illustration of the early part of the fieldwork, which involved observation and problematisation of the problematic situation faced by a handcraft pottery community in Kampong Chhnang. It attempted to gain empirical insight into the research setting by describing the field visits to different pottery communities in the province, conversations with local stakeholders and the findings on previous NGO activities related to ceramic production. Discoveries from the observations and interactions with the locals led to the process of reconstructing the problematic situation, which revealed previous NGO interventions through top-down trainings and in-kind donations of kilns and other infrastructure as 'troubling actors' that caused a sense of dependency, diffidence and cynicism in the community.

Instead, I focused on exploring an alternative approach to redirect and expand the potters' attentions beyond technocracy and hierarchical training. It is possible that a fresh perspective might change the way they perceive themselves and deter them from relying

on external help. An approach to social design was conceived within the research setting as a means of overcoming the conventional dualistic thinking that used to bar the local potters from taking part in the creative thinking process. Based on the notion of socio-material assemblage, I argued for a social design thinking approach that can rearrange the relational constellation of different actors within the problematic situation. Subsequently, I came to develop and conduct the SDTWs, the action research activities that encouraged the local potters to explore their tacit knowledge and rethink their role and relationships from a different perspective. The next chapter illustrates the detailed process, methods, outcomes and reflections of the SDTWs as an experimental approach to social design practices in the Cambodian context.

# 6. Fieldwork (2): The action research based Social Design Thinking Workshops (SDTWs)

In the previous chapter, I explained the background and problematic situation of the Cambodian handcraft pottery community as a research setting. Through a series of participant observation and interviews, I began exploring the existing problems and challenges faced by the local stakeholders. Conducting action research meant that the problem was not set solely by the researcher; conversely, the process of problematisation should be co-initiated and co-developed with the participants, who understand their own problems and the context better than the external experts. Greenwood and Levin described the significance of the democratic process in action research approaches below:

[E]very human being knows more about his or her own life situation than anyone else and that everyone, given reasonable support, is capable of contributing knowledge and analysis to a collaborative social process if we collectively are skilful enough in creating the arena for collaboration. (Greenwood and Levin 2007: 261-2)

This chapter illustrates the process, methods, outcomes and reflections from the action research informed SDTWs in detail, with a particular focus on an ethnographic account. It starts by explaining the process of selecting the participants and planning for the SDTWs. It further looks closely at each session, moving through the *Understand, Create, Expand*, and *Reflect* phases. The earlier part of the SDTWs was designed to discover and shape the research problem together with the participants; therefore, Sessions 1, 2, and 3 focus on understanding the participants' needs, aspirations and challenges. Based on these findings, the participants explored creative approaches to their ceramic production in Sessions 4, 5, 6, and 7. This then led the participants to expand their knowledge on the potential customers, the market, trends and branding throughout Sessions 8 and 9. Finally, in the last two sessions, the participants reflected the SDTWs. This was achieved through the use of interviews to find out how they felt about this process, how they would evaluate their personal development, and if needed, how they would change the overall structure of the SDTWs.

# 6.1. Selecting the participants

On participation within the development context, White (1996) marks the importance of making conscious decisions to choose the contestants. In the case of the SDTWs, the participants were selected based on three considerations: the nature of action research as a research method, the degree of participation and the findings from the first part of the fieldwork.

Firstly, action research as the main method of the fieldwork in this study meant that I had to seek and generate knowledge in the local setting by treating the participants as colleagues, not as research subjects. In my approach to social design thinking in the Cambodian context, participation and the democratic process were crucial while avoiding authoritarianism and hierarchy. At the same time, I had to consider the social customs in Cambodia in the process of selecting the participants. The social structure in Cambodia tends to be hierarchal, based on differences in age, sex, occupation, political position, education and financial situation (Hinton 1998). For example, it is the social norm to respect older people. In their study to co-design prosthetic legs with Cambodian people, Hussain et al. (2012: 99) noted that the participants were being 'very careful about criticizing each other and not to give negative feedback on prototypes'. The resistance to publically criticise might also be explained as an influence of the Khmer Rouge, which forced the elimination of intellectuals under their fascist and totalitarian regime (Chandler 2008). The literature suggests that it could be difficult to run a collaborative workshop with people from various backgrounds whose social positions differ from each other, and that it might be challenging to form a comfortable atmosphere for open discussion (Hussain et al. 2012; Winschiers-Theophilus, Bidwell and Blake 2012; Winschiers 2006).

Secondly, the meaning and degree of participation had to be rigorously approached. Would participation always work as a virtue? According to Greenwood and Levin (2007), participation can often become a token gesture without being properly enacted. Participation is closely associated with the idea of power and control (Arnstein 1969; Greenwood and Levin 2007), and it is often likely that a powerholder or an expert imposes his/her idea on the participants. In such cases, under the name of participation, participants are expected to do as they are told, rather than demonstrating their own capabilities and

decision-making. Therefore, democratisation and co-determination are the key elements (Greenwood and Levin 2007). Problems should be collaboratively set by multiple stakeholders, not just by the researcher or an expert. Similarly, solution and analysis should be co-developed, 'taking advantage of the multiple perspectives of the diverse stakeholders and their experiences with the problems' (Greenwood and Levin 2007: 261).

Thirdly, the findings from the first part of the fieldwork between August 2013 and May 2014 suggested that it might be difficult to involve potters from different villages for the SDTWs. I had to find people who would attend every session and produce outcomes. Attendance was the key issue in conducting this action research within a limited time scale. It would have been an intriguing discussion if I had invited potters from three different villages in Kampong Chhnang<sup>16</sup>. This approach would have provided an opportunity to observe different working styles and worked towards developing their collaboration. On the other hand, it could have been difficult to gather the participants for each session; further time and effort would have been required for them to become familiar with each other. Furthermore, findings from the early observations suggested that potters from each village had different preferences in working styles, either as an individual or working together as a cooperative, underlining a potential struggle in the running of the SDTWs in the limited period time. Indeed, I tried to involve potters from different villages, but that during the early phase of the SDTWs, potters from outside Andong Russey seemed to find it difficult to blend in.





Figure 20. The KCHH workshop in Andong Russey village, Kampong Chhnang province

<sup>&</sup>lt;sup>16</sup> Banh Chhkol, Andong Russey and Trapeang Spov villages in Kampong Chhnang province

Hence, I decided to focus on the quality of the relationship between participants, rather than having a larger number I chose to work with the Khmer potters who belonged to the KCHH workshop (see Figure 20). As explained in Chapter 4.4.2, the participants were facing the challenge of a take-over of the KCHH from the Japanese management within a year (H. Ake, interview, 13 February 2014). It was important to ensure that they had the capabilities to run the ceramic production and trade by themselves afterwards. By viewing their problem as something that required the understanding and rearrangement of their relationship within the community, it seemed appropriate to work with them to explore my approach to social design through the notion of socio-material assemblage. The initial contact was made through Hiroshi Ake, the coordinator of the KCHH, who also acted as a gatekeeper. He agreed that my approach could help the participants develop their design and branding skills. Additionally, Ake (interview, 25 October 2014) advised me against monetary compensation for the participants; instead, he suggested that I bring cold beverages for each workshop. This was a useful suggestion that helped to form a friendly and comfortable atmosphere. Financial incentives might have weakened their participation, especially in a country where foreigners were generally regarded as wealthy donors.

Ten Khmer potters, the members of the KCHH, participated in the SDTW. They were either family or friends, consisting of six women and four men. They have been working together since 2009 when the KCHH was founded by a Japanese entrepreneur and a group of Japanese potters (H. Ake, interview, 13 February 2014). The participants had been trained by Japanese ceramic experts whose visiting period varied between a week and two years (H. Ake, interview, 13 February 2014; S. Saruta, interview, 6 December 2014). The training had been focused on enhancing technical skills required for shaping, glazing and firing processes (S. Saruta, interview, 6 December 2014). Much of the emphasis had been given to the proper use of glaze and kilns to add more value and to differentiate the products. Casual conversation took place prior to the SDTWs to introduce myself and the research objectives, and for us all to get to know each other. The personal backgrounds of the participants were collected to reflect on the process of planning and running the SDTWs (see Appendix 1). The findings that were taken into consideration when designing the plan for the SDTWs include the following:

- All participants were educated up to primary school without any formal training in art and design.
- All participants had more than five years' experience in ceramic production.
- Four of them had the opportunity to learn techniques from the German teachers before joining the KCHH.
- All participants joined the KCHH to learn glazing and firing techniques, and to increase their profits.
- There is a strict gender role in the job: women are in charge of shaping, glazing, and carving while men are responsible for delivering heavy materials, producing glaze, glazing and firing. Glazing was the only task that overlapped.

By compiling the information given by the participants, I could roughly understand their circumstances, which helped me design the plan for the SDTWs accordingly.

# 6.2. Planning the SDTW sessions

This section outlines the process of planning the SDTWs, which evolved through several rounds of amendments during the fieldwork. Each plan had been developed from the previous one, supported by the experiences and reflections gained through participant observations, interviews, and later, the SDTWs.



Figure 21. The process of planning the SDTWs

The first Plan 1.0 started with a few rough ideas for the research methods, duration of each session and the composition of participants. It then developed into Plan 2.0, which showed some important changes to the number of sessions, detailed weekly plans and materials for creative activities. When designing Plan 2.0, I only reached the third session of the SDTWs. It was only after the second session had occurred that I could complete the sixth session. The plan could not be completed without actual practice, reflection and consideration. By outlining the activities and instructions I would give to the participants, Plan 2.0 began to shape each session in detail (see Figure 21).

Firstly, I listed all the keywords and activities that came to the mind, such as 'explain about my favourite piece', 'taking photographs', 'making a scrapbook' and 'making prototypes with clay'. Then, I grouped overlapping ideas. Related concepts and activities were categorised together. During this process, titles arose from each group, such as 'identify the challenge', 'discover our identity' and 'self-documentation'. These titles became each week's main task. This was easily and intuitively done by writing ideas on post-it notes and moving them around on the wall to arrive at the best sequential order. The draft of Plan 2.0 was then neatly designed in as a graphic diagram as a panoptic reference (see Diagram 4).

From this, Plan 3.0 was produced in December 2014 after the SDTWs began (see Diagram 5). Experiences and reflections from the first three session helped me to complete the plan. Plan 3.0 aimed to structure a sequential process by following four phases: *Understand, Create, Expand* and *Reflect*, with each session being mutually interconnected. Firstly, in the *Understand* phase, I focused on getting to know the participants and having them to acknowledge my research objectives. More importantly, this aimed to provide an opportunity for all of us to identify and shape the problem together by understanding the research context and facing the challenges that arose.

Session 1 24 Nov 2014	Session 2 1 Dec 2014	Session 3 22 Dec 2014	Session 4 29 Dec 2014	Session 5 12 Jan 2015	Session 6 19 Jan 2015	Session 7 20 Jan 2015	Session 8 9 Feb 2015 (tbc)	Session 9 16 Feb 2015 (tbc)	<b>Session 10</b> 23 Feb 2015 (tbc)
Introduction  Needs & wants  Favourite ceramics	Now & future Challenges	Self-document Inspirations & identities Worries	Scrapbook Think about end-users & kchh identity	Design practice #1: Modification of graphic motifs & patterns	Design practice #2: creation of forms & shapes	Three- dimensional prototype design	Understand the customers, markets & trends	Storytelling, packaging, display & communication	Reflection & evaluation
Explain the aim and process of my design workshops.	Create two mood boards: images of their 'now' and 'future'.	Interview with their photos & drawings to describe the questions:	Think about where their products will be supplied and to whom.	Mini-lecture on design elements: form, motif, colour, pattern and texture.	Discussion on last week's outcomes.	Produce ceramic prototypes.	Analyse the sales note.	Mini-lecture on the need for storytelling, branding, etc.	Discuss, reflect and evaluate the design workshops so far.
Image cards: ask them to put stickers on the objects they need and want.	Write down what kind of challenges and difficulties they have.	You can only find it in Kampong Chhnang.      Three objects	Research materials online & offline with iPads, laptops.	Design modification & exploration practice.	Form & shape creation practice		Analyse the visitors & customers.	Think of our storytelling.	
Favourite pieces: ask them to pick their favourite ceramic and explain why.	Give away disposable cameras for self-documen- tation.	<ul> <li>representing Andong Russey.</li> <li>Three objects representing our workshop.</li> <li>If I had the</li> </ul>	Make a scrap- book, as a visual reference for the future.				Analyse the competitors & other cases.	Ideas for packaging, display, branding & communication	
		chance, I want to make  5. This is something I worry about.							

Diagram 4. Plan 2.0 for the SDTW

Session #1. Introduction	Session #2. Identifying the challenges	Session #3. Identifying the inspirations, identities and worries	Session #4. Creating a visual reference	Session #5. Design exploration (1): Modifying graphic motifs and patterns	Session #6. Design exploration (2): Creating forms and shapes	Session #7. Three- dimensional prototyping	Session #8. Understanding the customers and the market	Session #9. Storytelling, packaging and displaying	Session #10. Reflection and discussions	Session #11. Evaluation interview	
Discover the needs & wants of the participants.	Create mood boards to find out the challenges.	Visual expression through drawings and photographs; in-depth interview.	create an 'idea book' as a visual	Explore and motify design elements (focused on motifs and patterns).	outcomes from the	with clay.	Analyse the sales note, visitors, customers and competitors; think about strategies for customer service.	Co-create brand materials based on the participants' stories and drawings to represent their identity.	Discuss, reflect and evaluate the SDTWs	In-depth interviews to learn about the participants' personal develop- ment and emotions after the sessions.	
24 Nov 2014	1 Dec 2014	22 Dec 2014	29 Dec 2014	12 Jan 2015	19 Jan 2015	20 Jan 2015	9 Feb 2015	16 Feb 2015	23 Feb 2015	2 Mar 2015	
1 week	3 weeks	1 week	2 weeks	1 week	1 day	2 weeks	1 week	1 week	1 week	1 week	
The periods of subsequent reflection after each workshop session											

Part 1. Understand

- · Get to know the participants.
- Understand their aspirations and challenges.
- Build trust.

Part 2. Create

- Practise how to research materials online and offline.
- Explore ceramic design ideas based on previous research.
- Create three-dimensional prototypes with clay.

Part 3. Expand

Expand the knowledge beyond the production: understand trends, end-users, the market, branding, packaging, display and communication.

Part 4. Reflect

Reflect, discuss and evaluate the SDTWs.

Diagram 5. Plan 3.0 or the final version

Secondly, in the *Create* phase, the participants were asked to explore and design their ideas. This was the core part of the SDTWs, with an aim to encourage the participants to access their innate knowledge and potential for originality. Thirdly, in the *Expand* phase, the participants were asked to develop their ideas beyond the technical aspect of the ceramic production. The first part of fieldwork had informed me that the local potters lacked knowledge in sales, packaging, branding and display, which were crucial in the process of adding values. Consequently, this phase attempted to make the participants aware of such aspects so that they could begin to think about and work on the post-production. Finally, in the *Reflect* phase, the participants were encouraged to reflect on and evaluate their personal development, and the overall design of the SDTWs.

In summary, the plan for the SDTWs was conceived in the earlier phase of the fieldwork; however, it underwent the iterative process of practising, reflecting and adapting until the final plan was completed. The plan provided a structural overview of the SDTWs at a glance, yet giving details on each week's activities and expected outcomes. During the fieldwork, I always carried it with me to revise and reflect on the previous sessions, and to adjust the details for the coming sessions. This also worked as a conscious reminder not to waste the time and effort of the participants, which could otherwise be spent on their livelihood. At the same time, I tried to leave enough space for improvisation that arise from the interaction between the participants in the process of the design workshops. The SDTWs and the plans evolved as the research progressed with the participants; it was shaped, developed, implemented and adjusted by their participation. Later in this thesis, I discuss the notion of situatedness in Chapter 8.3.2, based on my experience of designing plans for the SDTWs.

#### Materials

Through the use of visual ethnography (see Chapter 3.2.4), the SDTWs focused on encouraging the participants to explore their innate creativity through various visual forms and methods. They produced drawings, photographs, mood boards and ceramic prototypes. The materials used for the SDTWs were carefully chosen to be locally available and affordable to ensure ongoing progress without my presence. Since the research setting was a busy workshop with lots of ceramic pieces, tools and kids, the priority was given to provide simple, cheap and durable materials. For example, simple sketchpads made of cardboards and binder clips (see Figure 22) worked as a jury-rig desk for the participants.



Figure 22. A sketch pad made with cardboard and a binder clip





Figure 23. Disposable cameras and a list of tasks

I also became interested in the participant-produced photographs, or rather a form of self-documentary (Pink 2013; Banks 2001; IDEO 2008) (see Figure 23). This method appeared to be useful because: (a) the participant photographs provide an 'access and [...] understanding of situations that would be difficult' for the researcher to enter him/herself (Pink 2013: 99); (b) using a camera for the first time offered an interesting experience for the participants, stimulating their interests in the SDTWs; and (c) the participants could deliver visual information that would have been difficult to articulate where there was a language barrier<sup>17</sup>.

I shall not describe how exhaustive and difficult it was to purchase ten disposable cameras and get the films processed in the Cambodian context. Perhaps, it is time for visual ethnographers to leave disposable camera behind since film processing has become more expensive and rare than digital printing in a number of countries. However, the move to

<sup>&</sup>lt;sup>17</sup> Although I had accompanied my Khmer interpreter throughout the SDTWs, it was not possible to fully understand the participants' responses and interactions between them.

digital devices may be also problematic in a development setting due to its affordability and applicability since it is difficult to print images without electricity.

#### The Process

The SDTWs were conducted between 24 October 2014 and 2 March 2015 in the KCHH, in the village of Andong Russey in Kampong Chhnang province. It consisted of 11 sessions, with ten Khmer potters and myself as a researcher-designer, with help from a Khmer translator. Usually, there was 1-2 week' break between each workshop in order to reflect upon the previous one and prepare for the next one. Each session was thoroughly recorded by photographs, videos and a research journal.

As explained earlier, the plan for the SDTWs aimed to gradually build a sequential process with the participants through four phases. Firstly, it was important to *understand* the problematic situation by getting to know the participants, their needs and wants, inspirations, challenges and wishes, and to build trust with them. This included interviews, observations, creating mood boards, discussing image cards, drawing and taking photographs. Secondly, we moved on to *create* the design ideas and cultural distinctiveness for ceramic production by researching materials, developing a visual reference, exploring ideas for ceramic design and producing prototypes. Thirdly, we further *expanded* the knowledge beyond production by exploring trends, end-users, the market, branding, display, storytelling and communication that would help the sales and promotion of the products. This was achieved through a series of interviews, photographic analysis, discussions and the co-designing of brand materials. Finally, we spent the last two sessions *reflecting* the SDTWs by talking the process, methods, outcomes, feelings and personal development gained.

Each session lasted three hours. It started by reflecting on the last week's activity, how it would lead to the next step, explaining today's objectives and tasks and what the expected outcomes were. It was emphasised that the participants were encouraged to initiate ideas since this was a collaborative workshop, unlike the previous training-taught-by-foreign-teachers. They were encouraged to express their opinions and ideas without fearing being wrong because there is no such thing as a 'right answer' in this context. Unlike their previous experience, I resisted being perceived as a teacher, ensuring that there would be

no hierarchal relationship during the SDTWs. Each session was expected to run by their organic participation and knowledge sharing, thus creating a comfortable atmosphere was vital. It was important that the participants take this opportunity to enhance their design capabilities and market knowledge, hence adding value to their products and improving their profits while building self-confidence. The next section illustrates the process of the SDTWs by closely looking at the ways in which each session was prepared and facilitated, and the outputs and reflections produced in its process.

# 6.3. The SDTWs: The processes, methods, outcomes and reflection

This section provides a detailed illustration of the SDTWs by describing: the process of preparation and facilitation; the outputs delivered by the participants; and the reflections on each session. It aims to offer an ethnographic account of investigating the cultural phenomenon over 'long periods of time in the "field" and emphasise detailed, observational evidence' (Yin 2003: 11). The combination of action research, participant observation, semi-structured interviews and visual ethnography offers a vivid illustration of the fieldwork, leading to understanding the relationships between the participants, objects, thoughts and feelings that unfolded throughout the SDTWs. The final session 11, the evaluation interview, is not included here, but it is analysed in Chapter 7.2 in terms of discussing the rearrangement of the relationship within the research setting.

#### 6.3.1. Session 1: Introduction

# **Preparation**

Materials: image cards representing 32 different items and values<sup>18</sup>.

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<sup>&</sup>lt;sup>18</sup> With these, the participants were expected to intuitively recognise and explain what they needed and wanted in relation to their work. The image cards were roughly categorised into: 'tangible properties (that is money, smartphones, motorbikes, boats, cows, tractors, cars, cameras, computers and bicycles)'; 'dwellings (including luxury mansions and urban houses in Phnom Penh, modest local houses and traditional wooden houses)'; 'work-related (tools, books, shops, work spaces, work wear and kilns)'; 'basic needs (as in water, rice paddies, electricity, off-licences and medical services)'; and 'growth needs (such as religion, travel and education)'.

#### Methods and process

Session 1 was intended to introduce the overall aim and structure of the SDTWs as a collaborative approach to social design. Two activities, which also worked as an icebreaker, were proposed to the participants:

- First, to put red stickers on the images representing 'what I need every day', and yellow stickers on the images representing 'what I want to have in the future' (see Figure 24).
- Second, to bring their favourite ceramic piece, and explain why they chose it.

In the first activity, the participants were also asked to think about the relationship between the images and their work. In the research setting where there is a language barrier, this kind of visual communication led the participants to express their thoughts intuitively. At the same time, I expected to get a glimpse of their everyday life and work. Do the images they pick tend to be closer to their basic needs or work-related needs? What do they think of their job? How would they evaluate themselves in terms of their capabilities? What do they value the most in their life and work? Are they satisfied with where they are now?



Figure 24. Image cards put on the wall of the pottery workshop

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<sup>&</sup>lt;sup>19</sup> I borrowed the idea from Kara Pecknold's graduate degree project found here: (http://cargocollective.com/karapecknold/ASPIRATION-CARDS), which was later included in IDEO's Human-Centered Design Toolkit (2008). The images used here were sourced from IDEO's toolkit, Flickr and Google. I tried to reflect on the Cambodian context by selecting relevant images (such as pictures of local houses and landscapes) because some images from the design toolkit seemed irrelevant in this context.

The second activity was to pick up their favourite piece of pottery and explain it. Through this, I hoped to learn about their aesthetic tastes, the distinctiveness of the KCHH products, what kind of function they value in their products, or any other elements that I had not anticipated.

# **Outcomes and Reflection**

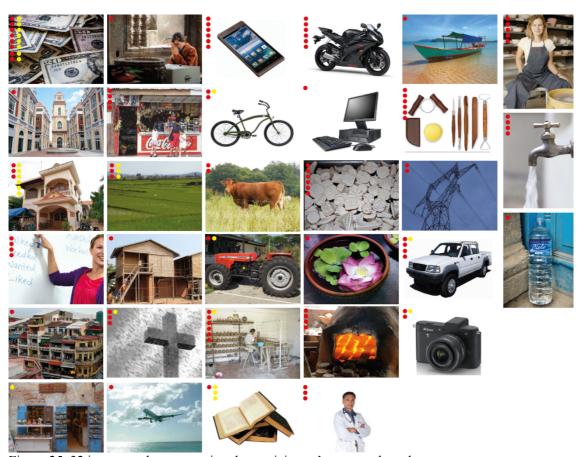


Figure 25. 32 image cards representing the participants' wants and needs

In the first activity, most of the participants expressed their desire for material possessions by selecting money, motorbikes, cars and smartphones (see Figure 25). However, their needs and wants were based on realistic grounds. For example, they did not want to live in Phnom Penh because 'it's too crowded and messy' (Y. Douen, group discussion, 24 November 2014), which was contrary to my assumptions and the major literature on the rural populations' immigration to urban areas (Chant and McIlwaine 2009; Elliott 2006). The participants were happy with the clean air and relaxing working environment. The participants showed an interest in images related to their work. They appreciated their job because '[i]t provides (them) work, a livelihood and money to buy things' (C. Soun, group

discussion, 24 November 2014). They also wished to expand their knowledge to be able to work better: 'I want to learn English so that I can communicate with foreign visitors and customers' (N. Oeur, group discussion, 24 November 2014). From this, I learned that their needs and wants were closely related to their work. The participants seemed to be very motivated to self-develop.



Figure 26. The participants with their favourite pieces

In the second activity, in which the participants were to select their favourite pieces and explain the reasons why, I had a disappointing, yet interesting result (see Figure 26). When the first participant responded that she liked a particular cup because 'it is useful for daily use, like when drinking water' (N. Oeur, interview, 24 November 2014), the rest of the group repeated 'I like it because of (a function)' so that their answers were almost identical. I had expected to get a sense of their aesthetic taste, but only one participant mentioned design: 'I like this kind of clay stand because it can be used for placing mosquito coils. I especially like its curves and colours' (M. Phal, interview, 24 November 2014). In hindsight, I should have asked them individually by conducting separate interviews with each member of the group. It is possible they were anxious about expressing their feelings to someone they did not know very well. But then, I supposed that this could be seen as another finding itself. This led me to adjust the structure and approach of the forthcoming sessions to encourage the participants to speak out about their original

ideas confidently. When asked how they felt about this workshop, they said 'it was strange but interesting' (P. Oun, group discussion, 24 November 2014). It was a good sign that they said it was 'strange' because it meant that they had never had this kind of experience before, so I could expect original outcomes. Also, this showed that the participants felt relaxed enough to say so.

In summary, the use of visual materials was helpful in stimulating conversations where there was a language difference. I also learned that when listening to the participants, it is better to talk individually in a separate space, so that they felt able to express their ideas without feeling diffident.

# 6.3.2. Session 2: Identifying the challenges

# **Preparation**

Materials: four A1 sheets, magazines, printed images, image cards from the previous session, scissors, glues, tapes, pens and post-it notes.

#### **Methods and process**

Session 2 aimed to build on the previous session to find out about the relationship between the participants, their jobs, working environments, community, products, customers, and other constituents of the research setting. Two activities were proposed:

- Firstly, to make two mood boards, depicting either 'our present life' or 'our desired future' in relation to their work and community.
- Secondly, to write down the challenges and difficulties they might face in the process of moving from 'our present life' to 'our desired future'.

Initially the participants were given 20 minutes to finish the mood boards, but, in reality, it took 90 minutes, as they were new to this kind of creative thinking activities. The participants paid attention to the given visual materials to select the image that best represented their present life and desired future (see Figure 27). The chosen images were cut out and put on the large sheets. The completed sheets were put on the wall: two sheets on 'our present life' on the left, and the other two sheets on 'our desired future' on the right (see Figure 28). I asked them to leave some space between them. When this was completed, a green arrow was

attached in the direction of left to right to visualise the sequential narrative from present to future. We had an open discussion on each mood board: what they meant by and why they chose a particular image.



Figure 27. The process of creating the mood boards, and writing down the challenges faced



Figure 28. Mood boards representing the participants' present life on the left; their desired future on the right; and their current difficulties written on post-it notes in the middle

Finally, after talking about the mood boards they created, I asked them to write down or draw on post-it notes what kind of difficulties and challenges would be faced to move from their current situation to the future they wish to achieve. The notes were put on the blank

space between the present and future boards, intuitively visualising the relationship between their current situation, desired future and potential challenges.

#### **Outcomes and Reflection**

On 'our present life' boards, the participants specified what they were capable of at the moment in terms of technicality. The comments included as below.

On an image of a piece of pottery:

- "We can make these."
- "They may be not 100% same to our style, but there's no technical problems to make them"

#### On the image of a kiln:

• "We know how to use the kiln."

On the images of customers and the market, they noted that:

- "We have foreign customers visiting our workshops. We are happy to have them here."
- "We had an event last month and had lots of customers."

#### On teamwork:

• "We work here as a family, which is great."

#### On deficiencies:

• "We don't have enough money for what we wish for."

The discussion warmed up as we talked about the images on the future boards. Most of their hopes were related to the desire to improve their work and sales. Five keywords arose at this stage. Firstly, the participants seemed keen on developing better designs. Secondly, the participants wanted to have kilns at home. Thirdly, having a nice shop to attract more customers was another future desire. Fourthly, the participants expressed a need for education and knowledge. In terms of learning, they were also keen on educating their children. Finally, the participants mentioned their wishes regarding promotion and advertising.

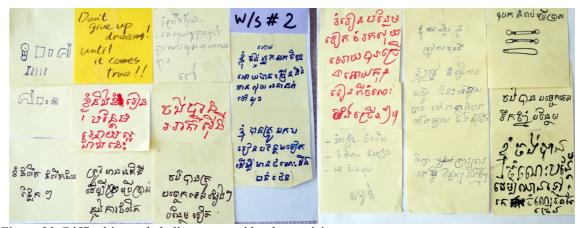


Figure 29. Difficulties and challenges noted by the participants

When asked to write down their difficulties and challenges in achieving the future they aspired to, the majority were closely related to gaining knowledge and new techniques (see Figure 29). The notes included the followings:

- "Study more, earn more for our children to go to school and get lots of knowledge."
- "I would like to have teachers to come and train us with new skills."

At the end of the workshop, Saruta (a visiting ceramist from Japan) and Ake seemed to be positive about the process and outcomes. Saruta, who was also one of the starting members of the KCHH project, said that:

"(This SDTW session seems to) fill the gap in what we lacked – I could teach them technical skills, but not the creative thinking process. They didn't have any experience like this before. I wanted to tell them 'don't stop thinking', and I think your workshop could be helpful in that way." (S. Saruta, interview, 1 December 2014)

The outcomes and reflections from Sessions 1 and 2 suggested that the participants were generally satisfied with their work, and that they wanted to improve their skills and knowledge on ceramic production. Nevertheless, they seemed to believe that advanced knowledge could only come from *teachers*, that is foreign ceramic experts, which implied that a sense of dependency had been prevalent within the community.

#### 6.3.3. Session 3: Visual ethnography and interviews

#### **Preparation**

Materials: disposable cameras, participants' photographs, sheets and coloured pencils.



27-24. This is me. នេះជាខ្ញុំ។
23. This is my family. នេះជាគ្រួសារខ្ញុំ។
22. This is my house. នេះជាផ្ទះខ្ញុំ។
21-20. This is beautiful to me. វាស្អាត សំរាប់ខ្ញុំ។
19. This makes me happy. វាធ្វើឲ្យខ្ញុំសប្បាយចិត្ត។
18. This is something I am proud of.
វាជាអ្វីដែលនាំឲ្យខ្ញុំមានមោទនភាព។
17. This is my favorite food. នេះជាម្ហូបដែលខ្ញុំចូលចិត្ត។
16. This is my favorite color. នេះជាពិណ៌ដែលខ្ញុំចូលចិត្ត។
15. This is my favorite item. នេះជាពេលដែលខ្ញុំចូលចិត្ត។

14. You can only find it in Kampong Chhnang.
អ្នកអាចរកវាបាននៅកំពង់ឆ្នាំងតែប៉ុណ្ណោះ។
13-11. Three objects representing Ondoung russei.
មានរបស់៣ដែលតំណាងឲ្យអណ្ដូងឬស្សី។
10-8. Three objects representing our workshop.
មានរបស់៣ដែលតំណាងឲ្យសិក្ខាសាលារបស់យើង។
7. This is something I need for my work.
នេះជាអ្វីដែលខ្ញុំត្រូវការស្មំរាប់ការងាររបស់ខ្ញុំ។
6. I wish I had this. ខ្ញុំសង្ឃឹមថាខ្ញុំមានវា។
5-4. This is something I worry about. នេះជាអ្វីដែលខ្ញុំបារម្ភ។
3-2. This is something I want to improve.

Figure 30. The participants looking at the cameras while listening to the instructions (top left); the list of tasks attached on the back of camera (bottom left); the list written in English and Khmer (right)

At the end of the previous session, I handed out disposable cameras and asked the participants to take photographs responding to the questions attached to the back of each camera (see Figure 30). Through this, I attempted to gain access to their everyday lives to learn about their relationship to their work, families and friends, community and objects. The participants were also encouraged to draw where appropriate, and to produce rich, visual materials for discussion in Session 3.

#### Methods and process

In Session 3, the participants were asked to respond to the questions on the wall by articulating their answers through photographs and drawings (see Figure 31). The question list was designed to explore their feelings and relationships within the KCHH, the distinctiveness of the community and their products, and their concerns and challenges (see Box 3).

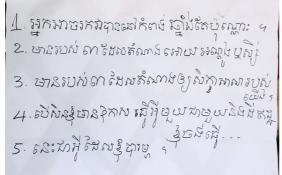








Figure 31. (Clockwise from the top left) The list of questions; drawing and making notes; Yem explaining with his photographs; Chenda Soun at the interview (the last photo: Laiheak Mey)

# On the participants' feelings and relationship within the KCHH:

- 1. In your work, what makes you most happy?
- 2. What is the biggest goal you want to achieve through your work?
- 3. Would you be happy if your children choose the same job as you? (YES / NO) Please explain why.

## On the distinctiveness of the community and their products:

- 4. What is the unique selling point of Kampong Chhnang?
- 5. Please think of three objects that represent Andong Russey village.
- 6. Please think of three objects that represent our workshop and products.
- 7. If you had a chance to make anything you want with clay, what would it be? Why?
- 8. Why are you proud of Cambodia?

## On concerns and challenges:

- 9. What are your concerns about your work?
- 10. What do you want to improve here?

Box 3. Question list for the participants in Session 3

When asked to answer the questions by drawing on a sheet of paper, the participants seemed to be confused and overwhelmed. They said they had never experienced this kind of activity, and that they did not know how to draw. It almost seemed as if they were afraid of spoiling the spotless sheets with their clumsy drawings. I had to reassure them that they did not have to worry about quality of their drawings. If they found drawing too hard, they could make notes, but I encouraged them to focus on producing visual outcomes. It could provide an easier and more intuitive form of communication to verbal translation. It took more than 15 minutes for most of the participants to start drawing on their sheets because they were hesitant.

With collected photographs and drawings, I conducted semi-structured interviews with each of them. Based on the lessons learnt from Session 1, I was keen on separating each interviewee from the rest of the group during our interview conversations. In this way, I ensured that the participants were not influenced by what the others had told me, so they could express freely, and I could gain insight into their individual and colourful perspectives.

## **Outcomes and Reflection**

Despite their initial worries, the participants produced a set of interesting and fruitful outcomes. I illustrate two participants' works in particular. Sokhy Son (interview, 22 December 2014) thought that the village of Andong Russey could be characterised by traditional clay pots, modern clay products and palm trees (see image 1 in Figure 32). When asked to describe three symbolic objects of the KCHH, she chose the working space, the room where they produce the glaze and the kiln (see image 3 in Figure 32). She expressed the desire to realise as many designs as possible given the opportunity, including the round teapot she drew (see image 4 in Figure 32). Her principal concern was about teamwork. At that time, there were hardly any problems, but she was worried that their friendships might be broken in the future, resulting in her not being able to continue her work there.



Figure 32. Photographs and drawings by Sokhy Son

For Chenda Soun (interview, 22 December 2014), clay, potters and pots represented Kampong Chhnang province and Andong Russey village (see image 1 in Figure 33). For her, the unique characteristics of the KCHH came from glazed items and the kiln, which was capable of firing glazed pots. The kiln appeared three times in her drawings (see images 4, 6 and 8 in Figure 33). If possible, she wanted to make vases, plates, elephant-shaped items and other designs (see image 7 in Figure 33). When asked about her concerns, she was worried about not being able to use the kiln, failing to fire the batches of pots correctly and having no one to buy their products. Moreover, she cared about her children a great deal, and it was important for her to keep working, so she could afford their education (see images 9 and 10 in Figure 33).

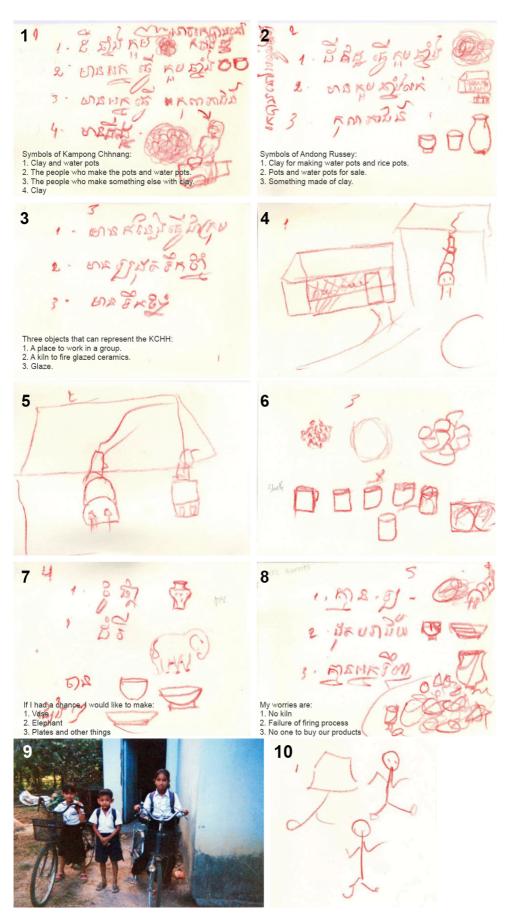


Figure 33. Photographs and drawings by Chenda Soun

In general, the participants appeared to share similar ideas on the characteristics of Kampong Chhnang province and Andong Russey village, that is clay, pots, potter's wheels, cooking stoves, the Gold Mountain (where they source the clay from) and palm trees. Most participants seemed to be concerned about the glazing and firing techniques since they were directly connected to the success of firing the batches and making a profit. The high temperature kilns and glazes were regarded as something that differentiated them from other potters in the village. Their work formed an important part of their lives as they worked with close friends and family members. The participants were keenly motivated to improve their knowledge and skills to advance the quality of their products, attract more customers and earn a higher income to support their children.

# 6.3.4. Session 4: Creating a visual reference

# **Preparation**

Materials: 3 iPads, 1 laptop, magazines, a portable printer and A4 sheets.

From the earlier observations made, the participants seemed to not have any experience in primary and secondary research. They had been unilaterally told to produce and supply items to hotels, restaurants and souvenir shops in Phnom Penh, and the design and size of each item was usually given by the clients (H. Ake, interview, 13 February 2014). In other words, the participants had been producing items without knowing why things had to be designed in certain ways, or in which environment they should be used. I identified this as one of the major problems. Fieldtrips to different places in Phnom Penh would have offered insightful first-hand experience for the participants. Instead, a realistic alternative was considered, which was to enable the participants to conduct their own secondary research with visual materials collected by the researcher (see Chapter 7.4.2). Session 4 was allotted for visual research to introduce the participants to the process of research, and to facilitate finding useful visual materials for inspiration. The emphasis was on invoking the participants to realise the need for spontaneous visual research, even after the completion of the SDTWs, for their own ongoing progress.

## Methods and process

Session 4 was divided into two parts: identifying design opportunities and making a visual reference. Firstly, the participants were asked to identify design opportunities by looking at given photographs, which included images of a restaurant, table, hotel room and spa.

Through this, they were expected to think about certain questions, such as: 'if your products are to be used in these places, what kind of design would you like to create? What kind of function would you add? How would you improve your current products?' The participants spent the first 30 minutes scrutinising the images, and putting stickers where there appeared to be opportunities for their products (see Figure 35). Similar to the children's activity of finding hidden elements in a picture, the participants gathered around to find items which could be replaced by their own products. These included dishes, cups, trays, small decorations, soap trays, teapots and so on. These images were carefully selected to create a sense of realism for the participants.



Figure 35. The participants scrutinising and discussing the images (the right photo: Laiheak Mey)



Figure 36. The participants researching visual materials

Secondly, the participants were asked to make a visual reference, which I named 'idea book' (see Figure 36). The participants were encouraged to collect images that would inspire them in the course of ideation and production for ceramic designs. They were asked to navigate the Internet, collect images online, cut out photographs from magazines and other given materials, and put them together on A4 sheets. They were divided into three groups with different themes: Group A on hotels and spas, Group B on restaurants and souvenir shops and Group C on traditional images of Cambodia. Considering the limited time span, and that it was the first time for the participants to use digital devices, each

person was asked to collect three images online, using an iPad or laptop, with detailed instructions, as shown below:

"Think of keywords – for example, if you want to make a vase with a lotus flower decoration, google 'lotus flower vase'. You'll see lots of images. Look carefully and decide which you like the best. Click the image and capture it. The translators will help you with English words. If you want to use traditional images of Cambodia, use keywords, such as 'Apsara', 'Angkor Wat' or 'Kbach'."

The main challenge was that the participants were new to visual research. They had never used the Internet or digital devices; they had no knowledge of the English language; and there were no sufficient materials online in Khmer. The translators helped the participants navigate the Internet. As the participants wrote down keywords in Khmer, the translator changed the words into English and helped them to google until they found the ideal one. Nonetheless, the participants seemed to be stimulated by the use of the Internet and iPads. The images found online were printed with a portable printer throughout the session.

# **Outcomes and Reflection**

Collected images were put onto A4 sheets by the participants. These were laminated in order to ensure durability and put together in a ring binder. This is because the participants' hands would often get dirty with clay (see Figure 37).





Figure 37. The 'idea book', a visual reference

Given that this was their first experience with a visual reference, it took a while for them to become familiar with its use, that is the whole process of finding visual inspiration. At that time, my role was to frame the idea book in a positive way and remind the participants to look at it whenever they were at work. As a design practitioner myself, this way of visual research appeared to be useful in training the participants in the design process in terms of invoking and stimulating an organic design thinking process. Towards the end of the

SDTWs, the participants gradually became familiar with this visual reference. It was still doubtful, however, whether they would keep using it without my presence. It was difficult to observe the behavioural change of the participants within such a limited timescale. Nonetheless, the SDTWs attempted to introduce the significance of visual research to the participants. The aim was to have them experience this process, and to be stimulated through the use of digital media for ideation, and to understand how to piece them together for future reference.

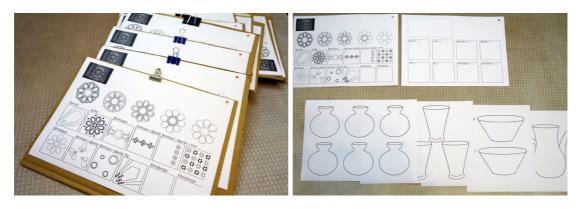
# 6.3.5. Session 5: Design exploration (1): Modifying graphic motifs and patterns

## **Preparation**

Materials: worksheets, drawing pads, pencils, rubbers, colour pencils, rulers, the idea book and the Khbah pattern book.

The previous sessions showed that the participants found it difficult to draw on blank sheets. A great deal of consideration went into designing the sessions of the Create phase to elicit originality without overwhelming the participants. I designed a set of worksheets to support the participants in educating themselves with basic design techniques through a step-by-step guide (see Figure 38). The idea was borrowed from my previous experience as a graphic/brand designer: the process of creative exploration through diverse design techniques, such as enlarging, patterning, linearising, repeating, omitting, elaborating and simplifying. Firstly, the 'step-by-step' sheet provided an image of a traditional Khmer motif from Angkor Wat, and which was presented as an example. To help understand the process of simplification, the original motif was gradually simplified on the first row. Below this, twelve boxes were placed. Ten of them were already filled with example drawings with several design techniques. The last two boxes were left empty to encourage the participants to draw designs different to those in the examples. At this point, they were asked to think of distinct ideas.

Secondly, once the participants had finished this 'step-by-step' sheet, they were asked to move on to the next task. This time, they had to select a motif from the idea book (a visual reference) from Session 4, copy it onto tracing paper and modify it as they had previously practised on the 'step-by-step' sheet.



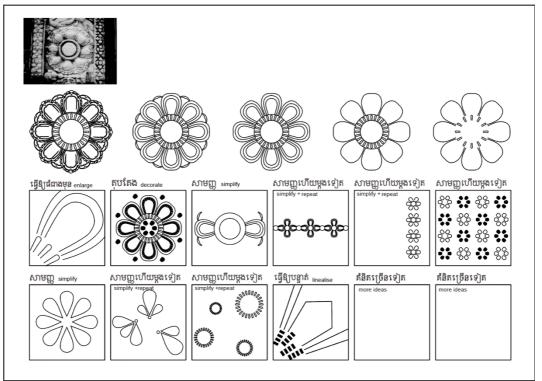


Figure 38. Worksheets designed for Session 5

Finally, when the participants became familiar with modifying motifs, they were instructed to apply their original designs to template sheets. The template sheets offered outlines of the products that were being produced in the KCHH, such as water pots, teapots, mugs and bowls. By applying their design ideas to these templates, the participants were able to imagine what the visual appearance before the production of the ceramic prototypes scheduled for Session 7.

# **Methods and process**

In the beginning of Session 5, the participants were given a short lecture on the basic elements and techniques of design. Considering that they had not had any art education before, this lecture focused on delivering (and reminding to some extent) essential design

skills to help them easily understand core techniques, and to enhance their *capability to participate* (see Chapter 7.4.2) in the Create phase of the SDTWs. They were told to make use of four elements of design (shapes, graphic motifs and patterns, colours and texture) and a range of design techniques (enlarging, elaborating, simplifying, repeating, colouring and linearising).

The participants enthusiastically applied themselves to their work throughout the session (see Figure 39). Most of them borrowed motifs from the idea book, but a few sought design inspirations from their own products. The participants used pencils, coloured pencils and rulers to express their ideas on the template sheets. They appeared to be pressed for time (due to their large workload), yet the template sheets seemed to have stimulated them to complete them, and so they worked diligently throughout the session.





Figure 39. Douen Yem seeking design inspiration from an existing pot (left); Chenda Soun drawing patterns for a ceramic design on a worksheet (right)

## **Outcomes and Reflection**

The participants had explored a variety of design possibilities by closely observing a motif, tracing it and exploring various visual directions. Further to this, by modifying the original Khmer motives, they were asked to become creative and experimental with attention to detail (see Figure 40). Next, as the participants applied their designs to the template sheets, they could immediately see their new ceramic designs in a sketched form (see Figure 41). This might have given them a feeling of achievement, as they lacked the opportunity to participate in the decision-making process for designing before. Through a series of tangible outcomes, there was room for further interest as a result of the process, hence the participants becoming more proactive and cooperative throughout the SDTWs (see Appendix 2 for more outcomes from Session 5).

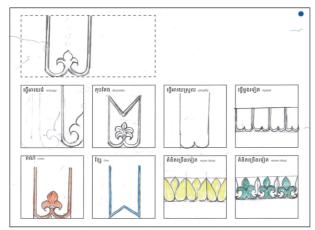


Figure 40. Original motif (in dash-lined rectangles) and a set of modifications



Figure 41. Graphic motifs and patterns applied to the template sheets by the participants

# 6.3.6. Session 6: Design exploration (2): Creating forms and shapes

## **Preparation**

Materials: worksheets, drawing pads, pencils, rubbers, colour pencils and the idea book. The SDTWs were intended not only to allow the participants to produce their own original design ideas, but also to raise their awareness of a variety of existing designs and potential competitors outside the community. It would have been ideal if they had become familiar with the methods and processes of visual research. However, the majority of them lacked access to devices connected to the Internet, at home or at the KCHH. The scarcity of quality information in Khmer, and the participants' lack of English competency included another barrier for visual research. Although Session 4 had introduced how to research materials online with digital devices, realistically this would be a time-consuming process until they were familiar with it.

Although the SDTWs were designed to encourage the participants to demonstrate their indigenous knowledge and innate abilities, I encountered a number of situations which required my intervention more frequently than I had expected. For example, in this session, I had to research visual materials for the participants since they were unable to take a fieldtrip outside the community. I had to be cautious about balancing intervention and education. On this occasion, priority was given to introducing design trends and informing the participants about a variety of possible ideas. Therefore, I performed the online research for them; I collected a diverse range of images showing a variety of forms and shapes of ceramic designs (see Figure 42 and Appendix 3 for further worksheets).

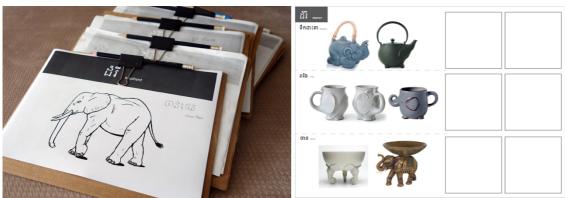


Figure 42. Worksheets designed for Session 6

Three themes were chosen: elephant, pineapple and lotus flower, reflecting the participant responses to the representative objects of Cambodia and Kampong Chhnang province from Session 2. To design the worksheets, I collected images of teapots, cups, bowls, plates, vases, containers, aroma pots and small souvenirs online. In addition to everyday objects (teapot, cup, bowl, plate, vase and box), I added an aroma pot and small souvenirs. This is because at the KCHH, I noticed that most visitors tended to buy small items probably because they were travelling. At that time, the main items at the KCHH were practical objects, such as cups and bowls. The SDTWs contributed to providing a wider selection of products with an addition of small souvenirs that could appeal to tourists.

## **Methods and process**

As an extension to Session 5, this session was designed for the participants to explore forms and shapes to produce distinct designs for ceramics. The participants were asked to closely look at example images printed on the worksheets, and create differentiated designs

in empty boxes. Each row presented different objects, such as teapots, cups and vases. Their designs were produced into three-dimensional prototypes the next day.

It was interesting to observe that not only the participants, but also the translators became interested in participating in the session (see Figure 43). In the beginning of the session, Mose (my translator) showed the participants the design sketches produced from the previous session. He encouraged them to refer to it throughout the session. Equally, Sambath (the KCHH translator) contributed to the session for the first time by producing a number of design sketches. It seemed to be a positive outcome in that it demonstrated a reconfiguring of the socialities between the participants, stakeholders, objects and processes, which is integral to a social design thinking approach.





Figure 43. My translator showing the design sketches to the participants (top left) (photo: Hiroshi Ake); The KCHH translator taking part in the SDTWs (top right); the participant concentrating (bottom)

# **Outcomes and Reflection**

The workload appeared to be rather heavy, evident from the fact that most the participants only had time to work on the 'elephant' theme; nonetheless they worked diligently throughout. The participants seemed to have understood the distinctive characteristics of each chosen subject matter, and how to insert them into their designs. For example, on an elephant-inspired teapot, almost every sketch featured teapots with elephant nose-shaped spouts (Figure 44). The elephant's ears are naturally placed on each side of the beginning of the spout. Some designs paid exquisite attention to detail, such as making the teapot handle like an elephant's tail, or adding legs like a quatropod. For the pineapple motif, the participants demonstrated a broader interpretation in their visual approaches. Some design sketches resembled the entire pineapple while others depicted the pattern of the pineapple skin in detail (Figure 45). There were also other details added to accentuate the design, such as a pineapple stalk or spikey leaves. With the lotus flower motif, most designs used round shapes and petals (Figure 46; see Appendix 4 for further outcomes from Session 6).

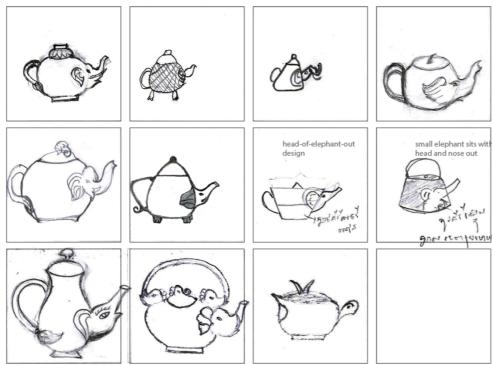


Figure 44. Designs for elephant-shaped teapots

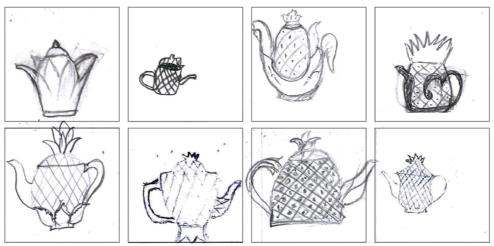


Figure 45. Designs for pineapple-shaped teapots



Figure 46. Designs for lotus flower cups

It was interesting to note that the range of designs spread widely from a traditional to a modern look. Within three hours, the participants managed to familiarise themselves with the design trends suggested in the worksheets, differentiate their ideas from the existing designs and interpret the key features of each subject matter through their own visual language.

Gibson's (1986) idea of the affordances was employed for the designing of the worksheets as it allowed the exploration of the interconnected relationships between artefacts and human activities. According to him, objects, through affordances, make us act in certain ways, as the following example demonstrates:

An elongated elastic object, such as a fiber, thread, thong, or rope, affords knotting, binding, lashing, knitting, and weaving. These are kinds of behavior where manipulation leads to manufacture. (Gibson 1986: 133)

Fallan (2010) builds on the Gibsonian affordances by arguing that artefacts not only afford physical functions (i.e. to let one use an object in the intended way), but also sociotechnical aspects (i.e. to make one convey and convert the meaning of an object through a symbolic and emotional engagement). Similarly, Fisher (2004: 26) notes that 'affordances cannot simply be "built into" or "read out of" artifacts, but are discovered by users through interaction with them'

In this vein, the worksheets were designed to provoke the participants to fill in the blank boxes. The participants might have found it difficult to draw on a plain sheet of paper because that would not imply any kind of guidance or intention. The worksheets provided both physical affordances (by directly nudging the participants to complete these blank boxes) and socio-technical affordances (by stimulating the participants to create original designs through their own research and ideation, thus enabling them to perceive themselves as designers rather than mere technicians).

# 6.3.7. Session 7: Three-dimensional prototyping

#### **Preparation**

Materials: coloured clay, clay, shaping tools and potters' wheels.

## Methods and process

On average, each session was run every 1-2 weeks, depending on the participants' availability and the working schedule of the KCHH. However, Sessions 6 and 7 ran over two days to introduce to the participants the idea of a seamless experience in expanding their creativity from design sketches to three-dimensional ceramic prototypes. In Session 7, the participants were asked to produce prototypes with clay, drawing on their own design ideas from the previous session (Figures 47 and 48).



Figure 47. Prototypes produced after the design sketches



Figure 48. A female participant's skilled craftsmanship

As the session began, the male participants started to work with the coloured clay. The female participants chose to work with real clay at first, so that they could make the bases first, dry them for a few hours under sun and decorate on them. This process lasted two hours. After the female participants had created several pots with real clay, they started to

work with the coloured clay. It was interesting to see them creating new designs based on their drawings from the previous day. They focused on the details, such as the pineapple leaves and lotus petals. One participant even returned home to bring tools to help her articulate the shape she had in mind.

# **Outcomes and Reflection**



Figure 49. Final outcomes from Session 7 (see Appendix 5 for further outcomes)

All participants created new designs that I had not seen before in the KCHH, sometimes with surprisingly unique and sophisticated detail (see Figure 49). For example, Chenda Soun made chopstick rests in the shape of a lotus petal and pineapple leaf by disassembling the elements of the flower and fruit and turning them into individual design pieces. As practised in Session 5, they were experimenting with a range of design techniques, such as enlarging, repeating, linearising, elaborating and simplifying the clay prototypes. At the end of the session, the participants were asked to glaze and fire the outcomes.

My intervention drastically decreased since Session 5, as the Create Phase was designed to empower the participants' original and spontaneous contributions. My role was more as a facilitator with a little bit of nudging. I felt that the session was a success in that the participants enjoyed it and continued to work during the afternoon. Usually, each session lasted three hours, but on that day the participants spontaneously chose to work for the whole day. I also had the impression for the first time that the participants appreciated me for running these SDTWs. Perhaps, it might be because they were able to relate the SDTWs to their real jobs, realising that they were not wasting their time, nor that they were being exploited. Some participants even asked when I would return for the next session, which had not happened before.

# 6.3.8. Session 8: Understanding the customers and the market

#### **Preparation**

Materials: 2 iPads, A1 board, post-it notes and pens.

One of the primary aims of the SDTWs was to help the participants become aware of elements beyond technicality by enabling them to create creative designs for ceramics, to understand the market and customers and to think of better ways to communicate and brand their products. From my early observations, the role of the participants was as mere *technicians* who imitated designs taught by their former Japanese teachers. Moreover, in terms of sales and client communication, they were excluded as Ake, the Japanese coordinator of the KCHH, had been in charge of such responsibilities. Moreover, the participants faced the challenge of the takeover of the KCHH by the end of 2015 (H. Ake, interview, 13 February 2015). The lack of capability in managing digital devices and the English language meant that they risked losing or not maintaining a link between their

community and the outside market. Both the participants and I have distinguished this as the major problem, and the SDTWs were designed to partly respond to such a challenge. The participants had already expressed their concern about their lack of knowledge of the market and customers in Session 3. Although they vaguely felt the need for knowledge related to marketing and branding, they did not know where to start. Session 8 was designed to help the participants become aware of the need to understand the market outside the community and customer needs; It also aimed at encouraging the participants to construct strategic ideas to attract customers. Considering the limited time span and preexisting conditions, I did the visual research for the participants who were not able to conduct first-hand research, as in Session 4. They were asked to closely look at given photographs on iPads, which depicted foreign visitors to the KCHH (see Figure 50), and other ceramic workshops and souvenir shops in Siem Reap. Images were carefully chosen from my archive of observations.



Figure 50. An image of previous customers to the KCHH

The priority was given to simple and easy approaches to understand and think about the market and customer expectations outside the community. The term 'marketing skills' was understood by the participants as the ways in which to attract more customers and sell more products. The participants, while looking at the images, were asked to think about the following questions:

- What makes your products unique?
- How can your products stand out from others?
- How can you sell more products?
- How can you make the customers happy?

# **Methods and process**

As the participants examined certain images on the iPads, they were instructed to write down their findings (see Figure 51). For example, in the image of foreign visitors to the KCHH, they discussed what the visitors would have been interested in, and what the participants would be able to provide the visitors for a better experience.



Figure 51. The process of scrutinising each image on iPads (left); and writing down their suggestions to improve the found problematic situation (right)



Figure 52. Discussing their observation notes and suggestions (photo: Laiheak Mey)

Having put together the collected notes on a board, we went on to discuss a number of issues including the followings (see Figure 52):

- "There are a few ceramic brands in Cambodia, notably advertising their handmade quality and Khmer characteristics. Thus, how could you differentiate your products from theirs? What makes your products unique?"
- "How could you better interact with your visitors? In what ways could you make a good impression and increase your sales?"
- "Imagine that you are participating in a large ceramic fair, say, in Japan. Let us assume that one of these booths is yours. There are other booths selling Khmer ceramics, such as from Siem Reap. In this situation, how would you distinguish your products? What ideas do you have about attracting more customers and selling more products?"

By examining the images and discussing them, the participants were encouraged to compare their products with others, to learn ways to display and brand them and to think of possible ways to improve their work.

#### **Outcomes and Reflection**

When asked to think of ideas for establishing their distinctiveness and attracting more customers, the discussion became more alive. Suggestions could be roughly categorised into five subjects: customers, technical improvement, differentiation, display and customer service (see Figure 53). Some are listed below to illustrate the participants' ideas and reflections vividly:

#### On customers:

- "They seem to be interested in the way we make pots. Also, they seem to want to learn and understand what the finished pieces will look like." (P. Oun, group discussion, 9 February 2015)
- "They might be curious about the materials, too." (D. Yem, group discussion, 9 February 2015)

# On technical improvement:

• "We would like to research and find out more about the glazing." (C. Soun, group discussion, 9 February 2015)

#### On differentiation:

- "Our glaze is sourced from nature unlike other ceramic workshops. Theirs might look nicer, but our products are similar to homemade food. Homemade food tastes better than restaurant food even though restaurant food may be presented better." (C. Soun, group discussion, 9 February 2015)
- "We need to design products to look more modern and ensure that they are finished well by the glazing and firing process." (S. Som, group discussion, 9 February 2015)



Figure 53. The observation notes and suggestions made by the participants to improve their situation

# On display:

- "We need to improve our shop decoration so that it has a neat and nice order. Other workshops seem to have tables and shelves to make their products look pretty." (S. Som, group discussion, 9 February 2015)
- "It would be nice to have furniture to display the products, such as cabinets and tables. Our shop needs to be clean." (C. Soun, group discussion, 9 February 2015)

#### On customer service:

- "I want the guides (who brings foreign visitors on tuk-tuks) to tell our story to the customers, but I cannot be sure if he would tell the customers exactly as I would." (P. Oun, group discussion, 9 February 2015)
- "We should tell the customers our story: our village, our work processes, how it is difficult to make glazes and so on." (N. Oeur, group discussion, 9 February 2015)
- "Knowing just one English word isn't good. We need to show hospitality that will encourage the customers to listen to us." (C. Soun, group discussion, 9 February 2015)
- "We have to explain to them that we are working hard to produce good quality products that are long-lasting and durable. Also, I'd like to tell them about the difficulties in the process." (P. Oun, group discussion, 9 February 2015)

It was interesting to note that one participant asserted the need for an outside designer:

"We don't have a designer here; we are only makers [...] We still have to think of more styles, but having a designer will be better. Although we are going through these SDTWs, we don't have time, and we are at a lower level. I don't know whether people would like our designs or not. Our level is low, and we don't know how to design well or how to attract people with our designs. We have been making the products mostly from the ideas of the Japanese teachers." (S. Oun, group discussion, 9 February 2015)

It was a bit of a surprise and disappointment for me that S. Oun was still seeing himself as a worker with a 'lower level'. He was aware that the participants were in the process of learning creative thinking skills; yet he defined himself as a technician without creative abilities. This might indicate his anxiety about the takeover of the KCHH from the Japanese managers. I have to admit that it probably would take longer time than anticipated to transform the behaviours and perceptions of the participants.

Nonetheless, the SDTWs, as an innovative methodological approach to social design in the Cambodian context, helped me to investigate the ways in which social design approaches could be used to identify and unfold a problematic situation. They also enabled me to see

how such an approach could act as a catalyst that reconfigures the relationships within the situation in question. In that sense, Soun's suggestion below seemed to be positive as she responds to Oun's self-depreciation from her experience of using the Internet in Session 4:

"It would be nice if we post pictures of our products on Facebook and ask for any comments or what kinds of designs people want. Some people might have good ideas, which will be helpful." (C. Soun, group discussion, 9 February 2015)

# 6.3.9. Session 9: Storytelling, packaging and displaying

#### **Preparation**

During the open discussion in Session 8, most of the participants agreed that in order to differentiate their products and attract more customers, they had to promote their story. The participants appeared to have pride in their work process, the locally sourced natural materials and the progress they had made so far.

About that time, I read 'Around the World in 80 Trades' (Woodman 2009) which inspired the design of Session 9. Writing on his travels around the world in which he traded commodities between countries, he tells an anecdote about selling a carpet in Morocco. He was searching for authentic carpets at reasonable prices and reselling them to Western tourists for a profit. For some time, he struggled with adding value to the carpets he was selling. Eventually, Woodman (2009) successfully managed to do so through storytelling. By visiting a household who produced the carpets he had purchased, he met a Berber carpet weaver and listened to their family history; he learned that the story of the family and the village had been weaved as a pattern on the carpet. As a consequence, these small details about the Berber family interweaved into the carpet added value to it, and differentiated it from other carpets on the market. As a result, he made a considerable profit. It is likely that the tourists chose the destination in question because they were interested in its culture; therefore, they were willing to pay more to listen to and experience more of the Moroccan culture.

Such an approach might also be applied to the KCHH. The participants and I observed that the tourists and visitors appeared to be interested in the facilities, products, potters' wheels, firing process and kilns. At that time, the only source of information came from the guide who used to bring the visitors. The participants were not able to communicate with the visitors because of the language barrier, but they wanted to explain their work and progress

made. Therefore, I collected the stories told by the participants throughout Session 9. These stories later formed an important part of co-designing the eco-bags and leaflets (see Chapter 7.3). In this session, they were asked to freely talk about their feelings, lives, work, wishes, and other elements that formed part of their relationships within the pottery community. I chose to use comprehensive questions to open up the conversation, including: 'what are your wishes for the future?' and 'what would you want the customers to know about your work?', to not limit the participants' answers. Throughout the previous sessions, I found that it was more effective to give more space for the participants. By introducing a broad topic, I attempted to encourage the participants to express their thoughts, and thus they sometimes expressed original and unexpected stories.

# Methods and process



Figure 54. The participants trying to improve the display of their shop

Session 9 was run in two parts. Firstly, I told the participants the anecdote from the book 'Around the World in 80 Trades' (Woodman 2009) to explain the ways in which storytelling could contribute to adding value and increasing profits. The participants were asked to write down any thoughts and use these notes during their interviews. Secondly, while waiting for their interview, the participants were instructed to create ideas to

improve on the KCHH workshop and shop display (see Figure 54). As discussed in Session 8, they were feeling the need for a neat and appealing display. I observed the participants sweeping the floor, aligning the products, cleaning dust away and decorating with flowers and leaves picked nearby.

## **Outcomes and Reflection**

As the participants were asked to freely talk about any subject enabling the development of their own unique stories, most of them mentioned the following three themes.

A sense of gratitude towards the German and Japanese NGOs and supporters:

- "A German NGO taught me a lot of skills, which enabled me to earn a higher income to support my family." (P. Oun, interview, 16 February 2015)
- "I will tell our customers about the work achieved by our supporters they tried to teach us a lot of things up until now, so that we can make things with our own hands." (S. Son, interview, 16 February 2015)
- "Japanese teachers came to our village and taught us how to find the raw materials for colouring, so that we no longer need to go to other countries to buy them. They gave us this high-temperature kiln, and taught us different techniques, helping us find customers." (C. Sem, interview, 16 February 2015)

## Family-oriented ambitions:

- "I want to see our jobs make more progress. I want to have a good kiln, more customers, and a shop to store our products. I want a higher income so that my children can have a good education." (C. Soun, interview, 16 February 2015)
- "I want to keep this job, have a new house, see my children enter higher education, and have more customers come to our village and buy many products." (S. Som, interview, 16 February 2015)

## Andong Russey village and ceramic culture:

- "This job is part of our culture. Older people told me that pottery production began with the first generation of us Khmer people. So, we should continue this work for the younger generations. Even though I started selling products at very cheap prices, I was able to keep on working to maintain our culture and pass it on to the next generations. So, it means it's not cheap; it is still valuable. It is valuable work in my life." (P. Oun, interview, 16 February 2015)
- "The story of Kampong Chhnang province relates to how we make pottery products. We want to tell them about our workshop and also about the colours, products and process of making and firing." (M. Phal, interview, 16 February 2015)

- "The history our village sees how people here have been producing this kind of pottery since the time of our great, great grandparents even though I don't know exactly when but it's a long time ago." (S. Oun, interview, 16 February 2015)
- "I want to tell the customers to come to visit our village and have a look at both the pot-making and glazing place. If they come in the rainy season, they can take a look at our villagers who plant rice in the paddy fields." (N. Oeur, interview, 16 February 2015)

Although most of the participants appeared to be concerned with making more money and buying new houses, one participant told me that money is not everything. He had worked in Korea for two years as a foreign worker:

"Even if I had a chance to go back to Korea to make money, I would rather stay here – I might be able to earn more than 1,000 USD a month there, but if my wife (C. Soun) and I work hard we can make about 500 USD monthly here. That would be enough for our family." (S. Oun, interview, 16 February 2015)

As we continued the conversation, Ake interrupted (H. Ake, group discussion, 16 February 2015), as can be seen below:

Ake: "What do you feel about the firing and glazing work? Do you find it harder compared to your previous work in Korea?"

S. Oun: "It was difficult at the beginning, but I got used to it. The difficulty comes when we get sleepy while watching the fire overnight."

Ake: "What about glazing?"

S. Oun: "It's hard because we have to pound rocks, and it is not easy. We have machines, but no electricity."

Ake: "What do other members think of the firing process?"

S. Oun: "When firing, we are afraid that the glazing might melt. It's hard to decide when to stop the firing."

Ake: "What is a good thing about the firing work?"

S. Oun: "It's easy because we workmates know how to work, so we can help each other"

This was the first time Ake intervened in the SDTWs. He used to limit his role to observer, only filming each session. By this conversation, I assumed that there had been a lack of mutual communication between the Japanese management and the Khmer potters. This incident explains that Ake regarded the SDTWs as an opportunity to observe and talk to the participants on their feelings about their daily work (Ake was often regarded as the 'boss', and his orders were delivered to the Khmer potters through Sambath, the translator

of the KCHH. There was hardly any direct conversation between Ake and the potters, according to my observations over the previous serveral months).

Lun shared more of his personal story. As a newlywed groom, he had been thinking in an in-depth way about his life and future through his experiences within the SDTWs:

"[T]he difficulty is that I just got married and we only began to hold hands and go forwards on a floating boat in the middle of the river. We don't have a real island to settle on yet." (P. Lun, interview, 16 February 2015)

He was hoping to have more customers and some reasonably paid orders so that he could eventually build a house in one to two years' time. To him, his work was more than a means of livelihood:

"When my children grow up and become interested in pottery work, I will be very happy. I don't want this valuable heritage of Kampong Chhnang to be lost in the future. I want to tell them that by doing this work, I could have achieved what I have today." (P. Lun, interview, 16 February 2015)

Such personal stories revealed in an intimate manner were made possible during this session since the participants and I had become closer throughout the SDTWs over the period of five months. These provided rich insights into their motivations to work and their concerns and wishes. The participants saw their job as the following: a source of livelihood; a means of providing better opportunities for their family, to educate their children and buy houses; and as cultural transmitters. Acknowledging the long history of Khmer pottery, the participants seemed to have a sense of responsibility to keep the tradition and pass it to the next generation.

Another finding was that, as mentioned above, it appeared that Ake took this session as a chance to ask questions he had wanted to know. I began to realise the meaning of device, or rather a designer as a device, in the light of ANT's approach to socio-material assemblage. My original intention was to observe the situation, run the SDTWs and help the participants with their creative design thinking skills and knowledge in the market outside the community. As the fieldwork progressed, it seemed that not only the SDTW sessions, but also my existence as a researcher-designer, and the participants' activities had become intertwined, influencing each other, and sometimes elicited unexpected events such as Ake's interruption. This could mean that the SDTWs affected and transformed previous relationships between the Japanese management and the Khmer potters within the

KCHH, their work routines and the way they thought of and treated their work and everyday lives.

# 6.3.10. Session 10: Reflection, discussions and suggestions

## **Preparation**

Materials: an A1 board, pins, a self-standing A3-sized accordion book (with the titles and images of each session) and A5-sized review cards (with the titles and images of each session).

As the SDTWs reached its final *Reflect* phase, Session 10 was planned for the participants to review, reflect, discuss and suggest ideas that could improve the next round of the SDTWs. The session was run in two parts: to review, reflect and discuss; and to make suggestions. Firstly, for the reflection and discussion, I focused on preparing materials to help the participants recall the earlier SDTW sessions. The titles and photographs illustrating activities and outcomes from each session were printed and put together on an A3-sized accordion book, which could stand by itself on the floor. With this, the participants reviewed their previous work and got a sense of progress and sequential narrative at a glance. Secondly, for the suggestion part, A5-sized cards depicting each SDTW session were given to the participants to rearrange their order. At the same time, they were asked to take out any cards (or rather sessions) which they thought unnecessary, or put in additional cards (representing the sessions) if they thought that would be more effective for a possible future occurrence of the SDTWs.

#### Methods and process

The participants were asked to freely talk about the following questions (see Figure 55):

- Which would you count as your favourite session?
- How did you find using the Internet for visual research?
- (To the male participants) How did you feel about the shaping and decorating work?
- How did you feel about making ceramics from your own designs?
- What was it like to take part in the SDTWs from the beginning?
- Were 11 sessions enough for you?



Figure 55. The participants reviewing the SDTW sessions (photo: Laiheak Mey)

On their favourite sessions, 7 out of the 10 participants picked either Sessions 4, 5, 6 or 7, which all belonged to Create phase. Most of them seemed to be inspired that they no longer had to imitate the same designs over and over again; instead, they learned that a simple object could be modified and become a number of diverse designs:

"I liked Session 5. I realised that a single subject matter could be modified into many different designs. Through the exercises, I learned a drawing could be applied to other products, which I could make into a reality." (C. Soun, group discussion, 23 February 2015)

"I was also interested in Session 5 because through this I learned that designed items can be very different to each other and look nice. Before then, I used to make only the same things over and over again. After Session 5, I created many new styles, and I was able to think of new ideas as well." (C. Sem, group discussion, 23 February 2015)

Two female participants said they liked Session 7 because they could make pots out of their own designs. Other participants added comments to describe how they felt about making items from their own ideas and drawings:

"I am happy to have some of my own designs and make them into final products. These are not 100% perfect for me; nonetheless, they are still good and made me feel different. I never knew a pineapple could be made into a number of different shapes. I am so thankful to the SDTWs that enabled us to discover this kind of approach. Obviously, we all used to know what lotus flowers or pineapples looked like. We

only knew pineapples could be eaten, but never thought they could be a subject matter to ideate from ... At the beginning, we only knew how to draw things exactly as they looked, but we became able to use our imagination beyond that." (C. Soun, group discussion, 23 February 2015)

"I liked Session 7 because on that day we made pots according to our drawings. We were able to separate the hidden shapes of an object, take it and modify it for a unique design." (S. Som, group discussion, 23 February 2015)

The female potters had been familiar with shaping and decorating ceramics, yet this was the first time for them to create their own design ideas. They seemed to be stimulated by the fact that they were capable of articulating originality, similar to their former foreign teachers.

While the female participants were satisfied to discover their abilities to devise new design ideas, the male participants said they were 'happy' for a more fundamental reason. There had been a strict gender role in the pottery-making profession (H. Ake, interview, 13 February 2014). Women were in charge of shaping and decorating, and men were responsible for carrying heavy materials, breaking rocks, glazing and firing, tasks that required strengths. They never had a chance to take part in the creative process because it traditionally belonged to the women. Surprisingly, the male participants seemed to be satisfied by their experience:

"I think it [the Creative phase] was good. I've never done it before, but once I had made one, mine almost looked like the ones made by the women... After finishing the final piece, I was so happy." (D. Yem, group discussion, 23 February 2015)

"I felt happy. I've never had time to make pottery objects before. My outcomes aren't as good as the women's because I am not a professional like them." (P. Lun, group discussion, 23 February 2015)

"I could make things that I used to think I was not able to. I am happy that I could make them with my own hands." (M. Phal, group discussion, 23 February 2015)

Through the SDTWs, the participants had overcome the conventional dualism of the roles between designers and technicians, female and male, and teachers and students. Instead, they redefined their roles and quickly adopted new skills that stimulated them into achieving their goals, including creating a visual distinctiveness, earning a higher income, attracting more customers and having a pride in their cultural. This has affected the way they relate to their work, to Ake and between each other. The process ultimately created new and constantly changing relationships between the constituents around their work.

The SDTWs had also contributed to the introduction of a new approach to work. For example, the participants said they realised the usefulness of using the Internet for researching ideas and up-to-date trends:

"I was interested in Session 4 because we could check the Internet and search for products. This has enabled us to create items with inspiration. We were able to learn a number of new designs through the pictures we found on the Internet." (S. Oun, group discussion, 23 February 2015)

"I was so surprised to see that there is so much information on the Internet that I have never seen before. We could compare our products to others, and we saw how different they looked." (N. Oeur, group discussion, 23 February 2015)

"The Internet had so many things we never knew. It would be so good to have the Internet here because it allows us to know things that we never knew or saw before." (C. Soun, group discussion, 23 February 2015)

The discussion continued into what they thought of the Understand phase. It seems that the participants thought the earlier part of the SDTWs to be irrelevant to their work. As I had assumed, the participants felt it was strange and rather meaningless. However, as the SDTWs progressed, they began to connect things together:

"I couldn't understand why she [the researcher] put the pictures on the wall and what she was going to do. I was so intrigued." (C. Soun, group discussion, 23 February 2015)

"I only started to notice from Session 5 onwards. I started to know that she [the researcher] wanted us to know how to design the style of the ceramics." (N. Oeur, group discussion, 23 February 2015)

Finally, when asked if eleven sessions were enough, most of them responded that they would have liked more sessions. The participants were asked to rearrange the order of the SDTWs, as if they were running the workshops for other potters in the village. They were also encouraged to remove any unnecessary sessions or to add their suggestions (see Figure 56).



Figure 56. The process of reorganising the sequence of the SDTWs (photo: Hiroshi Ake)

# **Outcomes and Reflection**

When asked to redesign the entire the SDTWs to be more effective, the participants decided not to change the order of the sessions (see Figure 57). However, they added a few comments, such as '[h]ave fieldtrips to the places shown on the photographs' for Session 4; and 'I want to put tea light candles inside the lamps, and place a mat under our products so that they are better displayed' for Session 9. The participants' suggestions not only helped me to rethink the course of the SDTWs through their perspective, but they also informed me of the need to conduct the SDTWs as an iterative programme, rather than a one-off project (see Chapter 8.3 for further discussion).



Figure 57. The participants' suggestion for a revised order of the SDTWs (photo: Hiroshi Ake)

## Conclusion

This chapter has described the process, methods, outcomes and reflections on the SDTWs conducted in the KCHH, a handcraft pottery community in Kampong Chhnang in Cambodia. 11 sessions were conducted over a period of five months, with ten Khmer potters. The SDTWs were intended as an innovative approach to social design thinking in its combination of action research, semi-structured interviews, participant observation and visual ethnography. Through the four phases, Understand, Create, Expand and Reflect, in this sequential order, the participants were encouraged to problematise their situation. They were also asked to produce visual outcomes, as a means of establishing their competitiveness to attract more customers and add value to their products. The participants, who had never previously experienced this type of creative design thinking or art education, were gradually guided to play a major role in the creative process of ceramic production, which used to be the arena of the external, foreign experts. Through this process, they have become empowered and interested in exploring their innate capabilities, overcoming the customary dualism that had detached them from becoming designers. Overall, the SDTWs acted as a catalyst to rearrange the relationships in the pottery

community, as the participants began to see their roles, work, challenges and ambitions in a different light.

In this chapter, working processes, methods, outcomes and reflections from each session were illustrated to provide a sense of having been there, which is crucial in investigating any real-world problem through the notion of socio-material assemblage (Latour 2005). Furthermore, rich data were collected throughout the fieldwork as described in Chapters 5 and 6, which became useful resources for further analysis in the next two chapters.

# 7. Findings from the fieldwork

In this chapter, I discuss the findings from the fieldwork by analysing the collected data including my observations, reflections, interview conversations and the outputs produced by the participants. This chapter begins by providing the researcher's reflections and the process of rearranging the relationships within the research setting. Following to this, I demonstrate the process and outcomes of co-design as an important part of the SDTWs in terms of supporting an organic participation. Finally, I discuss the challenges and issues of practising an approach to social design by comparing my fieldwork experience and the literature. Through this, I establish empirical grounds for discussion on a social design thinking approach in a development setting, which is to be discussed in Chapter 8.

#### 7.1. The researcher's reflection

Practising an approach to social design through the SDTWs in a Cambodian handcraft pottery community accompanied a series of ontological and epistemological reflections, which made me become attentive to details that were not easily recognisable, but which were useful for the fieldwork. This section provides my reflections on the fieldwork, which helped in terms of conducting and analysing the SDTWs as an inventive and productive methodology for social design. This can be also useful for exploring further directions for social design enquiries in developing countries.

## Building honest relationships with the participants

As described in Chapter 3.2.1, the process of revising my ontological and epistemological stance affected the way I approached the research. Basically, I viewed it from a different perspective compared to previous rational approaches. There appeared to be mixed feelings toward foreign experts within the pottery community in Kampong Chhnang, as if they represented two sides of the same coin, according to my observations. On one hand, the local stakeholders tended to be dependent on external support, in-kind donations and top-down trainings, previously provided by the Japanese and German NGOs. On the other hand, the locals seemed sceptical about those interested in a collaboration since a few

In terms of pursuing an 'I-Thou' relationship (McNiff 2013), I created harmony and built rapport with the participants by establishing my ontological position as a researcher-practitioner-designer, instead of a teacher (see Chapter 3). As for my epistemological stance, I followed Schön's (1983) idea of knowing-in-action and reflection-in-action, thus encouraging the participants to explore their tacit knowledge and skills helping them to articulate their thoughts and feelings. The scope and overall plan of the SDTWs were openly shared with the participants from the beginning. It clarified that it was not about the provision of technical or managerial solutions, but that it aimed to support them by exploring their design thinking skills and fostering a healthy competitiveness. Such an approach helped to form and maintain mutual relationships, and to encourage interest in participation and honest interview responses throughout the fieldwork.

## No financial compensation

Whether to provide compensation or incentives to the participants in action research is still controversial. It is not obligatory for all cases, but compensation or incentives may encourage participation (Grant and Sugarman 2004). Nonetheless, it is important to consider the amount and type of compensation (Grand and Sugarman 2004). In the case of the SDTWs, I initially planned to pay an hourly rate for my research participants because they would be sacrificing their working time for my research. However, it was a concern that financial compensation might aggravate the dichotomy between donor and receiver, teacher and student, and developed and developing, as experienced in the previous NGO interventions in the community. Instead of offering financial compensation, I provided cold drinks for each session and hosted a picnic lunch at the end of the SDTWs. This approach seemed to have contributed to creating an equal and cooperative relationship between the researcher and participants.

#### Embracing unexpected circumstances

During the SDTWs, it gradually became apparent that I had to spend time not only with the participants, but also with their children, who always accompanied their parents to work at the KCHH. Occasionally during the SDTWs, the participants were distracted by the necessity to breastfeed, stop fights and other parental duties. Therefore, it was important to design each SDTW session to be flexible and manageable in terms of space and time, and not to be too intensive. For example, the participants were encouraged to work anywhere

within the KCHH when drawing sketches and making ceramic prototypes. At the same time, I tried to keep the children focused on creative activities so that they would not distract their parents. For example, colouring sheets, coloured pencils and clay were handed out during Sessions 5, 6 and 7. The children enjoyed this type of creative activity and asked for more sheets. On occasion, they produced some interesting outcomes, which I considered to be an important actor, which influenced their parents' work, and thus shaped the unique constellation of the SDTWs (see Chapter 8.1.1). This helped to consolidate trusting relationships with the participants, and ultimately, it reminded me of my role as a social designer who was able to facilitate the rearranging of the relationalities between the actors within the situation in question.

# Personal development

X<sup>20</sup>, a quiet and inconspicuous female participant, was one of the few who had been favourable about the SDTWs from the beginning. She was the only person in the KCHH who could not afford her own motorbike. She was a single mother of two sons. When she joined the KCHH four years ago, she suffered domestic violence from her ex-husband because she 'was not making enough money from that Japanese workshop' (X, interview, 16 February 2015). X was enthusiastic and presented a number of new and distinctive visual approaches throughout the SDTWs. She represented the KCHH booth at a trade exhibition in Phnom Penh when the SDTWs were completed in March 2015. She seemed confident when demonstrating the pottery-making process and explaining the products to the visitors. Ake (the Japanese co-ordinator of the KCHH) said that he was pleased with her change, based on his two-year observation of her (H. Ake, interview, 27 March 2015). It seems that, to a certain extent, the SDTWs might have affected the participants by instigating confidence and by encouraging them to explore their innate creativity.

In short, the SDTWs led to a personal development in the participants and in myself. I was able to improve my communication skills since I talked to the ten participants every one to two weeks. It was important to ensure that they understood my intention to finish the task in three hours; therefore, extensive effort was placed into being explicit with help of the translator and visual aids. Having worked with ten Khmer potters with linguistic and

<sup>&</sup>lt;sup>20</sup> Although this thesis provides the participants' names in favour of open dialogue; in this case, anonymity is given due to this person's need for privacy (see Chapter 3.2.5 for ethical considerations).

cultural barriers helped me to become more confident in my teaching. By acknowledging that the process of the SDTWs would not go as planned, I was also able to learn ways in which to improvise and cope with unexpected situations (see Chapter 7.4.2). At the same time, I was affected by the participants' tacit knowledge in ceramic production and Khmer culture. Further, the way they explored and articulated their thoughts through drawings, interview conversations and prototype designs were invaluable in terms of designing the rest of the SDTW sessions and rethinking the socio-material assemblage of the situation. In this sense, the SDTWs provided an opportunity for personal development and mutual learning for both the researcher and the participants.

# 7.2. Rearranging the relationship within the research setting



Figure 58. The follow-up interview session. (From the left) Hiroshi Ake, the researcher, Seanmose Lat (my translator), and Phou Oun (photo: Laiheak Mey)

The structure of the SDTWs was carefully designed to allow for possible interferences on the way. In view of the fact that research in the real world can face a number of challenges ranging from a shortage of time, difficulties in contacting and gathering the participants to confronting harsh weather and national incidents (Robson 2011), the SDTWs were loosely conducted. As the participants had to carry out their daily work, I was cautious about not interrupting them with my research. The participants, and other stakeholders of the handcraft

pottery community in Kampong Chhnang, appeared to be sceptical about activities brought by foreigners. The reason seems to be that past occurrences resulted in one-off-give-away events. Sufficient time and effort were invested to ensure the participants that my research would not take advantage of them, and that I would try to contribute to their daily work through the SDTWs. Thus, it was important that the participants and I spend sufficient time understanding and reflecting on our progress after each session. Hence, there was usually a one-to-two week break between each session. These breaks were long enough to digest and reflect upon the knowledge gained, yet short enough to maintain the spirit and enthusiasm from the previous session. This section describes the process and consequences of engaging with the participants and community throughout the SDTWs, as a way of rearranging the socio-material assemblage within the research setting. It does so by offering a series of participant testimonials obtained from the follow-up interview session, which took place eight months after the completion of the SDTWs (see Figure 58 and Appendix 6).

## 7.2.1. Making sense of the SDTWs

During my observations, the participants appeared to be indifferent and perhaps doubtful during the early phase of the SDTWs. In fact, the evaluation interviews in the final SDTW session revealed that most participants had wondered what I was doing and thought that the SDTW activities made little sense. The participants seemed to have begun to understand the aim and implications of the SDTWs around the time we entered the Create phase. Some participants recalled:

"We were not aware that the earlier sessions [SDTW 1, 2 and 3] were also important and related to the other parts of the SDTWs." (S. Son, interview, 2 March 2015)

"In the beginning, we did not realise what we were doing – like choosing the images of money, cars, etc; [it did not seem to make any sense]. We did not know what you were planning to do. We just joined the sessions and sat still. After a few sessions, I realised that you had a good plan for us." (N. Oeur, interview, 2 March 2015)

"After Session 1, I thought it wasn't very interesting or helpful. But, as you went on to Sessions 2 and 3, I then felt the value of Session 1." (P. Oun, interview, 2 March 2015)

As noted earlier in Chapter 6, the Understand phase was designed to introduce the aim and process of the SDTWs to help both the researcher and participants become familiar with each other, and to enable both parties to explore and identify the problematic situation.

Ironically, the participants saw the Understand phase as rather useless and dull. Nevertheless, they began to make sense of it as they entered the next Create phase and found the connection between them. I still think the Understand phase was indispensable in the SDTWs. For me, it offered an opportunity to understand the participants' values and worries while building mutual relationships. It also helped the participants reflect on the ways in which they perceived and engaged with their work. The Understand phase also provided an opportunity for me to introduce the overall idea and plan for the SDTWs with the participants. However, given that the participants were not able to immediately recognise its aims, and even felt bored at that time, the structure of the phase might be redesigned for to be more engaging and relevant.

# 7.2.2. Engaging the relevance of the work

The participants reported that the Create phase sessions were the most helpful. The majority informed me that they were inspired about the process of developing a simple idea into a variety of designs:

"I was able to experience the process – from designing to making real shapes. Through this, I was able to try more design ideas, which were developed from my own thoughts." (M. Phal, interview, 2 March 2015)

"Session 7 was about the real work we do every day. It provided us with the opportunity to think about real designs." (N. Oeur, interview, 2 March 2015)

"Sessions 5 and 6 really helped me. Before, I was not aware of the possibility that a pineapple can be employed as a design source, and that it can be transformed into a number of different designs." (C. Sem, interview, 2 March 2015)

"[The designing sessions] provided a chance to generate more ideas for diverse designs." (P. Oun, interview, 2 March 2015)

"On her favourite session: when I drew sketches in Session 7, I wasn't sure if I could really make them. It was surprising to see that my ideas have turned into real objects. I tried my best to shape those based on my designs." (S. Som, interview, 2 March 2015)

"[I enjoyed Session 5 the most because] it was useful to learn how an original motif could be developed into many different designs." (S. Oun, interview, 2 March 2015)

The initial idea for the SDTWs was to invite the participants to explore and articulate their inherent creativity and knowledge in the form of visual outcomes. By fostering distinctiveness and competitiveness, the SDTWs were intended to ultimately add value and

foster economic independence in the community. As expected, the participants found Sessions 5, 6, and 7 the most helpful and enjoyable. These sessions about creating design sketches and producing ceramic prototypes were closely related to their daily jobs; therefore, the participants found these sessions particularly useful and relevant. Moreover, through the experience of turning their ideas into tangible outcomes, this stimulated their participation and interest in the SDTWs.

Similarly, when asked to choose the session they wished to extend, the participants predominantly selected Sessions 5, 6 and 7 that belonged to the Create phase. Some participants pointed out the limited time within which to produce the expected outcomes. Apparently, the participants had also been busy with product orders in their work, and some seemed to be concerned that they were unable to properly complete the worksheets:

"[I would like to repeat] Sessions 6 and 7. You gave me lots of tasks to do. We could not finish them all. Also in Session 7, we wanted to make more items. We were busy with orders at that time." (N. Oeur, interview, 2 March 2015)

On the relevance of the SDTWs to their work, participants also selected Session 4 (making a visual reference) and Session 9 (display and storytelling). The latter part of the SDTWs progressed in a smooth way and within a friendly atmosphere, and the participants seemed to have been able to express their opinions. In summary, the SDTWs might have worked as an instrument to sensitise the participants in terms of exploring and drawing their innate originality and tacit knowledge, materialising this collected knowledge into tangible outcomes, and situating such a process, methods and outputs within their daily work.

#### 7.2.3. Conceptual and behavioural changes

The participants conceded that they were more or less affected by the SDTWs in a positive way. Most of them mentioned the attainment of the ability to explore creative ideas for ceramic design; other comments included that they were able to comprehend the customers, and change the way they thought and behaved in the workplace:

"It [the SDTWs] really helped us improve our thinking skills, particularly in the design process." (D. Yem, interview, 2 March 2015)

"It was useful for my work, the designing and shaping. Also, it helped me to understand the mind-set of the customers." (M. Phal, interview, 2 March 2015)

"[The SDTWs affected me] a lot. Prior to the SDTWs, we used to work according to

the orders from our customers. When there was no order, we did not have anything to do. Now, we feel like we would like to create new products – changing ourselves from repeating the same work into trying many different ideas." (N. Oeur, interview, 2 March 2015)

"All sessions were very important to me. Especially the design process. Now, I know that I can go somewhere, take photographs and make a visual archive in the development of designs from this kind of research. I hope to create new designs so that our customers and buyers can find new products. These will have a higher value and higher price." (P. Lun, interview, 2 March 2015)

"[The SDTWs] were really useful for the work." (S. Oun, interview, 2 March 2015)

The participants consistently stressed that they wanted to retain the spirit found during the SDTWs and continue practising together. Some participants reported that having realised the usefulness and implication of design skills, they would spend more time researching them. One participant explained that through this experience he viewed the gender roles within this job in a different way. He was also keen on perceiving the SDTWs as an approach to add value to their products:

"On his favourite, Session 7: I did not know how to do this kind of work before. The women have been very good at shaping, but it is way too difficult for me. If I had the chance, I would like to learn more. In Cambodia, shaping in pottery production has been women's work. But for me, it is not important to distinguish between a women's role and a man's role. I like this work ... In our village, every house produces the same items, which in turn makes the price cheaper and cheaper." (P. Lun, interview, 2 March 2015)

On the participants' attitudinal changes, Ake also noted that:

"The participants used to make the products based on the customers' orders and designs, but they need to design and produce by themselves. From now on, they have to work as artists and designers, not as workers who merely follows orders from others." (H. Ake, interview, 2 March 2015)

These testimonials suggest that the SDTWs could have impacted the ways in which the participants thought, acted, interacted and reflected, directly or indirectly, in terms of their jobs and relationships with the other constituents within the research setting.

#### 7.2.4. Suggestions for the SDTWs

The participants in general found the SDTWs useful and inspiring. Nonetheless, consideration should be given to the possibility that the participants were being too polite to address critical thoughts publicly. In order to elicit honest responses in evaluating the SDTWs, the question was posed indirectly, using expressions, such as 'which session would you like to improve? In what way?' and 'do you think the overall length of the SDTWs were enough?'. Eight out of ten participants responded that eleven sessions were not enough. Three expressed the desire to have more sessions for however long I was 'available'. The others commented on the need to extend each session to more than three hours. In short, the participants felt the need to extend the duration until they became familiar with the process and methods of the SDTWs. When asked to suggest ideas for improving the SDTWs, one participant responded that:

"On Session 4: it was good for us to research on the Internet. We would like to visit the real places to look, touch and feel the real objects." (N. Oeur, interview, 2 March 2015)

In addition, other stakeholders of the KCHH shared their ideas for further possible directions:

"I think it would be good to develop our products with our identity to represent the Andong Russey village. Customer memories are associated with their experience. So, it would be nice if they could be reminded of their travel to Kmapong Chhnang by looking at the products they bought during their visit." (S. Sourng, KCHH translator, interview, 2 March 2015)

"On Session 8: it would be nice if the participants had the chance to talk to the customers, and display items in the shop." (H. Ake, interview, 2 March 2015)

#### 7.2.5. Final thoughts and unsolved problems

During my short visit to the KCHH for the follow-up interview, I found that the participants were undergoing the takeover of the KCHH, as the support of the Nippon Foundation had finished. Ake, the Japanese coordinator, was to leave the place, and the KCHH would be entirely run by the ten participants. This meant that the participants would become responsible not only for ceramic production, but also for quality control, client management, sales, marketing and more. This follow-up interview was aimed at tracking any subsequent outgrowth from the SDTWs, and to find out how well prepared the participants were to take over the KCHH and to adjust their roles and responsibilities

within the centre

A question guide was prepared, but the interviews proceeded in the format of a relaxed dialogue with each participant. Most of the responses were focused on their reflections on how the SDTWs have impacted them and any remaining concerns, as described below.

# Reflections on the impact of the SDTWs

First of all, the participants stressed that the products designed from the SDTWs had been in high demand, and that the customers seemed to prefer them, as noted below:

"The products we designed from the SDTWs were almost sold out; only a few were left. Customers really liked them ... Through the SDTWs we were able to try new and different items that customers had never seen before." (P. Lun, interview, 2 December 2015)

"With the designs that we had done in the SDTWs, many customers seemed to be interested in them, and we were able to raise the prices." (M. Phal, interview, 2 December 2015)

"People are more interested and buy more products." (P. Oun, interview, 2 December 2015)

Other than an increase in sales, another notable achievement seemed to be how they perceived their experience throughout the SDTWs, as described below:

"[The experience from the SDTWs] helps me when making new things in manifold styles." (N. Oeur, interview, 2 December 2015)

"There are changes to the way we make the ceramics. We used to make items without a lot of thought, but since the SDTWs, we are able to make use of pictures and other details on the products." (P. Oun, interview, 2 December 2015)

In summary, the SDTWs appeared make an impact not only on the quality of products through distinctive designs, but also on the participants' attitudes towards innovation. In this process, the social design thinking approach transcended the traditional boundary of design (to produce objects and services) and moved towards a more comprehensive, interactive and affective approach, which acts as a tool for organisational change, as suggested by Deserti and Rizzo (2014).

#### Remaining concerns

Facing the takeover of the KCHH workshop, the participants seemed particularly concerned about their technical abilities. Six of them explicitly mentioned the difficulty in maintaining quality stability, getting supplies for the glazing materials and avoiding breakages throughout the firing process. At that time, the participants were worried about breakages. A few months earlier, an eighty-piece set of dinnerware had been supplied to a renowned Khmer cuisine restaurant in Phnom Penh, but a fair amount of the dishes cracked, not long after being sold. This problem became particularly noticeable as the dinnerware was used in a restaurant with a high turnover. Thus, one of weak aspects of the KCHH products was revealed as a consequence of the frequent use of dishwashers. The quality of the clay was diagnosed as its cause, and a Japanese potter, one of the founding members of the KCHH project, flew over to experiment with the component ratio of clay. The participants were keen on improving the quality of the clay mix to reduce further breakages and chips.

Alongside these technical issues, the participants were worried about not being able to find sufficient clients. Until then, Ake (the Japanese coordinator) had been in charge of this; no one in the KCHH workshop had managed to perform the job on his/her own.

"I am very worried because no one will manage us or find the right niche in the market. It is difficult for us because we still do not have any knowledge about marketing." (N. Oeur, interview, 2 December 2015)

"We still lack many things, like marketing. After the handover, we will have no one in charge of marketing." (S. Oun, interview, 2 December 2015)

In general, it seemed that a vague sense of anxiety was growing about losing *them* (referring to the Japanese potters, coordinators and other outside experts, including me):

"I am anxious about whether this workshop will be able to keep going. When *they* [the Japanese potters, coordinator, and other external helpers including me] stay, I feel reassured. But after they are gone, I will feel so lost." (S. Son, interview, 2 December 2015)

"When are here, they can spot our mistakes. But, without them, we will have to talk with each other. Being without them might be a kind of good lesson for us to try harder by ourselves ... [Yet] I still need to get advice from them." (D. Yem, interview, 2 December 2015)

"I am worried that I can't do as well as when I studied with her." (S. Som, interview, 2 December 2015)

"It is important to communicate with foreigners, but it is difficult because we don't know English. Even speaking in Khmer, I still feel it is hard because I don't know where to start ... at least we will need to be equipped with basic English phrases to greet them, sell items, notify them of the prices and other important things we should let them know about. I think that these can get you off to a good start." (N. Oeur, interview, 2 December 2015)

Some of the participants admitted that they had not been able to keep up with what we had practised during the SDTWs. They had been busy meeting deadlines for clients. One participant depicted the situation honestly in the following:

"The change, in my opinion, isn't too fast and it hasn't become the real thing yet. I am still not good enough at design ... before the SDTWs, it was like I was blind, but after the ten sessions, I gained more ideas. However, after that I have my own family, and I don't have much time to think about this process." (P. Lun, interview, 2 December 2015)

In summary, despite some fruitful outputs and attitudinal changes, the participants were still worrying about their capabilities, particularly in regard to running the KCHH without external help. Such concerns were understandable: the SDTWs were intended to break the customary idea of technocracy, but just one round of the SDTWs was not enough to bring about major changes. This calls for an investigation into practising a social design thinking approach as a programme, not as a one-off project. The notion of infrastructuring that opens up an agonistic space for continuing participation is discussed later in Chapter 8.3.

# 7.3. Co-designing as an instrument of participation

The objectives of the SDTWs were twofold: to explore an approach to social design thinking in a Cambodian context to fill the knowledge gap in the literature; and to contribute to the participants and community. This included inspiring and empowering the participants to develop their design thinking skills, enabling their abilities to elicit lasting outcomes and helping them to produce distinctive designs and understand the notion of competitiveness to ensure an increased economic independence.

Participatory design and service design have been emphasising the conceptual aspects of design, such as the design thinking process or the strategic practice of designing a 'holistic

experience' (Yang and Sung 2016: 27). In this approach to social design, I argue for the significance of co-designing as an instrument of participation. Its significance becomes much higher when the research is conducted in a development context where there is a language barrier, scepticism and a sense of urgency for livelihood. In retrospect, however benign the intentions I had were, the course of blending in as an outsider was a tough challenge, especially in the early stages of the fieldwork. I was under constant pressure to prove that I was not taking advantage of them for my research, but that what we were doing would actually help to improve their work and raise their income. Similar experiences have been reported by Wang et al. (2016) in their research on the co-creative fieldwork conducted in rural China where the authors describe the difficulty of inviting local stakeholders into their social design project due to widespread scepticism.

While describing the realistic hardship of conducting a participatory action research in the true sense of the word, the authors emphasise the significance of co-designing 'tangible outcomes and implementations' instead of mere 'presentations and written documents' (Wang et al. 2016: 40). In other words, concrete artefacts drawn from a co-design process articulate a participatory design practice (often appearing abstract and irrelevant to the locals), prove its usefulness and relevance to the participants, build confidence in that they are being productive and progressive and give a positive impression of the research onwards that would stimulate ongoing commitment. These tangible outcomes act as proof of and as an attractor for organic participation.

Thus, the SDTWs were aimed to elicit tangible outcomes through a co-designed process. The SDTWs had been conducted based on the principle of democratic participatory design. To reassure the participants about what they were achieving and to keep them interested in, substantial outcomes were needed. For this reason, a co-designing approach was employed.

#### 7.3.1. Why a co-design approach?

Co-design can be loosely defined as 'designing with (others)' (Fuad-Luke 2009: 147); it invites multiple stakeholders, including those who would benefit from the outcomes of the project, in the process of problem solving. The boundary between designers and users, designers and non-designers become blurred as participants collectively share their

knowledge and thoughts, not only to elicit conceptual and technical solutions, but also to place the solution in the cultural and social context of consent (Carroll 2006; Fuad-Luke 2009; Steen 2013; Manzini 2015). Thus, co-design can help the researcher-designer explore different ideas and experiences offered by heterogeneous stakeholders:

Co-design can be understood as a process of collaborative design thinking: a process of joint inquiry and imagination in which diverse people jointly explore and define a problem and jointly develop and evaluate solutions. It is a process in which participants are able to express and share their experiences, to discuss and negotiate their roles and interests, and to jointly bring about positive change. (Steen 2013: 27-28)

The participants are encouraged to share and combine their experiences, knowledge and feelings without hierarchical restrictions. Considering that it inherently embraces diverse perspectives and experiences in the course of collaboration and collectively building the ground for knowledge, co-design can be approached as an epistemological oscillation between practice and reflection (Dewey 1934; Schön 1983; Steen 2013).

The scope of co-designing varies, depending on how the term is interpreted in relation to existing design disciplines. For example, Manzini explains co-design in a comprehensive sense in that 'all design processes tend to become co-design processes' (2015: 48), especially today where communities and societies are densely connected and form a 'social conversation' (2015: 49). Within this, co-design innately takes on the character of 'social qualities' as the term is based on the concept of networks and mutual interaction. On the other hand, Wang et al. (2016) describes the extent of co-design in comparison to other participatory design approaches. Both participatory design and co-design share conceptual values, such as employing a democratic process, collaboration and achieving a social good, rather than promoting private interests. However, the commentators argue that there is a fundamental difference distinguishing one from the other:

An important distinction exists between co-design, where the focus is on the output of a design process which draws on the expertise of participants, and participatory design, where the focus is on how to facilitate the engagement of participants with different voices and opinions in a shared creative process. (Wang et al. 2016: 38)

Similarly, Bannon and Ehn (2012) note that participatory design can be distinguished from other related design disciplines, as participatory design deals with 'doing' and 'how' while other design themes (as in the example of Human-Computer Interaction) focus on 'what' (2012: 41). Nonetheless, this does not necessarily mean that we should draw a dividing

line between participatory design and co-design; nor does it mean that we should choose one over the other to prove the superiority of a particular design approach. Rather, a mutual complementation between design themes is required. For instance, a processfocused participatory design can help the researcher consolidate a reciprocal relationship, dispel sceptical views and strengthen the basis for collaboration with the locals, hence overcoming cultural and linguistic differences and being able to conduct a productive codesigned project (Wang et al. 2016). In this way, the participants are encouraged to produce tangible co-designed outcomes, that can enable the participants to witness their progress and keep them committed to participation, hence forming a productive cycle. The SDTWs followed the fundamental principles of participatory design, with a particular focus on co-designing tangible outcomes to stimulate the participants' organic cooperation and to evoke a productive atmosphere. It should be noted that these tangible outcomes drawn from the SDTWs were rather unintentional objects that arose in the course of the workshop sessions, instead of being planned beforehand. The following section describes the process and methods for co-designing eco bags and leaflets as important outcomes of the SDTWs.

## 7.3.2. Co-designing eco-bags

The idea of co-designing eco-bags and leaflets unexpectedly arose halfway through the SDTWs, drawing on three circumstances. Firstly, the participants created drawings and stories about their life, work, village, hopes and worries in Sessions 3 and 9, which became fruitful materials for storytelling (see Figure 59). The sketches, at that time, appeared to be rather amateur, and some participants seemed shy about showing their work. However, together with their responses in the interviews, these formed an honest and insightful narrative, which explained their relationships within the community, the ceramic production and Khmer culture. The primary objective of asking them to create these materials in Session 3 was: a) to learn about their situation and thoughts as a researcher, prior to entering the Create phase; b) to allow the participants to think about their work from a different perspective; and c) to reflect on any element that would help improve my original plan for the forthcoming SDTW sessions.

Secondly, through observation, I became aware of alternative packaging options. Ceramic products sold in the gift shop (next to the KCHH workshop) used to be wrapped in

newspaper and bubble wrap, and then placed in a plastic bag with the KCHH logo printed on it (see Figure 60). Sometimes, I noticed that certain items had been randomly wrapped with newspaper that depicted a huge graphic image of a car accident or injured victims. Hence, I began to think about designing a new bag that would give a better impression to the visitors.



Figure 59. The outcome examples of Session 3



Figure 60. Visitors in the gift shop of the KCHH (left); and a plastic bag (right)

Thirdly, as a graphic-branding service designer, I was open to the idea of contributing my knowledge and skills. I began to imagine the possibility of producing eco bags with the participants' drawings printed on them, and displaying them at the counter for sale. This would not only promote the KCHH brand, its products and village, but also provide an

environmentally friendly packaging option.



Figure 61. Selected images from the participants' original drawings

As the stakeholders of the KCHH, including the participants, welcomed the idea, I began to review the original drawings and design drafts from Session 3. In this process, I focused on: a) including everyone's drawings so that the participants could feel their work was being valued and was good enough to become a tangible outcome; b) presenting an authentic and distinctive image that represented the stories of the participants, such as their work, community, families and aspirations; and c) preserving the details of the original drawings, such as the strokes and texture (see Figure 61).

Having experimented with each visual element and the layout, the initial draft came out. It

comprises the story of the KCHH workshop, its potters, families, the village, materials and products. These images were carefully selected and put on the bags to reflect what the participants valued as important elements of their life and work, such as a kiln, clay, a child and many more. The bags were designed to visually represent the authentic voice of the participants by maintaining their original expression seen within the strokes of their drawings.





Figure 62. Eco bags (top); the translator carrying a bag (middle); and a customer with a bag (right)

These were accompanied by a sign saying that all drawings were created by the KCHH potters (see Figure 62). 16 bags were sold by the time of the completion of the SDTWs.

What was more encouraging than the successful sales were the participants' reactions: '[i]t was really amazing to see that our very simple drawings were collected and turned into a bag' (M. Phal, interview, 2 March 2015). On the definition of co-design, Sanders and Stappers defined the term as a 'collective [...] creativity of designers and people not trained in design working together in the design development process' (2008: 6). Similarly, in my case the relationship between the participants, the SDTWs and I as a researcherdesigner happened to draw an unexpected outcome. The participants were encouraged to see this tangible outcome and gained self-confidence in their ability to create a useful and likable product. The participants gradually felt more favourable towards the SDTWs as they progressed, especially as they began to acquire tangible outcomes (sketches, ceramic designs, an idea book and eco bags). In this sense, the bags acted as a catalyst for mutual trust and confidence building. The eco bags were also packaged in an environmentally friendly way, aligning with the philosophy of the KCHH to maintain sustainability throughout its production by using local resources. The bags have become a means of promoting the KCHH brand outside the village (when the customers take the bags elsewhere). It was also expected that the bags contributed to increasing profits for the participants.

The significance of the eco bags can also be explained in terms of design culture and materiality as 'the products of an enterprise are not just the synthesis of the end user's needs, but essentially are the synthesis of its culture' (Deserti and Rizzo 2014: 38). While design culture highlights the shift of focus from object-orientation to process- and practice-orientation, it does not necessarily exclude the role of artefact. Rather, the artefact can be considered as a missing link between practices and generated knowledge (Kimbell 2012). In the case of the SDTWs, the eco bags represent the process of exploring and rearranging the relationship between the participants, the community, their objects and values in a tangible form.

#### 7.3.3. Co-designing leaflets

While trying to elicit tangible outcomes through the co-design process, I decided to extend the experimentation to another format: leaflets. It was found that the existing leaflet design was merely depicting the KCHH workshop and its products (see Figure 63). Together with the eco bags, new leaflet design was expected to promote the KCHH brand through the

participants' authentic stories.



Figure 63. Old leaflet design

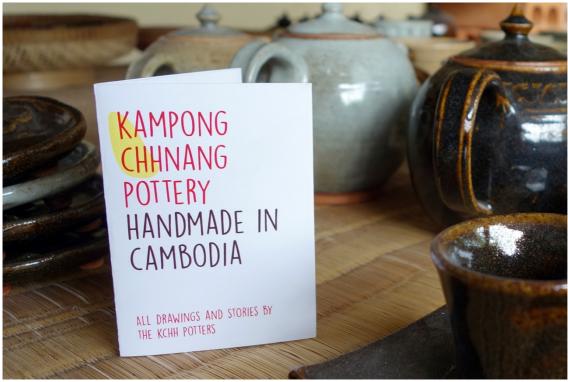


Figure 64. New co-designed mini leaflet

Two types of leaflets were designed: a palm-sized mini leaflet (see Figures 64 and 65; and

Appendix 7) and an A4 leaflet (see Figure 66 and Appendix 8). The participants' drawings and stories delivered in Session 3 were used to build a narrative, as if the participants were explaining to the customers in person about themselves, the KCHH workshop and how they felt about their work and culture. The story and drawings are simple, yet strong since they penetrate the history and symbols of the village, and the participants' mind. The front page featured the same phrase as the bag: 'Kampong Chhnang Pottery handmade in Cambodia', accompanied by a note saying that all drawings and stories were created by the KCHH potters. Despite its small size, its simple design helped it stand out against the other displayed products. The mini leaflet was extended to an A4-sized one in which the photographs of the potters, the village, the workshop and the products vividly illustrated the sense of being there. The leaflets were placed in the gift shop and in the trade exhibition held in Phnom Penh.

In an ideal case, it might have been beneficial for the participants to also take part in designing the branding materials. However, considering the realistic challenges of their computer illiteracy and the lack of electricity in the workshop, my, rather active, intervention as a graphic designer was ineluctable. With electricity and computer skills, they would have been able to play a leading role in putting together the drawings and typography. Moreover, it would have been possible to have had several rounds of critiquing and refinement on the prototypes through the use of a computer, printer and projector. Instead, I avoided becoming either a 'big ego designer' and a mere 'post-it designer' (Manzini 2015: 66). The former would pose the risk of failing the participants in their sense of empowerment and accomplishment while the latter might result in a bunch of sticky notes on the wall without any actual fruitful outcomes, hence weakening the participant interest and commitment. The degree of my intervention had to be cautiously adjusted to encourage the participants to take responsibility in the SDTWs and still be able to draw tangible and convincing outcomes. It should be noted that my graphic design skills were not transferable to the participants (because of the lack of electricity and computer literacy skills); therefore, it is not impossible to redesign or extend some of the SDTWs activities (that is, the worksheets, eco-bags and leaflets) without my presence. Nonetheless, I ensured the reproducibility of those activities by handing out the digital artwork to the participants at the end of the SDTWs. This signals the opening of an agonistic space for continuing progress led by the participants. One of the further research opportunities might be in expanding the participants' knowledge in regard to digital information technology.

# KAMPONG CHHNANG POTTERY HANDMADE IN CAMBODIA

ALL DRAWINGS AND STORIES BY THE KCHH POTTERS



\*\* KAMPONG CHHNANG, which literally means pottery port in Khmer, has been a historic centre of Cambodian pottery production.

Let us introduce Kampong Chhnang with these five objects - black and red clay locally sourced from a mountain nearby, clay pots and charcoal cooking stove used for everyday life.



forming a tight-knit community for years. While most of rural young people in Cambodia prefer to get a job in urban factories, we are happy to work here. We enjoy learning and making ceramics with advanced skills, while looking after our kids and having fun with each other.

This job not only provides us livelihood to take care of our children, but also makes us proud to be the cultural transmitter of the traditional Khmer handcraft.

Figure 65. Sample pages of the mini leaflet (see Appendix 7 for more pages)



Figure 66. Layout of the A4 leaflet (see Appendix 8 for another page)

# 7.4. Challenges and issues

This section illustrates the challenges experienced in the course of exploring an approach to social design thinking in the Cambodian context. Some of the challenges I experienced aligned with those of traditional participatory design while other challenges posed rather sensitive issues due to the nature of the research setting. I, firstly, outline the general challenges of participatory design, then I move to issues more directly connected to the context of developing countries as a research setting.

# 7.4.1. Analysis of participatory design approaches

Since its emergence against a backdrop of social, political and technological undertakings in Scandinavia in the 1960s and 1970s, participatory design has been brought into the design discourse at both academic and practical levels (Emilson 2014: 18). In recent years, participation has been gaining popularity and influencing many design practices drawing on its democratic and emancipatory principles (Robertson and Simonsen 2012). Nonetheless, a number of commentators point out that there has been a lack of critical perspectives that address questions related to achieving a genuine partnership, negotiating the degree of participation and distributing power for decision making (Kensing and Blomberg 1998; Robertson and Simonsen 2012; Greenwood and Levin 2007; Bannon and Ehn 2012). Kensing and Blomberg provide a guideline for the requirements of participation, as below:

(1) Access to relevant information; (2) the possibility for taking an independent position on the problems, [...] (3) participation in decision making [...] (4) the availability of appropriate participatory development methods and (5) room for alternative technical and/or organizational arrangements. (Kensing and Blomberg 1998: 172)

Even if these preconditions are fulfilled, the degree of participation can vary depending on 'how' and 'why' the participants are engaged (Kensing and Blomberg 1998). For example, where people are engaged through *passive participation*, the participants merely offer the designer their knowledge and skills without a proper opportunity to take part in the process of creating outcomes or making decisions. On the other hand, in *active participation*, people's engagement is 'central to the value and therefore the success of the project' (Kensing and Blomberg 1998: 173). The question of how to balance the two ends of the

spectrum comes to the fore since it is unrealistic to expect full participation in many participatory design projects (Kensing and Blomberg 1998). Considering the nature of participation, the designer should be aware of his/her ontological and epistemological stance to carefully distribute and arrange the power and control necessary for participation and the decision-making process (Greenwood and Levin 2007).

Another important issue is continuity (Robertson and Simonsen 2012; Kensing and Blomberg 1998). The outcome and follow-up measures are left in the hands of the participants (people who worked with the outside designer and will use the outcomes of the project), and the principal challenge of participatory design has been to ensure the durability of the project without the designers' presence. Would the participants still be interested in following up the project after its completion? What can act as a catalyst to keep the participants, the project and outcomes together and continue the spirit? What are the roles of the designers and the participants in drawing sustainable outcomes from participatory design? As discussed in the literature review, the Scandinavian school of participatory design has been investigating the notion of infrastructure in order to engage with the notion of 'design after design', an ongoing design practice occurring during certain post-design processes, such as implementation, adjustment and reflection (Ehn 2008; Bjorgvinsson et al. 2012a, 2012b). In Chapter 8, I attempt to answer the questions addressed above by providing a detailed investigation into the concept of socio-material assemblage. This ultimately would help to open an agonistic space for continuing, evolving and reflecting on practices after the project's completion.

## 7.4.2. Challenges of social design practices in developing countries

Cultural practices are deeply embedded in the ethos of the community, and the participatory paradigm in these settings is bounded by the cultural traditions and practices. (Puri et al. 2004: 48)

Since its conception in Scandinavia, participatory design has been mostly studied and discussed in Europe, if not, in the West at least. Although participatory design has been practised in developing countries for the past two decades, many researchers argue that existing theories, methods, tools and techniques often tend to be incompatible with the developing context (Puri et al. 2004; Winschiers-Theophilus et al. 2012; Winschiers 2006).

Such incompatibilities often end up posing a series of challenges to researcher-practitioners in a development context. These challenges are, perhaps, based on the nature of the research setting due to the differences in social, cultural and political structures and the gap in technology, literacy, education and access to information compared to more developed nations (Wang et al. 2016). Investigation and analysis of practical difficulties in developing countries are relatively less explored than those experienced in developed countries. Nevertheless, some researchers provide useful and empirical evidence into the challenges of practising participatory design approaches in a developing context.

Fundamental questions include the applicability of participatory design approaches outside Scandinavia, the genuine meaning and scope of participation and designers' roles in such a context (Michener 1998; Puri et al. 2004; Winschiers-Theophilus et al. 2012; Janzer and Weinstein 2014).

Hussain et al. (2012) provide a useful framework in which to discuss the challenges in practising participatory design in developing countries. In their fieldwork about the codesigning of prosthetic legs for children in Cambodia, the researchers constructed four categories to describe their challenges: (1) the human aspect, (2) the social, cultural and religious aspects, (3) the financial aspects and timeframes, and (4) the organisational aspects. Firstly, the human aspects include the relationship between the designer and the participants; access to the stakeholders; the participants' ability to participate; linguistic communication; and compensation for the participants. Secondly, social, cultural and religious customs are discussed as important components with which to determine the degree of volition and democratic participation. Thirdly, financial conditions and project schedules influence the project in terms of its scale, how smoothly the process unfolds and its implementation. Finally, organisational aspects are concerned with decision making, power relations and sustainability (Hussain et al. 2012).

Likewise, Wang et al. (2016) describe the practical issues in their study conducted in rural China. In the process of co-creating community engagement with local participants, they discovered the main challenges to be a lack of education; inadequate technology; scepticism about the 'outside expert', difficulties in replicating the research in other settings; and the risk of causing 'another new inequality' (2016: 42).

Based on the literature above, I illustrate the challenges experienced throughout the

fieldwork in Cambodia. These might be interpreted as practical tips for further fieldwork for researchers who work in a similar environment.

# a. Understanding social customs and avoiding neo-colonialism

Participatory design research often tends to encounter challenges in developing countries because its innate qualities of equality, the democratic decision-making process and open discussion that were conceived and widely perceived in the West appear to be incompatible in other contexts. For example, in the African context, authoritarian and hierarchical social structures make it difficult to conduct a democratic and explorative fieldwork, such as brainstorming or planning 'future workshop[s]' (Winschiers 2006; Winschiers-Theophilus et al. 2012). To conduct realistic fieldwork effectively, Winscheirs claims that the researcher should seek an 'inventory rather than criticism; usage of existing items rather than future visions which seem utopian for people dealing with solving daily problems' (2006: 74). Similarly, Puri et al. (2004: 48), drawing on their participatory design research in India, South Africa and Mozambique, argue that participation is not always necessarily shaped through autonomous bottom-up processes; sometimes, it requires a top-down approach, which will 'then be gradually nurtured over time'.

In the case of Cambodia, a vertically-organised social hierarchy affects the way people interact with each other, depending on a number of factors such as age, gender, job, religion, educational and familial backgrounds, and financial situation (Hinton 1998; Hussain et al. 2012: 98). As a consequence, it becomes difficult to expect younger participants to be able to express their opinions freely in front of older people, not to mention being able to constructively criticise each other. Many participatory design researchers from the West find this to be one of the main challenges. However, it was understandable for me as I also come from a background where the idea of Confucianism implicitly dominates society. It was natural for me to detect and acknowledge the values of respecting the elderly, authoritarianism, family-oriented morality, community cohesion rather than individualism, and agreement rather than argument. Therefore, I could cope with the related difficulties more flexibly in the course of the SDTWs. For example, as depicted in Chapter 6.3.1, the participants appeared to be passive and cautious in answering the interview questions. When asked to pick a favourite piece of ceramics and explain their reasons, the first interviewee responded that she liked a cup for its usefulness (N. Oeur, interview, 24 November 2014) and the rest – who were listening to the dialogue

– replicated the answer in an almost identical fashion. This incident upset me at first, but then it provided a useful guide for redesigning the rest of the SDTW sessions to be able to encourage a more active and expressive participation. In other words, in the early phase of the SDTWs, the participants tended to hide their personal opinions and converge their answers as a group, but an understanding of their implicit social and cultural customs helped me to redirect their attitudes towards a more open communication and participation.

#### b. Building trusting relationships

As discussed in Chapter 6.1. Selecting the Participants, the fieldwork began with an obvious challenge to find potential participants to gain access to the community and stakeholders, and to overcome any scepticism and dependency on outside experts. Considering that this was a self-funded project with a limited timeframe, it was aimed at conducting a feasible and realistic participatory workshop that would draw meaningful outcomes and be useful for the participants. In terms of the number of the participants, it would have been beneficial to have worked with a larger group of individual, local potters across Kampong Chhnang province. However, it should be noted that participation is inevitably followed by 'opportunity costs', that is, participants may not want to spend their time and commitment volunteering over other personal and social activities (Michener 1998: 2115) because 'one can grow tired of being an active citizen' (White 1996: 11). All the potters I met during the preliminary observation phase were occupied with their daily work, under the pressure of receiving a low income and also other agricultural or parental tasks. Even if they agreed to join the SDTWs, there was no guarantee that they would turn up for every session over the period of five months. The fact that they come from different villages and that they have dissimilar preferences of working styles (such as maintaining a family business or running a cooperative) might have delivered an interesting result, but at the same time it would have demanded a lot of time and effort for the researcher to facilitate. Besides, it would have required a long time for the participants to travel between the villages, which would have affected their attendance and commitment.

Therefore, I chose to build a steady and strong relationship with ten local potters who belonged to the KCHH in Andong Russey village. I first contacted Ake, the Japanese coordinator, who acted as a gatekeeper between the potters, the clients and people outside the community. Fortunately, he and the other stakeholders of the KCHH were open to creative experiments. I stressed that unlike their previous approach, which was to train the

potters in technical aspects, the SDTWs would provide an opportunity for the participants to explore original ideas for ceramic designs and branding. As Ake agreed to the plan for the SDTWs, I spent the next twelve months getting to know the community, talking to the then-potential-participants, observe the research setting and designing the plan for the SDTWs.

Building trust and respect took longer than expected because of the all-pervading scepticism about the outside expert. As Wang et al. (2016: 40) reported, the locals seemed to have 'become fatigued and even repelled by several rounds of interviews, pilots, observations, evaluations, and so on', which might have led to what Michener (1998: 2115) called the 'wait and see mentality'. This is a situation in which people withhold their participation while 'weighing the costs and benefits' before committing to any investment of their time and energy (Michener 1998: 2115). The local potters of Kampong Chhnang had experienced an array of international NGOs over the past ten years, and as seen in my observations (see Chapter 5), not everyone was satisfied with the outcomes. In an attempt to get closer to the participants on a personal level, I invested an effort not only because of my research objectives (visiting the KCHH, maintaining a presence before the SDTWs and taking photographs of their participation throughout the SDTWs), but also to genuinely try to immerse myself in the participants' daily lives by dressing like them, using simple phrases in Khmer, playing with and taking care of their children while they worked. As a consequence, throughout the fieldwork, I could feel that I was slowly being accepted by them, and I was later invited to a participant's wedding ceremony halfway through the SDTWs.

#### c. Dealing with unexpected circumstances

In real-world research, researchers and practitioners are advised to expect and accept more or less accidental incidents. Hodgson and Rollnick warn that '[t]rouble awaits those unwary souls who believe that research flows smoothly and naturally from questions to answers via a well-organised data collection system' (1996: 3). In preparation for such circumstances, Robson (2011: 406) proposes to have a certain degree of flexibility and a ""forgiving" design (where it is possible to substitute one case or activity for another)" in the research. Likewise, Hussain et al. (2012) claim that they had to ensure the participatory workshops were short and flexible because the participants would not spend many hours in place of family time in the evenings or weekends. In my case, the workshops had to be

adaptable and manageable partly due to the presence of their children. It became important for me to conduct each workshop in a flexible and manageable manner in terms of space and time. The participants were encouraged to work in spaces conducible to their working preferences and parental duties, instead of sitting at the table (see Figure 67). No pressure was given to complete each task; by contrast, they were asked to do their best within the allocated timeframes and according to their personal commitments.



Figure 67. A participant sketching on the worksheet and keeping an eye on the children



Figure 68. The children taking part in the SDTWs

At the same time, I kept the children from distracting their parents by encouraging them to also take part in creative activities, too (see Figure 68). For example, worksheets (originally designed for the participants) and coloured pencils were given to the children in Session 5. The children were inspired by the fact that their parents were working on the same sheets, which made them enjoy the colouring activity. For Sessions 6 and 7, I

brought plenty of coloured clay so that the children were also able to express their creativity, beside their parents. Sometimes, I made pinwheels and paper origami and showed the children how to play with them. Throughout the SDTWs, I was not only a researcher-designer, but to some extent a nursery teacher. As Merkel et al. (2004: 7) suggested, 'working with community groups expands the role of designers into lurkers, facilitators, consultants, and bards and foregrounds the need to find ways of communicating this role to community groups'. Similarly, Wang et al. (2016) stated that social design practices can require manifold roles for practitioners. Therefore, it is important that the researcher-practitioner copes with unexpected, peripheral factors with a flexible attitude.

This can be further interpreted from the ANT perspective. Michael (2012a: 31) describes an anecdote of a 'disastrous interview' that was caused by a combination of an indifferent interviewee, her distracting pets and a helpless tape recorder which documented nothing fruitful. Instead of addressing it as a failure, he notes that this episode 'entailed a complex set of interactions where humans, animals and technologies were involved in a process of constituting orderings and disorderings by virtue of the various relations' (Michael 2012a: 30). Furthermore, the process of reflecting on an anecdote, or *anecdotalisation* as he calls it, allows the researcher to explore the 'inventive doing of research' as it enables 'a semiotic and material dialogue between past and present through, and with, bodies, memories, stories, objects and texts' (Michael 2012a: 34). Put simply, the researcher interprets and interacts with the research findings in creative ways, rather than taking them for granted.



Figure 69. Unexpected designs inspired by the children's creative works

Similarly, in my experience, the children first appeared to be a disturbance to the participants' concentration in the SDTWs. A series of distracting activities allowed me to undergo the process of anecdotalisation by reflecting on and devising ways to engage them in the facilitation of a productive fieldwork. Their existence was reoriented to creative activities, which transformed into novel possibilities for inspiration for the participants. For example, male participants were new to shaping clay, so they seemed intimidated in the early phase of the SDTWs; however, through the Create phase, they were encouraged by their children's work and became braver in expressing their ideas through drawings and coloured clay. Some of their outcomes reminded them of their early childhood (see Figure 69). This can be explained through the notion of a socio-material assemblage in its ability to reconfigure the relationship between alien elements, as Michael argues below:

[Speculative] objects are chronically idiotic—by bringing together otherwise alien relations they challenge their audiences not to engage in solution seeking (what is the solution to the Neuroscope?) but to enact, what, as mentioned above, Fraser (2010) calls, "inventive problem making," where the parameters of the "issue" can shift in new and unprecedented ways. (Michael 2012b: 542)

#### d. Acknowledging and adjusting to a lack of capability to participate

A number of participatory design studies in developing countries underline their experience of encountering the participants' lack of capacity to participate (Hussain et al. 2012; Wang et al. 2016; Byrne and Sahay 2007; Puri et al. 2004). This might be due to their lack of education and low literacy levels, inadequate access to technology and infrastructure, unequal social relationships, different understandings of participation and democracy, and difficulties in accessing information that deters the locals from 'building on public design and knowledge platforms' (Wang et al. 2016: 37). Therefore, the researcher is expected to discard any underlying assumptions that may be valid in developed countries in terms of participant competence. It is required that the researcher becomes *agnostic* by discarding any prejudice or assumptions, and to adjust their perception towards understanding the local context and working with the participants (Puri et al. 2004; Storni 2015). I illustrate three examples where I have experienced this lack of capability to participate, and then changed the plan according to the situation.

Firstly, in terms of the lack of education, I focused on designing the SDTWs to be appropriate for the participants. Through the conversations prior to the SDTWs, I became aware that all of the participants stopped their schooling after primary school, so they had

not experienced any kind of art or creative learning. Therefore, it was my priority to immerse myself in their situation to make the SDTWs understandable and doable for them. Although creativity is an innate quality of human beings, sometimes people need to learn how to articulate their ideas and experiences (Sanders 2006). In this respect, participatory design has encouraged researchers to develop processes, techniques, tools and methods with which to conduct social design research in a developing context. I had to teach basic design concepts and techniques so that they could produce fruitful outcomes. In this process, I tried to keep it simple and easy, avoiding design jargons and complicated skills that might scare them off. Before handing out the task in Sessions 5 and 6, I gave a short lecture explaining the basic concepts, such as patterns, textures, linearising, elaborating and repeating; and the participants were encouraged to experiment with their ideas with their learnt techniques. Most of the participants quickly learned and applied their learning to their designs on the same day. In the final evaluation interviews, the participants reported that they have never taken workshops of this nature before, and that it 'opened something in their mind[s]' (N. Oeur, interview, 2 March 2015).

Secondly, inadequate technology in the research site was a constant consideration not only for the fieldwork, but also for continuity of the SDTWs. At the time of conducting the SDTWs, there was no electricity in the KCHH workshop; none of the participants had used computers and smartphones; and no one had used the Internet before. The idea of spending one session of the SDTWs to make a visual archive, an 'idea book', for future reference through the use of magazines and online research was conceived by reflecting on the reality of the rural Cambodian context. Session 4. Making an idea book aimed to: a) allow the participants to learn how to use information technology; b) allow the participants to become aware of the variety of inspiration, competitors and ceramic designs outside their village; and c) produce a visual archive, a concrete outcome that would remind the participants of the SDTWs and inspire them after the completion of the workshops.

In the process of preparing for Session 4, I had to consider their information technology (IT) knowledge, and I had to fragment the process of making visual archives into small pieces so that the participants could be engaged without being overwhelmed. As illustrated in Chapter 6.3.4, three tablets and a laptop were provided, and the participants were guided on the use of the devices by the translators. The participants were asked to research online, collect images for inspiration, print them out and put them together in a file, as a visual

archive. They seemed to be interested in and motivated to use the IT as they explored the Internet.

Thirdly, difficulties in accessing information arose when the participants were researching online. There was a clear limitation in finding usable resources with Khmer keywords, so the translators had to help translate the keywords from Khmer into English. This suggests that conducting social design workshop in developing countries might face not only a lack of capability to participate, but also poor access to information resources (including low Internet access, absence of public libraries, and a scarcity of international publications and multimedia). The need for indigenous artisans to learn about contemporary design, marketing and branding is crucial to enable them to produce competitive products and to meet customers' expectations (Craft Revival Trust et al. 2005). Consequently, IT literacy becomes essential to explore creative ideas and strategies beyond traditional approaches. The question is what can be done to enable the participants to collect useful knowledge online when they only speak their mother tongue, and information on the Internet is scarce in that language. What would be an effective and engaging way to make participants learn IT and apply it to their daily work? These questions require further research with a more extended timeframe.



Figure 70. The participants reviewing images on iPads

Having the participants perform online research was difficult, yet organising a physical visit outside the KCHH was even more challenging. I would have liked to have taken the participants to the National Museum, galleries, restaurants and souvenir shops in Phnom Penh where they might have been inspired. However, it was not possible due to several realistic considerations. Firstly, the participants were busy delivering several batches of products to clients. They were already giving their time and energy to the participation of the SDTWs instead of using them to make a profit. Secondly, the fieldtrips would have taken an entire day, and this would have been unattainable for most of the participants as they were bound to childcare and other domestic duties. Therefore, I had to intervene by carrying out the primary research; instead of having the participants visit the places in person, I visited them, took photos, and made notes and shared my experiences with the ten potters. In other words, the participants saw the outside world through me (see Figure 70). For example, Session 8 of the SDTWs was to understand the customers, market and trends. Instead of having a field trip, I put the images that vividly illustrated places where the end users might encounter the KCHH products (restaurants, hotels and souvenir shops), and other ceramic workshops in Cambodia, which could be one of their competitors. The participants were asked to scrutinise these images on the tablets, and discuss their findings (by using statements beginning: 'this place looks....'). Conducting social design workshops in developing countries involves a number of challenges, and the researcher should be flexible and open to be able to improvise and so amend plan and methods when needed.

#### e. Instilling confidence for mutual learning

Throughout the SDTWs, it was important to instil confidence in the participants who had been previously excluded from the creativie and decision-making processes. Their diffidence was observed from the very beginning of the SDTWs, as depicted in Chapter 6.3.1. The reason for their lack of confidence seems to vary. Firstly, it might be because of the deficiency in information and infrastructure, which not only influences the capability to participate, but also the mentality of the participants:

The wide difference in education between designer and (local) artisan constitutes a difficult barrier. With lack of education comes not only less ability to engage in authoritative Western discourses, such as scholarly articles. But it also lessens confidence in one's experience against the better-informed views of outside designers. (Murray 2010: 19)

Another reason for these passive reactions might be due to the history of colonialism. Janzer and Weinstein (2014) warn about the dangers of a neo-colonialist approach through participatory design practices run by outside designers. I had been aware of these issues prior to the SDTWs, through the literature (Hussain et al. 2012; Winschiers-Theophilus et al. 2012; Winschiers 2006), and also through my personal experience in Cambodia and advice given from friends working in local schools and hospitals in other parts of Cambodia. From my early observations, the participants and other local potters appeared to perceive foreigners as teachers or donors, that is as someone superior to them in terms of knowledge, skills or financial status. I kept stressing from the very beginning that I did not want to be treated as a teacher; I asked them to think of me as a researcher who wanted to learn about their work. However, by the end of the SDTWs I realised that they were referring to me as teacher. Michener (1998) argues that the idea of submissive roles had been deeply rooted in people in developing countries. It is not difficult to imagine that such stereotypes might affect the participants being open and confident to express their ideas in front of an outside researcher. Therefore, I argue that, as a social designer, one should be consistently aware of their ontological and epistemological position. At worst, social design practices might result in nothing more than a 'cultural invasion' (Freire 2018: 95), or as yet another top-down training with a cultural bias. We should also remember that the idea of liberal democracy cannot be taken for granted in some parts of the world (Robertson and Simonsen 2012; Winschiers-Theophilus et al. 2012). It is the social designer's decision, based on their expertise and capability for reflection, as to what extent they should facilitate or intervene to enable a productive and empowering workshop. The role of social designer is discussed in the next chapter.

#### Conclusion

This chapter provided an analysis of findings from the SDTWs. Firstly, in the course of depicting my reflections from the fieldwork, I noted the significance of establishing honest relationships with the participants and embracing unexpected elements. Secondly, I illustrated the process of rearranging the relationships within the research setting through the SDTWs, based on the participants' reflections. This included making sense of the SDTWs and informing the participants to pursue conceptual and behavioural changes. Thirdly, the process, methods and outcomes of co-designing were described, which involved certain fruitful outputs of the SDTWs and also a means for stimulating

participation. Finally, the challenges and issues of this social design thinking approach in the Cambodian context were discussed. Pragmatic issues such as understanding social customs, building trusting relationships and dealing with unexpected circusmtances were discussed. Within a development context, it is particularly important to adjust to the locals' lack of capability to participate and encourage them to develop self-confidence. A social design thinking approach in a development context inherently poses several challenges due to the socio-cultural, educational and conceptual differences between the local participants and the researcher from the outside. As argued by Puri et al. (2004: 49), the challenges of participatory approaches in developing countries emerge because '[t]here is no single, algorithmic best practice applicable to all situations'. We then need to acknowledge the idea of *situatedness* in order to better perceive and practice social design approaches in a development setting. In the next chapter, I discuss the use of socio-material assemblage as a means to problematise the situation, elicit the tacit knowledge of the participants and run social design practices as an iteratively evolving programme.

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# 8. Social design in a Cambodian context

In this chapter, I justify the choice for an approach to social design based on the empirical fieldwork in a Cambodian handcraft community. Firstly, I revisit the notion of sociomaterial assemblage, which was introduced in the literature review, to propose it as a key concept to understand and practise the social design thinking approach. Secondly, I argue for the need to unlock and elicit the tacit knowledge of the participants as a measure of adding value to the products and appreciating the local culture. Lastly, I propose an approach to social design that is to be practised as a programme, not as a project. Overall, this chapter seeks to offer useful concepts and approaches for researchers and practitioners working in handcraft communities in developing countries.

## 8.1. Socio-material assemblage

[I]t is no longer enough to limit actors to the role of informers offering cases of some well-known types. You have to grant them back the ability to make up their own theories of what the social is made of. Your task is no longer to impose some order, to limit the range of acceptable entities, to teach actors what they are, or to add some reflexivity to their blind practice. Using a slogan from ANT, you have 'to follow the actors themselves' (Latour 2005: 11-12).

As explained in the literature review, the notion of materiality and socio-material assemblage was conceived and nurtured by scholars of the ANT, STS, amongst other sociologists (Latour 2005; Callon 1987; Callon and Law 1997; Law 1992, 2008; Marres 2012). From the ANT's perspective, Latour (2005) calls for a sociologist of association, instead of a sociologist of the social who adheres to western-oriented rationalism, and a dichotomy that divides nature and culture, human and non-human, actors and context and so on. This perspective became useful in design culture, particularly for those who have been exploring the ways in which design and objects can be engaged within society (Kimbell 2011, 2012; Julier 2014a; Balsamo 2011; Shove et al. 2007). The notion of sociomaterial assemblage can lead the researcher to create an unconventional approach within which to view and engage with a particular issue by providing an understanding of

fluctuating and interrelated configurations between actors surrounding the issue. Similar to Latour's idea for a 'sociologist of association', the Scandinavian school of participatory design propose that designers move from designing things (as objects) to designing Things (as part of a collective network) (Björgvinsson et al. 2012a, b). In this section, I reflect on the socio-material assemblage of the SDTWs in the demonstration of how it helped to explore certain implications of social design in the Cambodian context.

### 8.1.1. A reflection upon the socio-material assemblage of the SDTWs

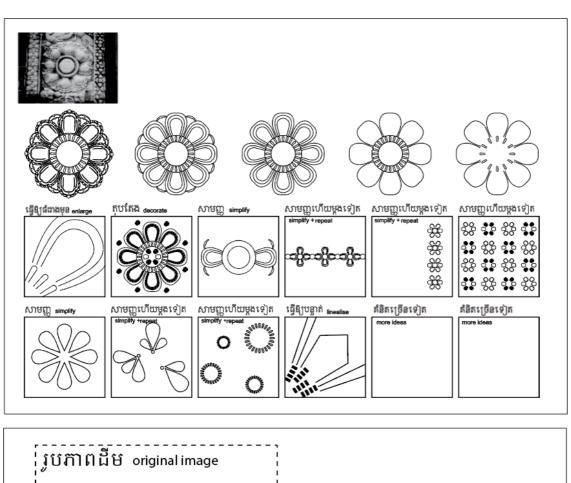
To the designer of things or the sociologist of the social, this research may seem to be an amateur design practice that produced some clumsy drawings. However, if we put the Latourian lens on, things can appear differently. What seems irrelevant on the surface can be interrelated underneath, subtly yet densely so that only the designer of Things or social designers would be able to recognise them. An immense number of actors seem to have been interconnected beneath the SDTWs. The social is never in a static or predefined form; it is more like a morphing net consisting of mutually affecting actors. Therefore, researchers are required to follow the interactions between heterogeneous actors carefully, and to uncover collaborative ways to improve the problematic situation (Latour 1996; 2005; Blok and Jensen 2011).

The SDTWs aimed to introduce design and branding techniques to the local stakeholders through a participatory process. They also attempted to build the participants' creative capability and uncover the distinctiveness of this community. Ultimately, they sought to contribute to an increase economic independence for the local potters. The SDTWs were conducted over a twenty-month period; therefore, they entailed a number of heterogeneous actors in various places, stages and forms. Objects, along with the human stakeholders, were regarded as important actors that acted and interacted within a consistently transforming network. Below, I briefly sketch examples of acts that helped form the SDTWs to illustrate how each of them influenced and interacted with the others, and to also show how the SDTWs were conducted and developed:

• The KCHH studio-workshop, a physical venue for the SDTWs, was located in a spacious field in Andong Russey in Kampong Chhnang, Cambodia. The three-hours-travel-distance from Phnom Penh made me feel conceptually detached from my a priori experiences and

enabled me to immerse myself into the ambience of the community and to accept whatever arose during the process of the SDTWs.

- Ceramic, as a key working material of the Khmer potters, presented a certain unpredictability due to its fragile nature. The kiln in the KCHH workshop seemed like a grumpy, random box because breakages, cracks, a melting of the glaze, unexpected colours and bumpy surfaces could happen at any time. The atmosphere of the KCHH used to vary, largely depending on the success or failure of each fired batch, and this might have affected the participants during each SDTW session.
- New means of research, such as magazines, laptops, tablets, googling and disposable cameras, helped the participants become connected to the market outside their community, where they were implicitly in competition with other ceramic producers. To add value to their products and attract customers, they came to produce novel ideas for design and trade.
- The participants' children played a role since they became a distraction (by playing and shouting) and later an inspiration (by playing with clay next to their parents).
- The worksheets were designed for the SDTW's Create phase, Sessions 5 and 6 (see Figures 71 and 72) for the participants to explore their innate creativity and rethink their relationship with their work. Considerable effort was invested into not overwhelming the participants and to leaving ample room for experimentation at the same time, by providing a set of instruction sheets that asked them to modify original images in certain ways (see Figure 71). A set of blank boxes on the page offered a sense of affordance (Gibson 1986; Yaneva 2009) by nudging the participants to fill these in with designs distinguished from suggested examples on the page. These worksheets, as key actors, not only managed to equip the participants with basic design-related terms and techniques, but also connected the participants to the economy outside the community by introducing other competitors and design trends.



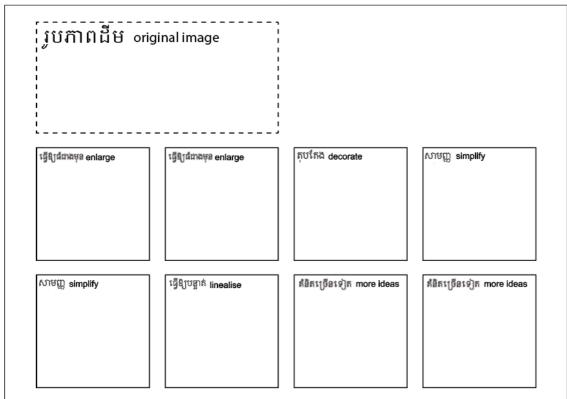


Figure 71. Worksheets from the SDTW Session 5. Design Exploration (1)

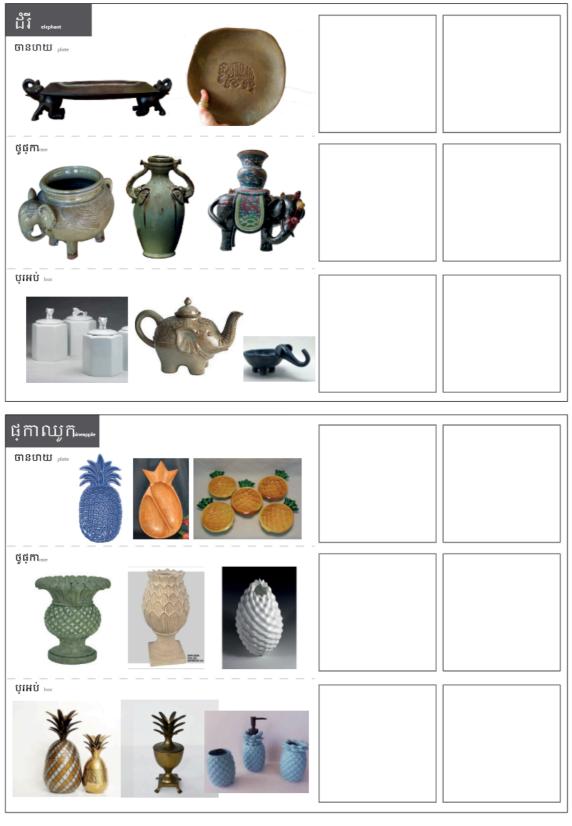


Figure 72. Worksheets from the SDTW Session 6. Design Exploration (2)

To sum up, the SDTWs and the worksheets intended to work against a system of technographcy, which emphasises the rationality and top-down style of training that previously dominated the pottery community in Kampong Chhnang. I acknowledged the importance of technical skills; nonetheless, without creative knowledge the local potters would remain as mere technicians and be excluded from the decision-making processes. At the same time, their indigenous culture had to be appreciated and cultivated, instead of being perceived as a hindrance to the modern ceramic production. By exploring ideas for ceramic design throughout the SDTWs, the participants were encouraged to realise that their originality and abilities were equal to (or even better than) their former *foreign teachers* they used to rely on.

I, as a researcher-practitioner-designer, have been engaged with the SDTWs possibly from the time I enrolled onto the PhD research programme to study design for social innovation in 2011. It may be even earlier than that, illustrated by the time I was struck by the 'First Things First', a manifesto published by Ken Garland and his colleagues in 1964 (Design History 2016), in an undergraduate lecture at the University of Brighton. A series of thoughts, emotions, interactions, events and experiences have formed who I am and led me to plan and conduct the SDTWs in the way in which they occurred. In the same way that it is difficult to pin down the exact beginning of the SDTWs, it is hard to point to the date of its conceptual completion because the SDTWs have since been scrutinised and reflected upon, and further evolved into various others forms, namely a research blog, my thesis, a journal article and a conference presentation. The experience with the local Khmer potters affected the way I taught at Hanyang University and Konkuk University in Korea afterwards. My evolved self gained an altered perspective when reflecting on and writing about the fieldwork. Such an iterative, interrelating and developing process helped the actors of the SDTWs remain in a constant reconfiguration even after the official completion of the workshops in March 2015. In this sense, this section might be understood as another form of experimentation of investigating, tracing and reconfiguring the actors through the eyes of my evolved self. The notion of socio-material assemblage helps to understand the ways in which the SDTWs were conceived, planned, conducted and reflected on as an approach to social design in the Cambodian context.

### 8.1.2. The old kilns versus the KCHH kiln, or 'things' versus 'Things'

For this social design thinking approach, I propose a turn to the socio-material assemblage from designing 'things (objects)' to 'Things (socio-material assemblies)', as suggested by Björgvinsson et al. (2012b). According to these authors, the etymology of 'things' can be found in the pre-Christian Nordic and Germanic communities, which originally meant assemblies or places in which people discussed their views on controversial issues (2012b: 102). This original meaning, however, did not survive and 'things' came to connote material objects (Björgvinsson et al. 2012b; Ehn, Nilsson and Topgaard 2014). The scholars of the Scandinavian school of participatory design insist that designers should bring back the original role of 'things', which would help to acknowledge and rearrange the relationships between heterogeneous actors and stakeholders around social issues. Simply put, it is necessary to move away from designing individual objects (things) to designing conditions and relationships (Things), as a way of 'modifying the space of interactions and performance and that may be explored as socio-material frames for controversies, opening up new ways of thinking and behaving, being ready for unexpected use' (Björgvinsson et al. 2012b: 102).



Figure 73. The old kiln donated by an NGO



Figure 74. The kiln in the KCHH

If we treat objects as mere things, we may lose an understanding of the network underneath the social issue. For example, the difference between the old kilns (given by the NGOs) and the one located in the KCHH workshop cannot be simply explained from a perspective of technicality. The former became troubling (see Figure 73) while the latter became an object of desire for the Khmer potters in question (see Figure 74). Ostensibly, the former was only capable of firing up to 800°C, while the latter reached 1250°C, allowing the items to be glazed for resistance, and thus adding value to their products (H. Ake, interview, 13 February 2014; S. Yung, interview, 24 October 2014). Nonetheless, I argue that the fundamental difference in my approach is derived from the kiln's ability to act as a mediator. The given kilns failed to do so because these were part of a top-down, technicality-focused project. The previous NGOs appeared to lack an understanding about the relationships between the stakeholders in the pottery community, their thoughts and attitudes towards the work, and also about the kiln's use after their departure. As a consequence, the kilns were monopolised and abandoned when broken.

On the other hand, the kiln in the KCHH has been continuously used and nurtured through an interaction between a number of actors: the ten Khmer potters, Japanese management team of the KCHH/CTPP, clients in Phnom Penh, foreign visitors and the SDTWs. For example, Ake's narrative describes the ways in which the KCHH has been treated as an ongoing, long-term training project with a focus on establishing glazing and firing techniques with a high-temperature kiln:

"The Japanese potters and I think it [the period of six years] is still very short time. Developing of pottery production takes a long process. Even in Japan. 20-40 years. Me and my colleagues often discuss about it, that we have very short time, but we have to try our best. [...] Village potters [of Kampong Chhnang] have lot of experience. [...] But we try to glaze pottery, and they don't have enough experience in that." (H. Ake, interview, 13 February 2014)

While the given kilns were treated as mere objects or things (by the NGOs without considering the power dynamics within the community), the KCHH kiln, as a Thing, had been part of an alternative way of mediating the various, surrounding actors. Through this example, I propose to move from a conventional rational problem-solving formula of designing objects to a new approach to social design. This novel way focuses on designing Things by understanding and reconfiguring the relationships within a specific situation to ensure a lasting impact and ongoing development.

# 8.2. Knowledge generation as a social act

Considering the notion of socio-material assemblage and its functioning within social design practices, I now outline why social design can be useful particularly in a developing context. I argue for an approach to social design that can unlock and elicit the tacit knowledge of the local population. By exploring the ways in which the indigenous culture and their accumulated skills can be incorporated into the development of handcraft pottery production, the SDTWs sought to establish a competitiveness and distinctiveness to the products, which would ultimately add value and help the participants achieve an increased economic independence.

### 8.2.1. Why social design in developing countries?

Social design approaches can be useful for development for three reasons. Existing methods, often involving one-off technical remedies, have been unable to improve the problematic situation in a development setting (Grramajo 2014; Johnson 2011) (see Chapter 2). The concept of social design can be useful here because it seeks to unfold the problem by recognising and rearranging the entangled relationships between human and non-human actors around a given situation. In second place, considering that a number of interventions have accompanied top-down training and in-kind donations, it raised the issue of continuity and local empowerment. Any initiative cannot remain in the hands of outside designers because it is likely that the outcomes and group spirit would disappear soon after the so-called experts have left the community. It presents an opportunity for social design to rearrange the socialities between actors for local empowerment and ongoing progress by focusing on designing Things rather than things. Finally, working in developing countries means that researchers and practitioner would inevitably face the challenge of language and/or cultural differences. The device-centred approach to social design can provide an inventive methodology for understanding and communicating with the local stakeholders, adopting local wisdom and generating knowledge grounded in empirical evidence (see Table 2).

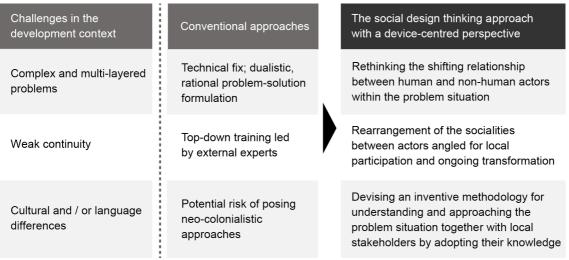


Table 2. Conventional approaches versus the social design thinking approach in a development context

I argue for an approach to social design that provides useful insights and methodologies with which to improve on any particular social issue existing within a developing country. In this approach, researcher-designers are asked to empower the participants from the very

beginning with a focus on finding and reflecting on their indigenous knowledge and cultural values throughout the design process. It should be stressed that the participants work according to their own needs and wants, and that the initiative belongs to them, not to the outside experts. At the same time, the researcher-designer should stimulate the associated actors, participants, devices, methods and objects, to form a new kind of constructive relationships as the practice progresses to achieve a continuing development.

### 8.2.2. Unlocking tacit knowledge

Understanding that social design practices can be useful particularly in a development context leads to the following questions: what forms of knowledge can be produced as a means of improving the status quo? In what ways can the participants contribute to the improvement of their own situation? How can the participants become spontaneous and responsible for their pottery production, overcoming the dependency and dualism that used to limit their role to mere technicians? My argument is that the novel approach to social design argued for in this thesis can work as a key to unlocking and stimulating the participants' tacit knowledge, which is essential not only in terms of developing new design ideas, but also in encouraging the culture of innovation within the community.

The notion of tacit knowledge may be best explained by Michael Polanyi's in that 'we can know more than we can tell' (2009: 4). The examples of tacit knowledge range from riding a bicycle or playing musical instruments to breadmaking and playing chess, and which are obtained through cumulated skills and experiences, rather than a scientific or 'explicit knowledge' (Polanyi 2009; Wood, Rust and Horne 2009; Collins 2010: 57; Mareis 2012). For instance, it would be tricky to teach someone how to swim through verbal or written guidelines as one can only acquire the ability to swim through intuitive engagement with practices and personal experiences. Craftsmanship provides another example because craftspeople usually find it difficult to explicate their knowledge, which is 'often only known through their undertaking those actions' (Wood et al. 2009: 66). To put this differently, craft knowledge is more likely to be expressed and transferred through practices and demonstrations, rather than through verbal articulation (Mareis 2012).

The significance of tacit knowledge is that it helps us carve out our practices and research through the 'expert eye' that consists of expertise and connoisseurship (Neuweg and Fothe

2011: 345). According to Mareis (2012), an expert with tacit knowledge can distinguish diminutive details and nuanced impressions that are not visible to an amateur, but which are essential to achieve the highest quality of the practice.

In this research, the SDTWs proved to be useful in terms of unveiling, exploring and expressing the tacit knowledge of local potters. Firstly, the Understand phase of the SDTWs helped me frame the situation and detect what tacit knowledge was out there, and also enabled the participants to become aware of their potential capabilities. For example, in the early phase of my observation, it was found that the participants perceived their abilities as merely limited to the technical aspects of pottery production. In order to enhance their capabilities and confidence to run the KCHH by themselves, the early phase of the SDTWs aimed to discern their tacit knowledge of the local realities and creative thinking through interviews, observation and visual ethnographic methods. Such an approach came from the pedagogical realisation that the participants were the most informed about their own production and culture, and that the designer's role was to facilitate the process to help them to realise and unlock this implicit knowledge (Freire 2018; Filho 2013). To put this simply, the SDTWs helped the participants become aware that they already possessed a tacit knowledge of Khmer culture, a certain creativity, ideas for display, client communication and sales, and so they were ready to act as the main agents of the ceramic production.

Secondly, the SDTWs underlined the importance of communication between the designer-researcher and the participants throughout the process to elicit their tacit knowledge without a cacophony or inertness. The earlier intervention made through the Kampong Chhnang Design Competition appeared to have ignored the significance of the tacit knowledge belonging to the potters. Instead of treating the potters as holistic artisans who possessed a knowledge for creative designs and Khmer cultural distinctiveness, the previous interventions delegated the creative part to the art students from outside the community, thus dividing the role between designers (or students) and technicians (or potters in Kampong Chhnang). It was found throughout the SDTWs that some of the participants had perceived that the competition did not make much sense because the students created design ideas that were not physically possible to make:

"We could not understand what the designers (the students from Phnom Penh) were saying. They did not understand the production process, and they sometimes asked us to make impossible designs." (N. Oeur, interview, 2 March 2015)

While design students did not understand why a teapot should be shaped in certain ways and why their sketches could not be materialised, the participants instantly knew that the sketches depicted imaginary objects; however, the potters found it hard to verbally explain why it was impossible to shape those ideas. It is not difficult to imagine that there must have been a certain degree of tension between the two parties throughout the prototyping process. To avoid such a situation, the SDTWs focused on continually communicating that the participants' tacit knowledge was valued and sought for, and that they were encouraged to express it without any worries or diffidence.

Thirdly, the SDTWs provided a methodological approach for the participants to explore and express their tacit knowledge through non-verbal means, such as sketches and three-dimensional prototypes. For example, the worksheets were designed to help the participants explore their implicit knowledge through a learning-by-doing process. This approach can work effectively for a researcher who has certain difficulties with the language and cultural differences, or for participants who lack a formal education. Moreover, this can be beneficial for the participants for their own sake, as Filho explains below:

The designer's role is to transfer to the craftspeople the sufficient methodological basis for them to solve their own problems of product development... they [the craftspeople] cease to be "objects" of intervention (whether from designers, brokers, dealers, or others) and can begin to act directly on their own work, not only operating in material resources, but also producing designs of their own solutions. That is, they learn to design... This change... is ideological and pedagogical because it transfers to the craftsperson (or group of craftspeople) the authority over design and development of their own work. (Filho 2013: 68-69)

It is interesting to note that the inarticulability of tacit knowledge has paradoxically led a number of researchers to focus on the concept when exploring the conceptual and methodological enquiry of design research (Cross 1982; Yair, Press and Tomes 2001; Wood et al. 2009; Mareis 2012; Filho 2013; Dalsgaard 2014). Perhaps the designer's ability of dealing with tacit knowledge – by detecting and eliciting implicit knowledge and by communicating with the people to express their internalised skills – is becoming increasingly important in the context in which formal knowledge solely cannot provide a holistic understanding of indeterminate situations (Dalsgaard 2014). Understanding that

craft is to be treated 'as a synthesis of cognitive style, skills, knowledge and experience... [rather than mere] technical skill and stylistic awareness' (Yair et al. 2001: 377), the methodology and process of eliciting tacit knowledge should come through a collaborative, learning-by-doing approach and a respect of the local culture, not from a top-down interventionist perspective (Filho 2013).

### 8.3. Social design as a holistic programme

Having argued for the need to critically look at interventions in a developing context, I proposed to problematise the situation from an unconventional perspective, that is through a socio-material assemblage (see Chapter 8.1). By acknowledging the tangled relationships between human and non-human actors, this view revealed that the donated kilns and previous NGO activities to be rather troubling. Instead of remaining dependent on technicality and external support, I attempted to build a platform for knowledge generation through the SDTWs (see Chapter 8.2) so that the participants could equip themselves to be competitors in the market. As a consequence, in this section, I argue for an approach to social design as an iterative, evolving programme, not as a one-off project.

### 8.3.1. Designing conditions for new socialities

The title of this section was borrowed from Emilson (2014) in which he describes the term condition as 'the creation of constellations of actors who take part in a mutual learning process guided by designers using tools such as workshops, scenarios, and prototypes' (2014: 20). The concept of *infrastructuring* can be useful in this approach to social design since it connotes the idea of building 'long-term relationships and the matching of actors with complementary resources' (Emilson 2014: 20). In this study, I propose a social design thinking approach<sup>21</sup> that can help the local stakeholders to fundamentally change the way they treat their work and culture. The experience and reflection on eleven SDTW sessions, and feedback from the participants contributed to establishing the social design thinking

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<sup>&</sup>lt;sup>21</sup> I call my approach to social design in this thesis 'social design thinking' to respect the existing ideas and discussions on design thinking in the literature, and to combine it with the notion of the social as explained in Chapter 8.1.

approach throughout this thesis. This approach, adhering to a 'device-centred perspective' (Marres 2012: 23), can enable us to view the world from an unconventional perspective, leading us to act, interact and transform the way we are engaged with the society. Instead of following the footsteps of previous NGO interventions, the field study began with the premise that the local potters would need to expand their needs and wants beyond acquiring technical and external support. Despite the modernisation of ceramic production through the donated kilns and technical training provided by the NGOs, the move to a technocratic system appeared to pose the danger of limiting the potters' role to a mere technician. This move meant that the local stakeholders would keep looking for external support, financial aids, in-kind donations and foreign teachers to support their production and trade.

In order to experiment with a social design thinking approach in terms of reconfiguring the relationships within the pottery community, I focused on designing and facilitating the SDTWs in two respects. In the first place, to support the participants during the takeover of the KCHH from the Japanese management team (see Chapters 1.2 and 4.4.2), the SDTWs explored how the participants were able to familiarise themselves with the creative design thinking process and expand their knowledge in trade and branding. As a result, they were prepared to run the KCHH without external help. Secondly, and more importantly, the SDTWs sought to stimulate motivation and a sense of initiative among the participants, emphasising that it was them who should identify the problematic situation, rather than waiting for an external opinion. Thus, I carried out the process of problematisation with the participants from the very beginning of the workshops (see Chapter 6.2.2) in order to encourage the participants to identify their own problems and challenges. This not only helped the participants to realise their how their situation was problematic, but it also formed a strong trust between us that enriched active participation and favourable attitudes throughout the SDTWs. This, as a consequence, created new socio-material relationships between the participants, objects and infrastructure, and it also affected the way they viewed creativity and technicality.

The following sections illustrate the process of reconfiguring the relationships within the community throughout the SDTWs, based on four key anecdotal moments.

#### Self-realisation

In the beginning of the field study, it was revealed that the participants viewed themselves as mere technicians, and that they wanted to be taught by designers and teachers from abroad. In order to challenge this conventional and passive thinking, it was important to start by designing conditions for the Khmer potters to realise their potential and abilities beyond their technical skills. The SDTWs focused on allowing the participants to experience a range of different expertise (research, design, branding, communication, sales and customer service) and to continually interact with each other through a series of discussions and collaborations. In the post-workshop interviews, it was discovered that the participants took the SDTWs as a starting point to plan their career (P. Lun, interview, 2 March 2015; Y. Douen, interview, 2 December 2015). They began to see themselves as designers, entrepreneurs and cultural transmitters. Some of them shared a blueprint to run a family business in the near future, with the new roles they acquired through the SDTWs (such as wife as a designer and husband as a technician and entrepreneur).

### Capability building

As the participants gradually changed the way they saw themselves and engaged with their work, the industry and the market, the SDTWs enabled them to build their capability and confidence. During this process, a 'device-centred perspective' (Marres 2012: 23) played an important role in its invention of an innovative methodology to devise visual cues, which could be used throughout the workshops. By visually materialising the working process and outcomes of their participation, creative activities and knowledge development, the participants were able to track their own learning process and personal development. For the researcher-designer, it proved to be useful in attracting the participants in a narrative manner despite the cultural and linguistic differences (see Chapter 7.3).

#### Communication

During the SDTWs, the communication between the Japanese management team and the participants gradually changed. While previous donor-recipient relationships were aligned in a strict top-down and a one-way direction, the collaborative process of the SDTWs seemed to have established a ground for open discussion. The management staff began to listen to the participants and reflect on their opinions that repetitively appeared throughout the workshops (including the installation of electricity, and shop display with locally-

sourced materials). Both parties understood the SDTWs as an opportunity for mutual understanding, democratic communication and behavioural changes.

### The creation of new relationships

In a post-workshop interview, Lun (a male of 28 years and with 5 years of experience) told me that this was the first time he experienced 'women's work', which was to shape and decorate ceramics, since he started work as a potter five years ago:

"There always has been a strict gender role in pottery production in our village. But, I do not care whether it is a women's job or not. I realised that I am very interested in, and quite good at shaping and decorating. I would like to keep working on it." (P. Lun, interview, 2 March 2015)

Moreover, as a newlywed groom, Lun said that the earlier part of the SDTWs' search for aspiration and the challenges enabled him to rigorously think about his future. Another participant, Oun (a thirty-three-year-old potter with five years' experience), told me that he became confident and ambitious with his job through the SDTWs:

"Working at a pottery in Kampong Chhnang, I make a tenth of what I used to make in my previous factory job overseas. It is true that more and more young Khmers hope to work in urban factories and work abroad to make a fortune. But, I prefer to work here to be surrounded by my family and friends ... These workshop sessions opened my eyes in that I could try a range of different things that I have never experienced before. Study never ends. I want to make sure that ten of us continue working together as a unit for a long time." (S. Oun, interview, 2 March 2015)

These testimonials suggest that the participants began to perceive themselves as knowledge generators, similar to their former teachers and NGO staff, rearranging themselves in the network consisting in the work, objects, family, community and their lives in their entirety. This new relationship was expected to affect and contribute to the improvement of ceramic production and trade in the future. The shift in attitudes, emotions and socialities through the SDTWs can consolidate the continuity of projects in a problematic situation in a development context.

The case of the SDTWs suggests that this social design thinking approach can be useful to improve a problematic situation in other handcraft pottery communities in a developing context. The device-centred perspective (Marres 2012) and the co-evolution of problem and solution spaces (Dorst 2015) with the participants from the beginning helped identify

the underlying challenges, understand the relationships between the actors, objects and context and to reassemble the constellations between those constituents to promote an ongoing development without external help.

### 8.3.2. Situated design methods for ongoing development

The previous section demonstrated the need for understanding socio-material assemblage as part of this approach to social design thinking that consists in the relational constellations between the actors, phenomenon and context. I propose that a social design thinking approach is based on Haraway's notion of *situated knowledge*, which sees knowledge production in relation to specific contextual, social and situational circumstances grounded in the local context (Haraway 1988; Dorst 2015; Simonsen et al. 2014). Understanding that each problem is uniquely situated in its context and surrounding actors, it needs to be carefully investigated and designed to respond to the specific situation and problem.

Such situatedness is seen as an alternative to universality, which might have encouraged and even justified objective decision-making processes and monotonous design solutions, regardless of the peculiarities of each setting. Acknowledging situatedness is particularly important in a developing setting, as explained below:

The [universal] modernization paradigm has been heavily criticized for its ethnocentric view on the world, its lack of attention to local contexts and cultural diversity, and its assumption that [...] are neutral and value free and can therefore easily be transferred to other contexts. These critiques have led to the emergence of the participatory, or multiplicity [situatedness-based] paradigm in which development is conceived as a process of change that should occur from within local contexts, taking into account cultural multiplicity and local needs. (Baelden and Audenhove 2015: 843)

To treat each situation differently means to consider the socio-economic, cultural and geographical specificities, and not to replicate the same approach applied elsewhere (Haraway 1988; Björgvinsson et al. 2012b). Design toolkits, for example, offer a set of universal methods, which might be referenced as a starting point to some extent; nonetheless, it is questionable if they can provide processes and methods that are specific to each situation. A number of design toolkits and guidelines were reviewed during the

preparation of the SDTWs (such as Frog Design 2013; IDEO 2008; NESTA 2014; Service Design Toolkit 2014; D-school 2014); however, the specificity of the problematic situation within the Cambodian pottery community encouraged me to adopt and invent a methodology that would respond to the exact situation. In the case of the SDTWs, visual methods were used extensively, considering the language difference, the need to develop design thinking skills and high quality materials that can stimulate and encourage their participation. Thus, I was also able to make use of my own experience as a graphic branding and service designer by facilitating the participation through a sequential process and designing worksheets to encourage creative ideas and explorations.

The process of planning the SDTWs also appeared important in view of this notion of situatedness. Plans can be regarded as guidelines which 'can be altered in accordance with the situation at hand', instead of being applied as a fixed procedure (Simonsen et al. 2014: 5). In this respect, the SDTWs were partially planned at the beginning since it was impossible to fix the entire plan prior to understanding the participants and the problematic situation. Therefore, the SDTWs started with approximate ideas about the first two or three sessions. Then, they gradually became part of a process that enabled them to be explored further (see Diagram 6). Reflections on the previous sessions helped to plan for the next one, which included being responsive to the participants' development, outcomes and atmosphere. The notion of situatedness enabled the participants' actions and development to be 'shaped moment by moment in response to local contingencies' (Simonsen et al. 2014: 5) as they collectively created a knowledge basis throughout the SDTWs.

Session #1. Introduction	Session #2. Identifying the challenges	Session #3. Identifying the inspirations, identities and worries	Session #4. Creating a visual reference	Session #5. Design exploration (1): Modifying graphic motifs and patterns	Session #6. Design exploration (2): Creating forms and shapes	Session #7. Three- dimensional prototyping	Session #8. Understanding the customers and the market	Session #9. Storytelling, packaging and displaying	Session #10. Reflection and discussions	Session #11. Evaluation interview
Discover the needs & wants of the participants.	Create mood boards to find out the challenges.	Visual expression through drawings and photographs; in-depth interview.	Visual research; create an 'idea book' as a visual reference.	Explore and motify design elements (focused on motifs and patterns).	outcomes from the	Create prototypes with clay.	Analyse the sales note, visitors, customers and competitors; think about strategies for customer service.	materials based on the participants'	Discuss, reflect and evaluate the SDTWs	In-depth interviews to learn about the participants' personal develop- ment and emotions after the sessions.
24 Nov 2014	1 Dec 2014	22 Dec 2014	29 Dec 2014	12 Jan 2015	19 Jan 2015	20 Jan 2015	9 Feb 2015	16 Feb 2015	23 Feb 2015	2 Mar 2015
1 week	3 weeks	1 week	2 weeks	1 week	1 day	2 weeks	1 week	1 week	1 week	1 week
The periods of reflection after each workshop session										

Part 1. Understand

- Get to know the participants.
- Understand their aspirations and challenges.
- Build trust.

### Part 2. Create

- Practise how to research materials online and offline.
- Explore ceramic design ideas based on previous research.
- Create three-dimensional prototypes with clay.

Diagram 6. The gradual process of building reflexive work plans for the SDTWs.

### Part 3. Expand

Expand the knowledge beyond the production: understand trends, end-users, the market, branding, packaging, display and communication.

Part 4. Reflect

Reflect, discuss and evaluate the SDTWs.

### 8.4. Social designers as a catalyst

The SDTWs were intended to act as a device that opened up the space for reconfiguration of the socio-material assemblage within the research setting. By seeking the 'socio-ontological change' (Marres 2012: 89) of the problematic situation of the KCHH, this social design thinking approach helped the researcher-designer to facilitate the participation as a mediator between heterogeneous actors and their interests (Manzini 2015). In other words, this approach to social design allows the researcher-designer to acknowledge and rearrange the entangled network 'to trigger the social conversation' (Manzini 2015: 49), that would lead to an unfolding of the problem.

The notion of situatedness in this approach to social design informs that the problematic situation needs to be reconstructed instead of being given (Dorst 2015). Therefore, the researcher-designer's ontological and epistemological approach to the practice becomes important. His/her own experience, reflection and dialogue with the socio-material assemblage within problematic situation become embedded in the process of conceiving, planning and devising a methodology and conducting the practice.

Researchers and practitioners working in the development context can often face unpredicted challenges that arise from the different social, cultural, religious and educational backgrounds (Hussain et al. 2012). Nevertheless, it does not mean that such issues can justify a top-down form of training and a hierarchical knowledge transfer. Instead, I argue for an approach through which researchers and practitioners can catalyse the relationships within the problematic situation by eliciting local tacit knowledge and encouraging participation without imposing authoritarian power. Such an approach should be built on a respectful understanding of the local community and a mutual trust between the researcher-designer and participants. In this social design thinking approach, the researcher-practitioner is expected to support the participants to examine their situation, identify their own problems and find ways for improvement. S/he should act as a catalyst, who connects, stimulates, changes and rearranges the social relationships between actors within the situation.

In the process of exploring and facilitating the socio-material relations, I suggest that the researcher-practitioner avoid a priori thinking that might deter her/him from perceiving the social happening as it is. Such an agnostic approach can provide inventive and useful answers to some of those multi-layered problems that could not be solved by conventional scientific, rational approaches. For example, Storni (2015) argues for the significance of an epistemological turn to agnosticism, in his field study with type 1 Diabetes patients. The patients and their families took an active role in the research by recording and tracking their everyday conditions. This, not surprisingly, was seen as rather worrying and distracting by specialist endocrinologists and other scientific experts because they felt it might give rise to 'potential data fabrication, the establishment of false beliefs and the lack of time to discuss non-medical aspects during consultations' (Storni 2015: 176). However, the author notes that the patients became more engaged with their treatment and recovery through a monitoring of their own conditions, becoming able to 'compromise between the doctors' order and their mundane concerns' (2015: 176). It is worthwhile to note that in this process, the researcher-designer had to 'resist the temptation of uncritically adopting a normative framework when deciding what to add and what to replace and, instead, carefully attending to other perspectives and forms of knowledge' (Storni 2015: 176) by appreciating the indigenous knowledge and tacit skills of the participants.

Below, I propose three roles for the researcher-practitioners in a development context in light of the social design thinking approach, as tested and proved throughout the SDTWs. This approach to social design invites the researcher-practitioner to act as a facilitator, an educator and an imaginative storyteller.

#### Social designer as a facilitator

Instead of being an administrator or a 'post-it designer' who fails to contribute in any substantial way other than through a series of endless mind maps and brainstorms (Manzini 2015: 66), I argue that the social designer should be able to empower the local stakeholders and facilitate organic participation. S/he is also expected to elicit tangible and fruitful outcomes from the participants, instead of producing endless bundles of post-it scribbles or mind maps. These outcomes can be valuable not only as the result of research/practice, but also as a means of stimulating the participation throughout the practice. As explained before, the stakeholders become more interested in and engaged with their participation

through the tangible outcomes. During this process, the social designer can offer his/her design expertise that can help the outcomes to become attractive. For example, a set of visual approaches were explored during the SDTWs based on my previous experience as a graphic branding and service designer (see Table 3). These helped the researcher to overcome language and cultural differences, to encourage the participants to bring out their tacit knowledge and to stimulate participation by materialising outcomes. Ultimately, such an approach helped to instigate the participants' confidence, interest and motivation throughout their participation (see Figure 75).

Phase 1. UNDERSTAND	Phase 2. CREATE	Phase 3. EXPAND	Phase 4. EVALUATE
<ul> <li>Image cards</li> <li>Moodboards</li> <li>Ideas on post-its</li> <li>Photography with disposable cameras</li> <li>Drawing</li> </ul>	<ul><li>- A scrapbook</li><li>- Design sketches on the worksheets</li><li>- 3D Prototypes</li></ul>	<ul><li>- Photograph analysis</li><li>- Ideas on post-its</li><li>- An eco bag</li><li>- Mini leaflet</li></ul>	- Workshop summary cards to evaluate & rearrange the sequence

Table 3. The list of visual approaches used throughout the SDTWs



Figure 75. The participants, translators and the researcher at the SDTW Session 10 (photo: Hiroshi Ake)

It was also discovered that social designers are expected to complete multiple tasks in support of participation. For example, I have depicted my experience of doing primary research for the participants who were not able to travel outside Kampong Chhnang (see Chapter 7.4.2). This included visiting a number of places and taking photographs so that the participants were able to analyse the collected images and discuss their findings. Put another way, I, as a social designer, became a mediating device through which they were able to view the world outside their community.

On other occasions, social designers may need to catalyse the relationship within the research situation. Throughout the SDTWs, I came to act as a nursery teacher by taking care of the participants' children and helping the participants to concentrate on their practices (see Chapters 7.1 and 7.4.2). Engaging with the participants' children not only facilitated the smooth process of the SDTWs and the development of trusting relationships, but also it ultimately contributed to a rearrangement of the socio-material assemblage between the SDTWs (see Chapter 8.1.1). As such, the role of social designer as a facilitator is to be considered in terms of assisting the practical progress, and stimulating and reconfiguring the relationships between the constituents in the practice.

### Social designer as an educator

It was revealed through the preliminary observations during my fieldwork that previous interventions by NGOs appeared to cause a sense of dependency and cultural imperialism within the Cambodian pottery community. Previous interventions tended to provide top-down trainings with an emphasis on the technicality of ceramic production. Not surprisingly, some of the participants of the SDTWs regarded themselves as mere technicians who consistently needed 'teachers' from abroad. However, following a social design approach, Manzini warns that designers should avoid becoming 'big-ego' designers:

Big-ego design is left over from the last century's demiurgic vision, in which design was the act of particularly gifted individuals capable of imprinting their personal stamp on artefacts and environments. Even though this may still mean something in some very specific design fields, this way of thinking and doing becomes highly dangerous when applied to complex social problems. (Manzini 2015: 66)

Instead, I suggest social designers can balance the two ends of the spectrum. On one hand, s/he can help the local stakeholders become familiar with design techniques and modern knowledge in sales and branding. Hence, the participants become connected to the economy outside the community. It is important that the social designer does not overwhelm the people with the use of jargon. S/he should be able to design an approach that can be easily understood and used by the locals, as tested throughout the SDTWs. On the other hand, the designer needs to allow enough room for the participants to explore their own relationships within the practice and draw on their innate knowledge. Through the shift in focus from top-down training to empowerment and organic participation, I argue for an approach to social design that can open an agonistic space and nurture ongoing progress even without the designer's presence.

### Social designer as an imaginative storyteller

In addition to the ability to facilitate and educate, I propose that a social designer ought to act as an imaginative storyteller. This can be done by collecting and weaving research data, including the participants' thoughts and feelings, relationships between human and non-human actors within the research situation, into a story, instead of being a mere observer-researcher.

Drawing on Schön's (1983) reflective practice and Dewey's (1934) pragmatism, Steen (2013) highlights the concept of imagination. Steen defines the concept in two ways: by seeing it as "empathic projection", or as a way to respond directly and emphatically to others and their feelings and thoughts'; and by 'imagination as a way to escape current patterns and imagine alternatives' (2013: 24). For him, imagination fits in well with design practices that require participation, collaboration and co-creation because it can provide an empathic understanding of the dynamics within the situation. Such a perspective can be useful in this approach to social design as imagination can also help social designers to envision and devise new methodological approaches to improve the status quo.

In other words, the social designer should be fluent in using imagination as 'a capacity to engage the present with an eye to what is not immediately at hand' (Fesmire 2003: 67). In the case of the SDTWs, I designed the plan with the notion of situatedness, and with a set of worksheets to enable the participants to explore ideas for new ceramic designs and also their relationships within the community. Each session was carefully designed and placed

next to each other in consideration of the sequential process of exploring and building collective knowledge. I also focused on eliciting and collecting the participants' thoughts, feelings, drawings and personal narratives to embed them into the eco bags and leaflets. All these approaches became possible through the use of imagination. The planning and running of the KCHHs became part of a continual and ongoing process of imagining: what it would be like; what materials, structure and activities should be prepared; how the participants would react to each session; and how to respond to the development of the KCHH. Imagination also helped me to minimise any time wasting and misuse of resources through a meticulous preparation.

#### Conclusion

This chapter discussed the implications and potentials of a social design thinking approach by analysing the fieldwork conducted in this Cambodian handcraft community. Firstly, the study called attention to a socio-material assemblage that can help researchers and practitioners unfold the problematic situation by focusing on the role of objects. I argued that the donated kilns and previous NGO interventions appeared to be troubling actors that negatively affected the relationships of the local stakeholders within the community by causing growing dependencies. Through the SDTWs, the social design thinking approach was proposed to redirect and rearrange existing relationships between heterogeneous actors within the situation.

Secondly, this study argued for the need to detect, unlock and elicit the participants' tacit knowledge not only as a means of adding value to their products, but also for developing their creative capabilities and stimulating an organic participation through the SDTW's learning-by-doing methodology and process. An emphasis was particularly placed on the significance of communication between the researcher and the participants, and on the need to design non-verbal approaches to educe implicit knowledge that is hard to verbally articulate.

Thirdly, I proposed an approach to social design that is to be practised as an ongoing programme, not as a one-off, quick-fix project. By acknowledging the situatedness of each problematic situation, this approach suggests the opening of an agonistic space where the participants are invited to continually act, interact, implement, reflect, adjust and evolve their practice through an iterative process of organic participation.

Finally, I suggested that social designer can act as a catalyst in this social design thinking approach. S/he is expected to act as a facilitator, educator and imaginative storyteller who can identify and unfold the problematic situation from an unconventional perspective.

Next, I move onto the final concluding chapter to summarise this study and clarify the contribution to knowledge.

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### 9. Conclusion

Throughout the thesis, I have attempted to answer the research questions addressed in the introduction. Primarily, this thesis aimed to uncover the distinctive nature of grassroots social design approaches in a Cambodian handcraft community. Secondly, the goal was to discover the challenges inherent within social design practices in a broader development setting. Finally, through the process of exploration, it intended to outline the designer's roles within this approach to social design within a research setting similar to the one depicted in this study. This final chapter presents the conclusions of the research by giving a brief summary of the study, outlining its contribution to knowledge, the limitations of the study and suggesting ideas for further research in this area.

## 9.1. Summary of the thesis

In this thesis, I proposed an approach to social design as an alternative to the Western-centric design discourse and development setting. By providing the case of a Cambodian handcraft pottery community, this thesis demonstrated the process, methodology, outcomes and analysis of a social design practice in a non-Western developing context, as a means of deploying an organic and ongoing development. The study can be condensed into five key themes: problematisation, the Social Design Thinking Workshops (SDTWs), outcomes of the SDTWs, issues and challenges of social design practices in the development setting, and the research implications.

#### **Problematisation**

Through the preliminary fieldwork based on participant observation and interviews, it was revealed that the earlier interventions and donated kilns were deemed to be *troubling actors* that caused a dependency and an inequality among the local stakeholders within the pottery community, despite the benign intentions of the external experts. Most local potters, including the research participants, were largely drawn to the system of technocracy in ceramic production (such as obtaining a high-temperature kiln). They

appeared to be diffident, dependent and inexperienced in the creative design thinking process. For example, ceramic production has been a repetitive process of copying foreign design styles taught by their former Japanese and German teachers. The study suggested that external aids, top-down training and charity without consideration of their relationality to the contexts and people would merely result in a piecemeal, quick-fix solution.

The Social Design Thinking Workshops (SDTWs) as an inventive approach to social design in a development setting

In order to improve the problematic situation, this study deployed the Social Design Thinking Workshops (SDTWs) in a combined form of action research, participant observation, semi-structrued interviews and visual ethnography. It was so named to appreciate the contemporary studies in design thinking (Kimbell 2011, 2012) while emphasising the notion of the social in terms of: (a) socially responsible activities and; (b) entangled social relationships between actors within the handcraft pottery community in Kampong Chhnang. Drawing on an ontological and epistemological approach to realworld research, this thesis attempted to treat the ten Khmer potters not as research subjects, but as participants who were capable of generating knowledge through their own visual and verbal expression. The participants faced the challenge of being able to be creative, managerial and knowledgeable of ceramic production in the Kampong Chhnang Pottery (KCHH) workshop. Therefore, the SDTWs were conducted through the four phases of *Understand, Create, Expand and Reflect* between November 2014 and March 2015, as a part of a twenty-month period of fieldwork. The SDTWs aimed at the following:

- To problematise the situation with the participants from the early stages to form a sense of empathy and comradeship.
- To challenge the diffidence and dependency prevalent in the community.
- To equip the participants with basic design concepts and techniques to foster their capability for participation and the production of fruitful outcomes.
- To encourage the participants to explore their tacit knowledge and to produce culturally distinctive designs to overcome their tendency to imitate the Japanese and German designs taught by the external experts.
- To connect the indigenous handcraft community and the market outside the community by working with the participants on branding, packaging and knowledge of the shop displays and customer service.

To add value to their ceramic products through original Khmer-inspired designs and branding, as a means of cultural preservation and achieving increased economic independence in the long term.

To facilitate an organic and ongoing platform in which the participants would be able to continue working on without the researcher's presence after the SDTWs.

#### The outcomes of the SDTWs

A number of fruitful outcomes were produced throughout the SDTWs. Firstly, the Create phase of the SDTWs allowed the participants to establish their original capabilities as they produced a set of drawings, photographs and stories that depicted their situation, emotions, and challenges, and also their sketches and prototypes for new ceramic designs. In the follow-up interviews, eight months after the completion of the fieldwork, a number of the new products conceived from the SDTWs were receiving positive responses from their clients and customers.

Secondly, rich outputs throughout the SDTWs led to co-designing processes, resulting in eco-bags and leaflets. These not only acted as a means of branding and promotion of the community, but also as a proof of their participation in a tangible form, which thus stimulated the remaining SDTWs in an encouraging and exciting manner.

Thirdly, reflections from both the researcher and participants provided food for thought. It became apparent that being aware of one's ontological position can be helpful for the researcher, by enabling an open and flexible attitude with which to embrace unexpected situations and socio-cultural differences. It also proved useful in the building of relationships without financial compensation to avoid the potential risk of imposing a sense of superiority or dualism by dividing the researcher and participants into giver and receiver, which could have affected the participant empowerment and desire to collaborate. The participants retrospected that it took a while for them to understand the SDTWs' usefulness and relevance to their artisanal work. However, as they gradually began to develop their understanding and interest in the SDTWs, they started to make conceptual and behavioural changes. For example, one participant responded that the SDTWs' Session 6, which explored their design ideas for ceramics by modifying and sketching three common subjects, an elephant, a pineapple and a lotus flower, 'was the key to open

something in [her] mind' (N. Oeur, interview, 2 March 2015). She also added that the SDTWs in general affected the participants want to 'change themselves from repeating the same work to trying many different ideas' (N. Oeur, interview, 2 March 2015). All in all, the SDTWs focused on establishing an organic and collaborative atmosphere, and rearranging the relationships between the participants, their work, objects and other surrounding actors to invoke a cohesive and continuing development.

The issues and challenges of practising social design approaches in a development setting. The thesis also outlined the issues and challenges of a social design approach in a developing context by drawing on empirical studies and the literature on participatory design in developing countries. The list below may apply to the researchers who attempt to practise social design approaches in a development setting, and to the development practitioners who may find the action research based SDTWs useful in their work:

- First, it is crucial to understand the social customs of the research setting, and to avoid any neo-colonialist attitudes, which may impose ideas alien to the local culture.
- Second, building trusting relationships is important for the researcher, so a substantial amount of time and effort should be invested prior to the research.
- Third, the researcher needs to improvise when encountering unexpected circumstances during the fieldwork.
- Fourth, acknowledging the lack of people's capability to participate is important, thus the researcher may need to invest extra time and effort in preparing the participants and equipping them with the knowledge and ability to take part in the research.
- Finally, the researcher should instil confidence for mutual learning between the
  researcher and the participants in order to aid them in fully exploring and making
  use of their tacit knowledge.

#### The research implications

Based on the fieldwork, I argue for an approach to social design based on three key considerations. Firstly, I propose to pay attention to the notion of socio-material assemblage. This ANT-oriented idea enables the researcher to acknowledge the relationships between heterogeneous actors, be they human or non-human, within the problematic situation. Such a perspective helps the designer to overcome the limitations of a conventional and dualistic problem-solving formulation that divides problem and solution into isolated entities. Instead of perceiving things as given, this approach leads us to continually challenge and raise questions on things that are seemingly obvious, and to rethink and engage with the situation in a different manner. Researchers are encouraged to become 'designer of Things (as part of a collective network)', not 'designer of things (as individual objects)', as suggested by the Scandinavian school of participatory design (Ehn 2008; Björgvinsson et al. 2012a, 2012b). Within this view, the SDTWs were expected to become not only a device that could outwit the unforeseen, problematised factors, but to also be part of a continuing process of unfolding objects and issues as assemblages of change in terms of their makeup and character. The fieldwork started by reconstructing the problematic situation with the participants from the beginning: firstly by recognising that previous NGO interventions and donated kilns were rather troubling; and secondly through the iterative, dialectic process of exploring the spaces between the problem and potential solutions with the participants. It is important that the researcher practises this social design thinking approach specific to the socio-economic, political and cultural circumstances by understanding the situatedness and sensitivities of the context in which s/he works in.

Secondly, I highlight the need to appreciate and elicit the tacit knowledge of the participants throughout the process. Incorporating local tacit knowledge into the social design research and practice is particularly important because it can enhance the cultural characteristics and add value to the products of the local crafts community; more importantly, such an approach encourages the participants to perceive themselves as the main actors, not as mere research subjects. By understanding the difficulty of verbally articulating or transferring tacit knowledge, this research explored the ways in which the participants – who had low levels of formal education, but abundant experience in ceramic production – could become able to express their creative ideas through sketches, photographs, mood boards and three-dimensional prototypes. As a consequence, the

participants came to realise their implicit insights and capabilities, provided their expertise and connoisseurship for improved ceramic designs and changed their attitudes towards their job by perceiving themselves as designers and entrepreneurs instead of mere technicians.

Thirdly, I argue that social design is to be practised as an iterative programme, not as a one-off project, only specific to the contextuality of the problematic situation. This approach proposes an open platform for the participants to iteratively continue the practice through reflection and adaptations to improve the problematic situation. Ultimately, it is expected that the participants and social design practices (the SDTWs in this case) retain the evolutionary process without the researcher's presence, opening an agonistic, participatory space for an ongoing, organic progress. As DiSalvo (2012) noted, agonistic design sees conflicts and dissensus articulated by different stakeholders as constructive in the way that they explore and shape alternatives to the challenges at hand. Within this, the role of the social designer becomes important as s/he needs to act as a facilitator, educator and imaginative storyteller. This aligns with the fundamental philosophy of action research, which was conceived by Lewin (1946) and his colleagues at the National Training Laboratory (NTL) in the US after World War II. The original thinkers of action research proposed an emancipating process 'so that new possibilities and trajectories of collective action [can] emerge' (Glassman, Erdem and Bartholomew 2012: 273).

Ultimately, I argue that these implications for the social design thinking approach in the Cambodian context are interrelated (see Diagram 7). The notion of socio-material assemblage (1): urges the need to consider knowledge generation as a social act, so it becomes necessary to explore and elicit the local tacit knowledge of the community. The socio-material assemblage also provides a ground for continuous exploration and reconfiguration of actors so that social design thinking can be practised as a holistic programme, not as a quick solution. Further to this, the recognition of tacit knowledge generation (2): highlights how the community is implicitly interconnected through a collective knowledge, hence placing itself as part of the socio-material assemblage. It also offers the participants' expertise to achieve a higher state of practice and research, which can help the social design thinking become a more practical and enriched approach. Furthermore, understanding social design as a holistic programme (3): leads to the opening of an agonistic space that is to be explored through the socio-material assemblage of the

situation. This rounded approach to social design thinking would also help the participants to actively and iteratively be engaged in the practice in the long term.

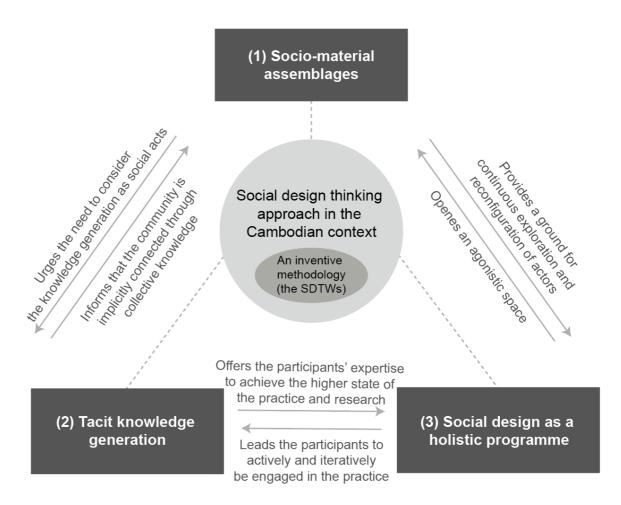


Diagram 7. The interconnectedness of implications for social design thinking approach

### 9.2. Contribution to knowledge

This research, for the first time, explored and tested an approach to social design in the Cambodian context, drawing on the notion of a socio-material assemblage. This enabled the researcher to undertake the process of problematisation through an unconventional perspective to argue that external help and experts might be more troubling when they retain neo-colonialist attitudes. It also bridged the concept of social design and Cambodia as a research setting, hence applying the West-conceived idea to a non-Western context, which had been marginal in the design culture literature.

Diagram 8 visualises the contribution to knowledge in this thesis. Two axes of the quadrant acknowledge that this thesis employed a cross-disciplinary approach, which encompasses multi-disciplinarity, inter-disciplinarity, and trans-disciplinarity (Barry and Born 2013; Julier and Munch forthcoming). Firstly, this study is multidisciplinary in that it accumulates different perspectives from several disciplines to address a specific object, in this case, 'social design'. For example, it included important themes raised by design culture and development studies (see the x-axis in Diagram 8), and addressed both practical and theoretical aspects of social design approaches (see the y-axis in Diagram 8). Important themes raised by academics and practitioners were grouped together and placed where appropriate, such as 'infrastructuring' in quadrant B, and *jugaad* in quadrant C.

Secondly, this thesis is interdisciplinary for aggregating and synthesising disciplinary insights through re-assembling and reconfiguring processes. For instance, those multidisciplinary thoughts, the literature from design culture and development studies, key approaches from sociology and the fieldwork data from Cambodia, were combined and rearranged to form an ongoing and changing relationship by influencing each other. In Diagram 8, the overlaps between different themes indicate the commonalities and mutual interactions between them. As a consequence, those overlapped territories suggest a combination of different themes related to social design approaches. For example, in quadrant A, design culture and the notion of socio-material assemblage provides a foundation for other themes, such as infrastructuring, new design thinking, new social design, design for social innovation and adversarial design. At the same time, all of them appear to be mutually interconnected to some extent.

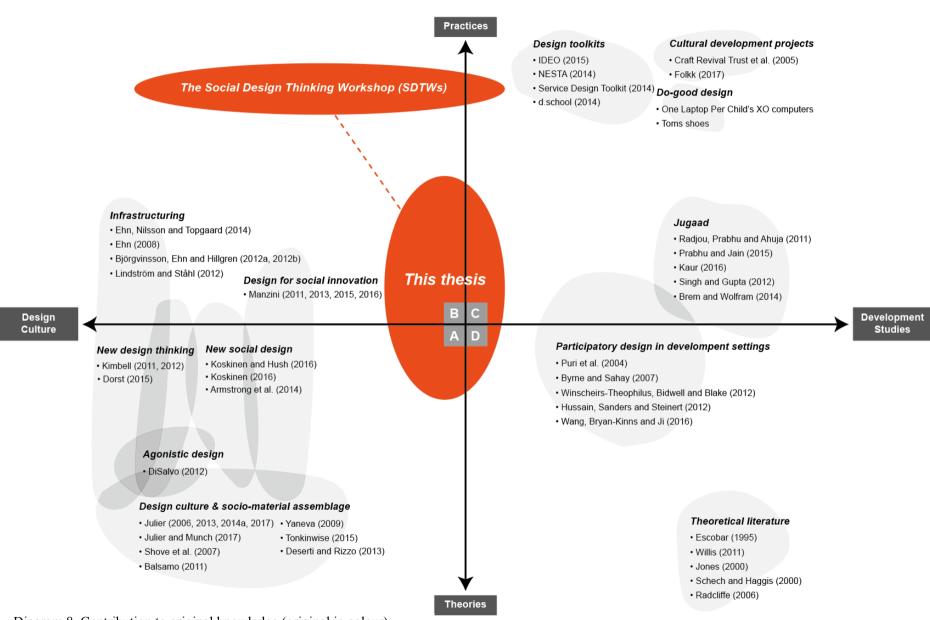


Diagram 8. Contribution to original knowledge (original in colour)

Lastly, this thesis is transdisciplinary for transcending and altering the current system in the provision of a creative approach to social design. The study has continually traversed the path between design culture and development studies, which themselves are already either multidisciplinary, interdisciplinary, transdisciplinary or cross-disciplinary (Julier and Munch forthcoming; Chant and McIlwaine 2009). The quadrant in its static form does not express such a fluid relationship because a graphic diagram often has 'the drawback of not capturing movements' (Latour 2005: 133). Nevertheless, it shows where this thesis and the SDTWs are situated, and approximately to what extent it contributes to each area of quadrant A, B, C, and D. The implications of this diagram can be explained as below:

- Quadrant A (design culture theories): although design culture is in its early phase as an established discipline (Julier 2014a; Julier and Munch forthcoming), scholars have been articulating and building on themes to consolidate the theoretical framework. Yet, their works have been focused on a theoretical account, and existing empirical evidence has been mostly tested in the West.
- Quadrant B (design culture practices): while academics in *infrastructuring, design* for social innovation, new design thinking and new social design provide some meaningful ideas for practice, I assert that more empirical evidence is required in the investigation of social design approaches in the real world.
- Quadrant C (development studies practices): it shows that while there has been a growing interest in do-good designs, much of them lack academic sophistication, which often leads to an increased dependency and cynicism among the locals, as well as the prevalence of cultural imperialism (Nussbaum 2010; Cheryl 2012; Warschauer and Ames, 2010) (see the example of the One Laptop Per Child and Toms shoes case in Chapter 2.1).
- Quadrant D (development studies theories): the literature provided a valuable introduction to development studies, providing useful concepts such as cultural development and the risk of posing neo-colonialist attitudes. Studies in participatory design also offered useful insights particularly in terms of identifying challenges of practising design in a development context. Yet, they were not necessarily linked to the notion of socio-material assemblage, which I find to be key in the social design thinking approach.

Ultimately, this thesis aimed to provide: (a) a theoretical background for social design drawing on *design culture and the notion of socio-material assemblage*, as described in quadrant A; (b) empirical evidence by demonstrating the process of problematising, conducting the action research based SDTWs with the local potters, and analysing the challenges and implications of a social design thinking approach in a development setting, as in quadrant B; (c) a focused analysis on an approach to social design tested in a non-Western context while providing Cambodia as the research setting, which also has been a lesser studied region, as in quadrant C; and (d) designerly insights into development studies which have rarely seen a design scholar's contribution. Consequently, the study offers the SDTWs as an inventive, cross-disciplinary methodology consisting of participant observation, interviews, action research and visual ethnography that can be applied to the fieldwork in settings similar to the Cambodian handcraft pottery community investigated in this study.

It is difficult to affirm what the relationships between the socialities produced and the material practices (as in the SDTWs) are, and whether or not they are equal to each other. Only a long-term follow-up investigation would provide the answer. What can be stated at this moment is that: (a) this research problematised previous NGO interventions, donated kilns and GTZ's design competition as troubling actors (see Chapter 5.3); (b) hence it attempted to rearrange the relationships between those troubling actors, the technocracy then-prevalent in the village, the pottery community, the objects, the participants, the challenges they faced and their feelings (see Chapter 8.1); (c) in this way, I argue for an approach to social design which not only connotes socially-responsible activities, but also the ongoing process of rearranging the relationships between its constituent (see Chapter 8.3).

Nonetheless, the SDTWs appeared to have made some impact on its relationship with other actors within the community. The Facebook page<sup>22</sup> for the KCHH, which used to be managed by Ake (the Japanese coordinator), is now updated by its Khmer members. The participants, who were new to the Internet, computers and mobile devices at the time of the fieldwork, now comment on its 'wall'. Most importantly, the page shows their photographs of the new ceramic products inspired by the SDTWs. I had not seen these previously, but

<sup>&</sup>lt;sup>22</sup> The link can be found here: https://www.facebook.com/kampongchhnangpottery/

they represent outcomes of the SDTWs and the themes employed, that is the elephant, lotus flower and pineapple. This means that not only had the participants kept the spirit of the SDTWs, but they have also been continually implementing, adapting and advancing the social design thinking approach even without my presence. The SDTWs have become an ongoing process and an open platform that is to be iteratively challenged and expanded. It may not possible to assert, with such little evidence, that the SDTWs have superseded the previous socialities mainly led by technocracy and external support. Instead, rather than pushing utopianism, this research proposes a 'molecular and sociological social design' approach, as suggested by Koskinen and Hush (2016), in which designers make small steps of progress, one by one, shored up by sociological theory (that is the sociomaterial assemblage). While Chen et al. (2016: 4) claim that 'current social design practices are limited in scope in terms of their power', implying that most studies have been conducted in small communities, this study attempts to provide a meaningful addition. Although this thesis presents the case of a small community in Cambodia, unlike other 'molecular' studies on social design (Koskinen and Hush 2016), this study enables the transferability of its research process and methodology to other research settings since it provides a detailed illustration and analysis of the fieldwork and research methodology.

In summary, this diagram maps my cross-disciplinary research against its related academic fields, revealing how it is situated between these, but also its bias towards design culture as both a theoretical lens and a practice. I am aware that this involves an element of subjective judgement, but it is useful in appropriating the claims of this thesis to new knowledge and the fields this relates to.

### 9.3. Limitations and suggestions for further research

While this thesis focused on the process of problematisation and provided an exploration of socio-material assemblage through the production of visual outcomes, the territory of social entrepreneurship was left untouched largely due to the constraint of time and funding. This would have led to a dynamic engagement with e-Commerce platforms (Đorđević 2017a, 2017b), or an investigation into organisational change (Deserti and Rizzo 2014). However, the fact that the KCHH workshop had been initiated, financially

supported and managed by a Japanese team also affected the decision not to extend the scope of research into business. Although the team had been favourable throughout the research, I was not able to access financial data, thus it was impossible to evaluate the effect of the SDTWs through a quantitative measurement. Hence, the result of the fieldwork had been analysed through a set of qualitative approaches by thoroughly illustrating each outcome through photographs, images, interview transcriptions, anecdotal moments and personal reflections. While this thesis was able to provide a short-term and mid-term evaluation through a series of interviews and group discussions, limited time and access to data made it difficult to measure its long-term effect.

It should be noted that this thesis provides the case of an approach to social design thinking that was tested on a group of potters with advanced skills and modern technical knowledge. The participants had been belonged to the KCHH workshop and had been trained by Japanese potters for four years. The SDTWs had been planned and proceeded with a premise that the participants would be able to reproduce their design sketches into three-dimensional forms without much difficulty. The structure and details would need to be adjusted if the SDTWs are to be practised with novice workers or artisans without modern skills (including glazing and firing knowledge for electronic kilns).

In addition, this thesis did not include any partnerships with local councils as the study was focused on investigating a grassroots approach. However, future research will need to seek ways in which to collaborate with local authorities for legitimacy, implementation and a lasting impact of the practice.

There seem to be three opportunities for further research. Firstly, it should be noted that practising social design approaches in developing countries may be theorised and applied differently to those in developed countries. It is necessary to investigate and test out social design approaches in a development context in a number of different ways to compare the process and outcomes to those in a developed setting, and to establish an appropriate and workable framework to apply to a development setting. The variations may be in several different ways: it can provide more pragmatic results if conducted over a longer term, as desired by the KCHH participants; alternatively, if a team of designers from diverse backgrounds could proceed with the research as a team, contributing multifaceted knowledge and skills, such as product design, textile design, furniture design and graphic

design.

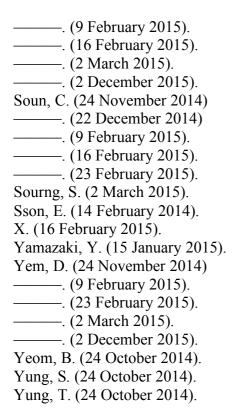
Secondly, as noted earlier, while the subject of social entrepreneurship and business was not covered in this thesis, further studies will need to investigate the ways social design can contribute to the economic growth of handcraft communities in developing countries. It would be helpful to experiment with crowdfunding platforms, such as *Kickstarter*<sup>23</sup>, to test the quality of the creative outcomes by local artisans, and also the notion of a sociomaterial assemblage by rearranging the relationships between artisans, products, ideas, online platforms, potential customers outside the community and so on. These diverse ways to engage entrepreneurship and profitability would encourage the participants to a greater extent, reinforce their participation and interest, and their contribution to the community economy as well.

Finally, social design will need to find its ways to validate a broader and longer impact, which may become possible through a collaborative research with local councils and authorities. Fundamental social change and lasting outcomes would come possible not only from grassroots approaches, but from the collective mutuality created between the people, context, work, artefacts, governmental agencies, multilateral organisations, practitioners and academics.

<sup>&</sup>lt;sup>23</sup> The Kickstarter initiative can be found here: http://www.kickstarter.com

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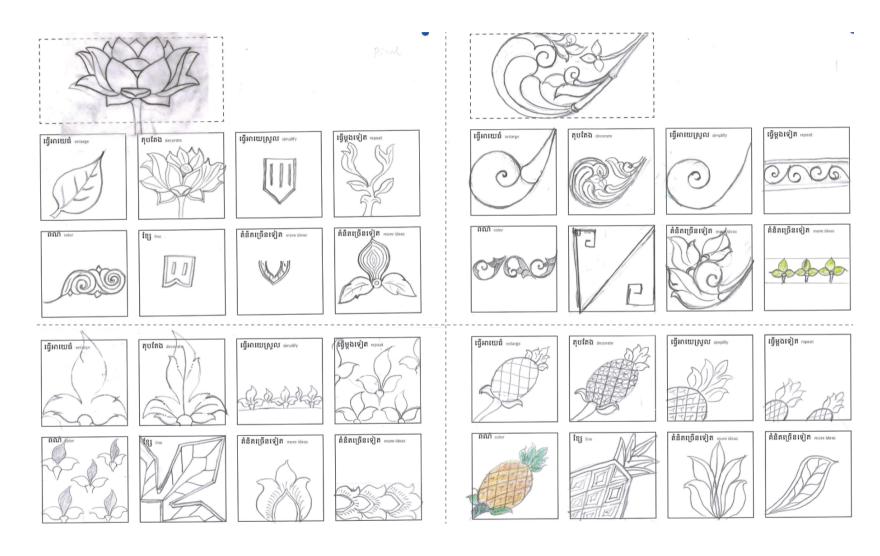
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# **Appendices**

### Appendix 1. List of the research participants

	Name	Sex	Age	Job role	Experience
1	Chenda Soun	F	32	Wheeling, shaping, glazing,	14 years
2	Sokha Som	F	27	carving	5 years
3	Nara <b>Oeur</b>	F	29		10 years
4	Chanthein <b>Sem</b>	F	32		5 years
5	Sokhy Son	F	22		7 years
6	Phou Oun	F	53		10 years
7	Somart Oun	M	33	Preparing clay, breaking	5 years
8	Mech Phal	M	27	stones, making power, carrying	5 years
9	Douen Yem	M	28	heavy materials	5 years
10	Pisal Lun	M	28		5 years

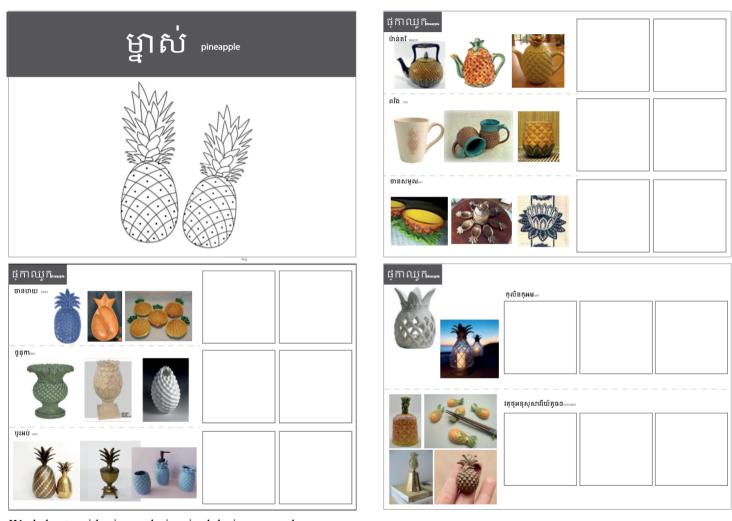
Appendix 2. Outcomes from the SDTW Session 5: Design exploration (1): Modifying graphic motifs and patterns



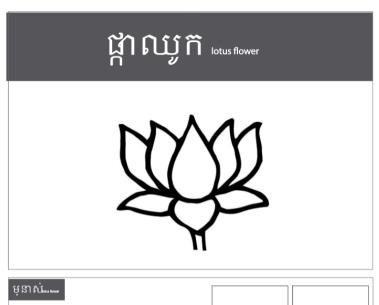


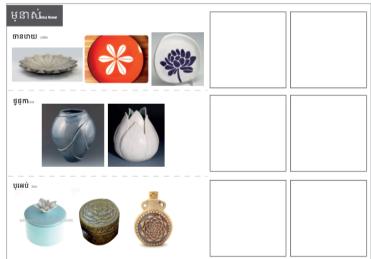
Design sketches on the template sheets

Appendix 3. Worksheets for the SDTW Session 6: Design exploration (2): Creating forms and shapes

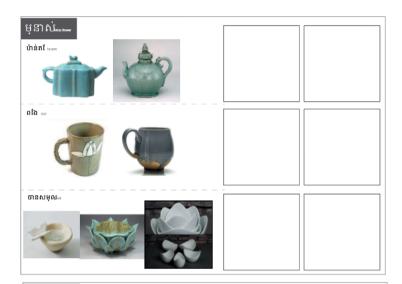


Worksheets with pineapple-inspired design examples



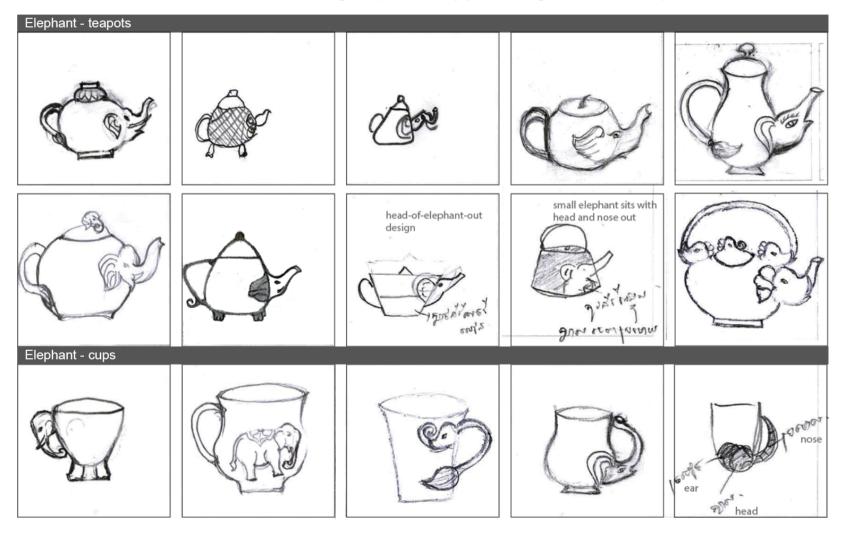


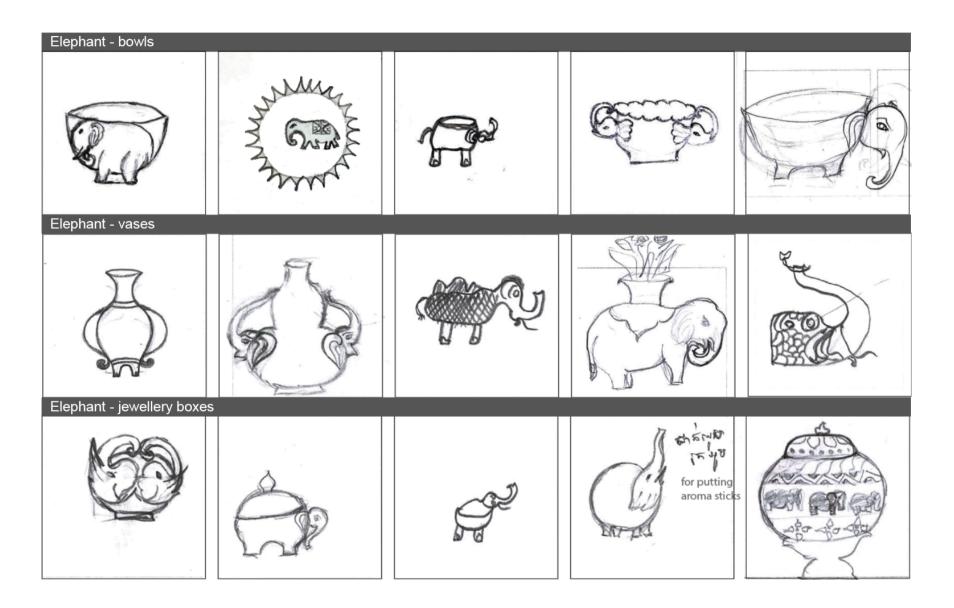


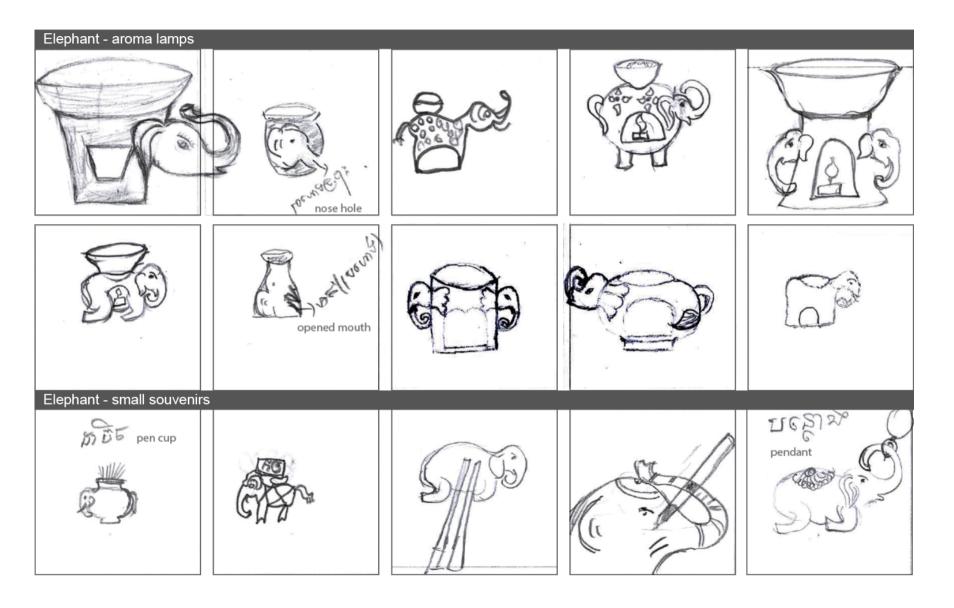


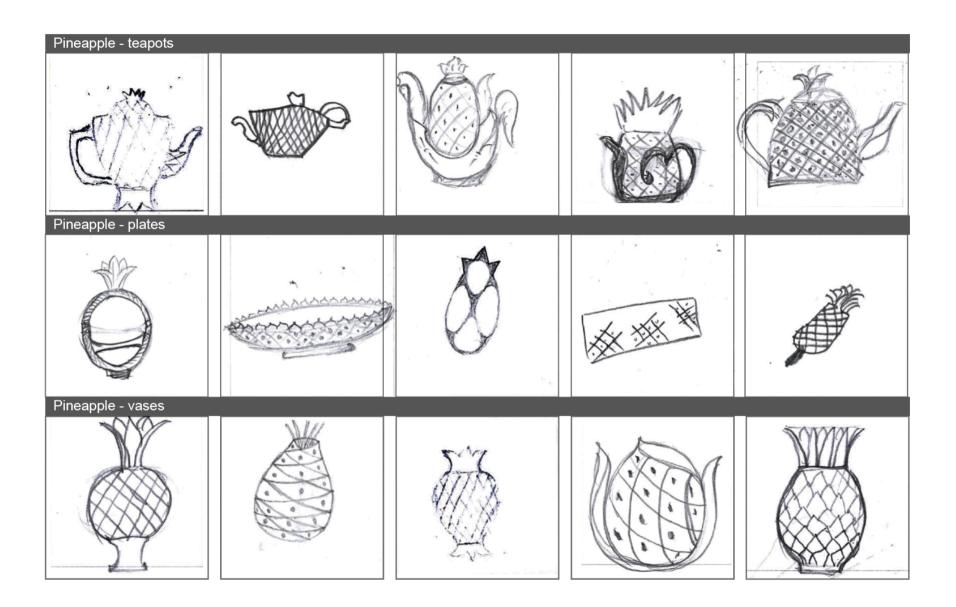


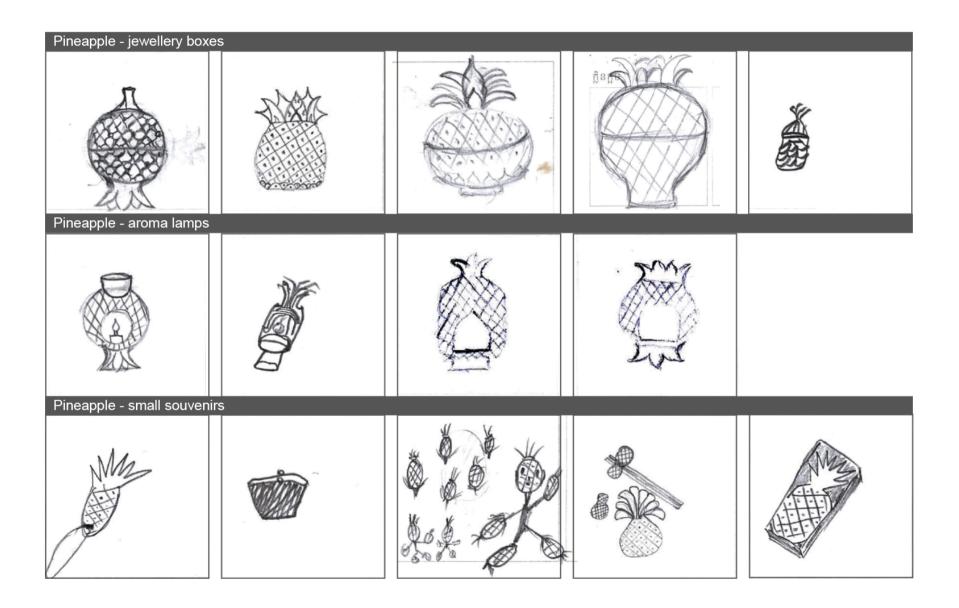
Appendix 4. Outcomes from the SDTW Session 6: Design exploration (2): Creating forms and shapes

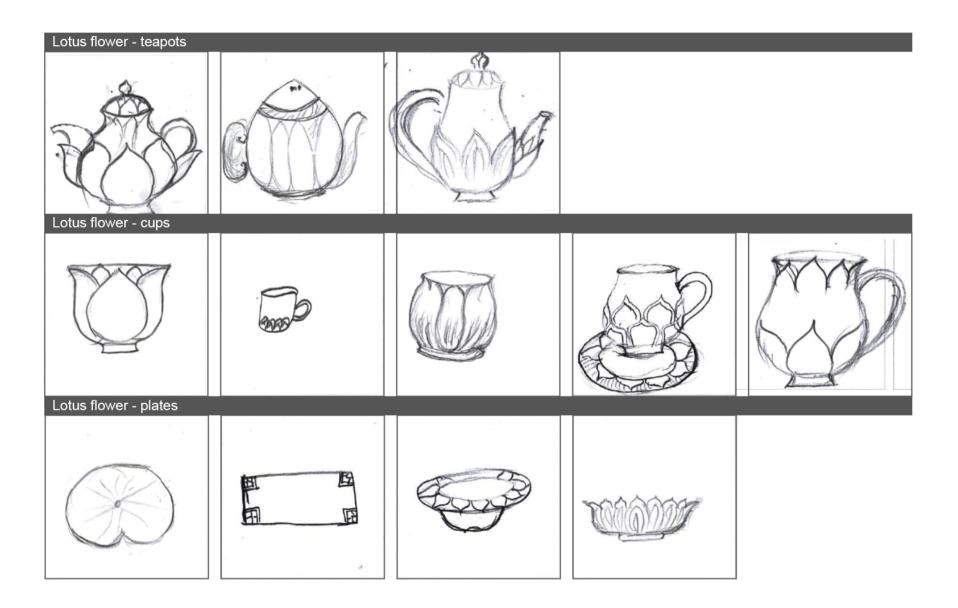


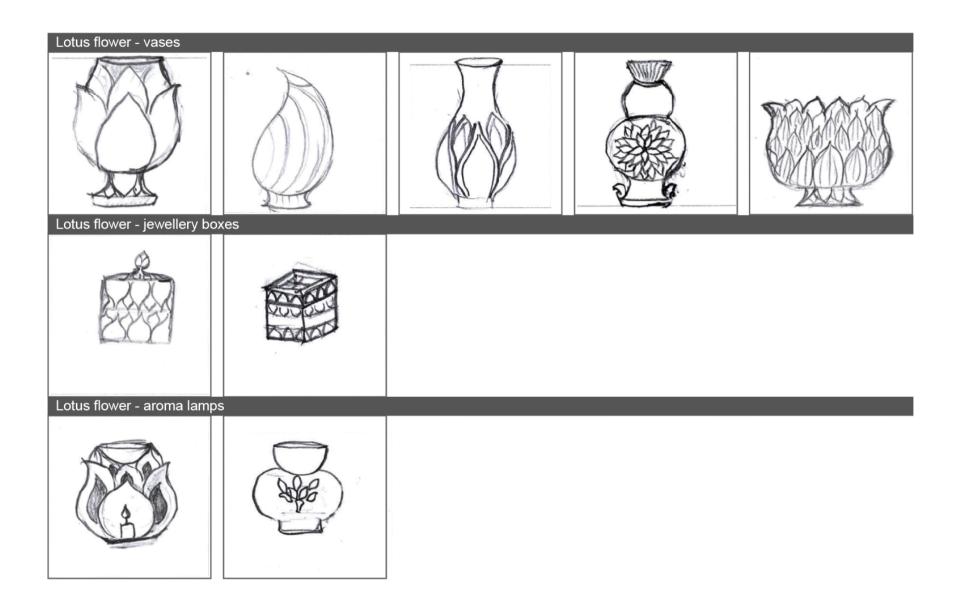












Appendix 5. Outcomes from the SDTW Session 7: Three-dimensional prototyping



A lotus flower-inspired teapot, cup, bowls and aroma lamp (from the left)

#### Appendix 6. Follow-up interview guides

- Do you think the Social Design Thinking Workshop changed the way you work? If so, in what way?
- What kind of effort have you invested to maintain the spirit of the design workshops?
- How do you feel at this time of the 'hand-over' phase? How well do you think you are ready to take over this pottery workshop? What kind of training have you had so far?
- If you had the opportunity, what kind of workshop or training would you be interested to take part in?
- What is your plan for design, production, branding, marketing, sales, customer service, exhibition and export?
- How do you envision this pottery workshop in five and ten years' time? How do you envision yourself?
- What do you remember from the Social Design Workshops? Was there anything specific that you have put into action or reflected on?

#### Appendix 7. Mini leaflet design



ALL DRAWINGS AND STORIES BY THE KCHH POTTERS



66 KCHH POTTERY WORKSHOP (kchh) was founded in 2009 as a part of the Cambodian Ceramics Restoration Project, funded by the Nippon Foundation. Japanese potters have trained and worked with the locals.

These drawings describe our workshop - the studio, wood fired kilns, and some of our products.



\*\*CAMPONG CHHNANG, which literally means pottery port in Khmer, has been a historic centre of Cambodian pottery production.

Let us introduce Kampong Chhnang with these five objects - black and red clay locally sourced from a mountain nearby, clay pots and charcoal cooking stove used for everyday life.



forming a tight-knit community for years. While most of rural young people in Cambodia prefer to get a job in urban factories, we are happy to work here. We enjoy learning and making ceramics with advanced skills, while looking after our kids and having fun with each other.

This job not only provides us livelihood to take care of our children, but also makes us proud to be the cultural transmitter of the traditional Khmer handcraft.



Skills to produce beautiful ceramics. We hope to have many customers, so that more people around the world will learn about our culture. We would be happy if our children chose the same job. It is a meaningful work.

We hope to continue working together at unity for long. 99

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Gallery at InterContinental Phnom Penh kchh.pottery@gmail.com +855-77-258-333

Appendix 8. Design for the KCHH leaflet (A4 sized)

