UNDERSTANDING THE DIFFERENT ROLES OF THE DESIGNER IN DESIGN FOR SOCIAL GOOD. A STUDY OF DESIGN METHODOLOGY IN THE DOTT 07 (DESIGNS OF THE TIME 2007) PROJECTS

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UNDERSTANDING THE DIFFERENT ROLES OF THE DESIGNER IN DESIGN FOR SOCIAL GOOD. A STUDY OF DESIGN METHODOLOGY IN THE DOTT 07 (DESIGNS OF THE TIME 2007) PROJECTS

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Abstract

Understanding the different roles of the designer in design for social good.
A study of design methodology in the Dott 07 (Designs of the Time 2007) projects.

This research explores design methodology in the Dott 07 (Designs of the Time 2007) initiative through seven different roles of the designer when they design for social good[1]. Dott 07[2] explored how design and designers[3] create innovative responses to social issues[4]. This research examines design methodology in seven design projects of Dott 07, where designers worked with public and social sector organisations and local communities, to address and respond to issues in health, education, energy, mobility and food (Dott 07, 2007).

Since the 1960s design methodology research has focused almost solely on the process of design "to the exclusion of everything else" (Dorst, 2008: 5). As a result, the designer has become "the missing person in design research" (Dorst, 2008: 5-8). Research in design methodology, while succeeding in building a substantial body of knowledge in 'knowing-what' of the design process, has lacked in the area of 'know-how'[5] of the designer (Cross et al in Jacques and Powell, 1981: 26). In addition to this, design research and literature has seen a paucity in elaborations and explorations of designer roles. This led the research investigation to reframe design methodology from the process of design, to the study of the different roles of the designer.

A Grounded Theory approach was used whereby theory emerges from the data collected (Glaser and Strauss, 1967). Qualitiatve research, in particular semi-structured interviews with a number of Dott 07 stakeholders, were undertaken to form a series of Dott 07 case studies (Yin, 1994) that examine their context, content and process (Young, 2008). A number of novel research methods were employed to analyse and synthesise the data, leading to a 'layering' (Heskett, 2002) of academic research methods with methods adapted from design practice[6]. Successive peer reviews enabled a 'stockpiling of knowledge' (de Certeau, 1986) where the interaction of research with the real world continuously validated the study, creating 'intersecting strands of data' (Derrida in Pryke et al, 2003: 31) that converged to create a body of new design knowledge[7].

Each Dott 07 case study identifies a dominant role of the designer. A single and dominant role enabled a focused investigation and interrogation of design activity. Seven roles in Dott 07 recognise the designer as: Co-creator; Researcher; Facilitator; Capability Builder; Social Entrepreneur; Provocateur and Strategist. As these roles exist in other fields and discipline, analogous literature reviews were conducted, for example from fields such as strategy, social entrepreneurship and facilitation, to create a better understanding of the roles, their practices and articulations of the value of the designer in multi-stakeholder cooperations that address complex social issues.

This investigation demonstrates how new design knowledge is generated when design methodology research is reframed from process to people, elaborating and articulating the practices, methods and value of designers when they design for social good. This PhD investigation aims to understand design methodology in Dott 07 to discover new knowledge for design methodology research and gain new insight into how designers address and respond to complex social challenges faced by governments, organisations and society at large.

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[1] Social good is used rather than social innovation as Dott 07's Programme Director states: "There is nothing morally good or bad about innovation it means causing things to change.... You can innovate and cause terrible damage and hardship and unhappiness in the world or you can do the opposite… innovation is not a virtue, it's a tool or just a description of life" (Thackara, 2007a: 10).
[2] Thesis will explain the provenance of Dott 07.
[3] A lot of design literature discusses 'design' rather than the 'designer.' Architect Lance Hosey states that: "Design can make a difference, designers make the difference" (Hosey in Bell and Wakeford, 2008)
[4] The Design Council stated that Dott aimed to "design and develop innovative new approaches to local issues that are also nationally relevant and support sustainable living in the UK" (2008d)
[5] Ryle (1949) originally wrote about 'knowing what' and 'knowing how' in his book, *The Concept of the Mind.*
[6] Such as the use of visual case studies, figurative language and Industry Ethnography.
[7] "An activity that aims to produce knowledge useful to those who design: design knowledge that designers and non-designers (individual, communities, institution, companies) can use" (Manzini, 2009a: 12).

List of contents

List of figures

Chapter 11: Urban Farming: The Designer as Strategist

Chapter 12: Conclusion

Appendix
List of accompanying material

Appendix 0	Prologue (full version)
Appendix 1	Initial Project Application (IPA)
Appendix 2	Mid Point Progression (MPP)
Appendix 3	Supervisor Meeting Report
Appendix 4	General Meeting Report
Appendix 5	Presentation to Design Council (8 August 2008)
Appendix 6	Planning for data collection
Appendix 7	Sample of Dott 07 project timeline
Appendix 8	Preparation for Stakeholder Interviews
Appendix 9	Preparation for Designer Interviews
Appendix 10	Confidentiality Agreement
Appendix 11	Checklist
Appendix 12	Discussion Guide for Designers and Senior Producers
Appendix 13	Discussion Guide for Project Stakeholders
Appendix 14	Literature Map
Appendix 15	Literature Map
Appendix 16	Sample of Interview Transcript
Appendix 17	Example of NVivo Coding
Appendix 18	Visual Case Studies of all Dott 07 projects
Appendix 19	Design practice as theatre
Appendix 20	Sample of 'Letters to Australia' research website
Appendix 21	Sample of 'Letters to Australia' monthly newsletter
Appendix 22	List of published and unpublished papers authored throughout the PhD investigation
Appendix 23	List of peer review presentations, including conference presentations
Appendix 24	Training Needs Analysis (2012)
Appendix 25	Epilogue

Prologue[8]

"Sometimes questions are more important than answers"
—*Nancy Willard (in Moorhead, 1988), The Meaning of Life*

In 1999 I began a Bachelor of Design degree (Visual Communication) at the University of Technology, Sydney. Fresh out of high school, I was ready to focus on exploring creativity, something that was limited to one subject once a week during art class at school. As I began University life, most of my friends would quickly find their place in the creative world and they were the lucky ones. For some of us, finding our identities as designers was harder. As for me, while I believed it was important that design create tangible artefacts, beautiful things, graphics and spaces, from what I could see, being taught to nurture our creativity was something that was bigger, and something which could have an additional and far greater contribution to society.

After my design degree, I completed a Master of Business (Organisational Strategy and Marketing) degree at the University of Sydney. I used this time to explore if design had a place in another context i.e. business and organisational life. In both degrees, I became increasingly aware that one of the key barriers between the two disciplines was the different vocabulary they both used. Boland and Collopy (2004) say that design must develop a new vocabulary if it is to transcend disciplinary boundaries. A common vocabulary is needed for other disciplines to understand design, and then for design to understand other disciplines. Vocabulary doesn't just mean words, but the forms, techniques and articulations specific to a discipline for example "dance companies have their own vocabularies of movement" (Oxford American Dictionary, 2009). This was the start of the explosion of questions I'd encounter in my practice as a designer. Collectively these questions surrounded one big question – what was my identity as a designer? As a designer I worked in various capacities such as in graphics, brand, packaging design, residential garden design and business and management consulting. In each role I endeavoured to use design strategically, whether that was to solve organisational problems, design organisational systems, build Design Thinking capacity or design and improve services. These strategic uses of design were not formally taught at university, rather discovered as a design student and further explored through my experiences as a professional designer. At the time of the early 2000s I was unsure where this left me as a designer. My full-time position prior to entering the PhD was as a designer at management consultancy, 2nd Road. They had just begun employing Design Thinking in their work with large organisations and it was here that explosion of questions confronted me. In particular when I began working with an Aboriginal lobby group concerned with native title rights[9]. 2nd Road were engaged in this pro-bono work to help the lobby group develop a more coherent vision. My involvement in the

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[8] Please see *Appendix 0* for the full version of the Prologue.
[9] Native title gives indigenous people and communities the rights over land.

project raised questions of design's and the designer's contribution in addressing and helping to tackle complex social issues, such as native title. Little did I know that things were already happening in the UK concerning the use of design in a similar context. An encounter online with the Design Council and Dott 07 (Designs of the Time 2007) showed that while things were happening in practice, very little research was being done to capture, understand and reflect on this. A PhD offered a platform to re-discover design through academic design research. I could explore answers to the questions raised from my experiences in practice, and I could observe, capture, reflect and communicate how design was being used in new contexts, beyond its traditional spheres, to create positive change. Dott 07 hinted at answers to all these questions. In 2007 I moved from Sydney, Australia to Newcastle upon Tyne, England to begin this journey. I would investigate Dott 07 and design for services and social issues. This thesis captures the research, learnings, experiences and knowledge gained throughout this exploration. It has been an amazing journey and one of the highlights has been encountering my co-sponsors, my university colleagues, all the designers who have in some way, shape or form contributed to this research, the Project Stakeholders who went on their own journeys to discover design, and the team at Dott 07 who made one of the most innovative and fascinating programmes of design projects happen in 2007.

Michael Polanyi (1967: 4) writes that "we can know more than we can tell." This thesis captures a lot of things I have come to know since 2007. But there are so many things outside the boundaries of the research investigation that could not be included, and lots more that I am not able to articulate in words but can demonstrate in practice. However, for all the questions I had about design when I left Australia, this research journey has certainly answered all of them. And more! But as in life, I have since found new questions. While this PhD journey comes to a close, one of the most important things it has taught me is to continually ask questions and seek answers. It has grown my appreciation to never stop learning. I am reminded by author William Bridges of the context of which this research must be seen, and life learning in general:

> "Even though we are all likely to view an ending as the conclusion of the situation it terminates, it is also– and it is too bad that we don't have better ways of reminding ourselves of this– the initiation of a process. We have it backwards. Endings are the first, not the last, act of the play" (Bridges, 2004: 132).

Acknowledgements

Many people are involved in the process and in creation of a PhD. There are many people who were involved in this PhD and in various ways.

Declaration

I declare that the work contained in this thesis has not been submitted for any other award and that it is all my own work. I also confirm that this work fully acknowledges opinions, ideas and contributions from the work of others. The work was done in collaboration with the Design Council, London.

Any ethical clearance for the research presented in this thesis has been approved. Approval has been sought and granted by the School Ethics Committee on 21 March 2012.

Name: Lauren Tan

Signature:

Date: 21 March 2012

Chapter 1

Introduction

Introduction

"Design can make a difference, designers make the difference"

—*Lance Hosey, Architect*[10]

Designers make valuable contributions for positive social change when addressing and responding to challenges faced in the public and social sectors and in society at large. This research investigation aims to explore design methodology in the Dott 07 (Designs of the Time) initiative that demonstrated how design could be used to create innovative responses to social issues. Historically design methodology research has focused almost solely on the process of design "to the exclusion of everything else" (Dorst, 2008: 5). As a result the designer has become "the missing person in design research" (Dorst, 2008: 8). This led the research investigation to reframe design methodology research as the study of the different roles of the designer. Despite designer roles being widely recognised in the design discourse, this investigation discovered a lack of research, exploration and discussions in the design literature and in academic design research[11]. This investigation identifies seven different roles of the designer in the social design projects of Dott 07. It recognises a dominant designer role in each Dott 07 project identifying the designer as: Co-creator; Researcher; Facilitator; Capability Builder; Social Entrepreneur; Provocateur; and Strategist. This research found that designer roles constitute a set of practices that are unique to designers. It triangulated these findings with literature from analogous fields such as strategy, organisational development, entrepreneurship and facilitation. Such findings confirm that designers make valuable contributions to public and social sector innovation[12] and lays initial foundations to enable designers to have conversations about the value they bring when they design for social good and participate in finding solutions to local, regional, national and global issues.

Design for social good

Since the beginning of the 21st century the idea of design for social good, that is designing for a social cause "to help make the world a better place" (Kusz, 2010: 29) and to "solve problems together for the collective social good" (OpenIDEO, 2011), has become increasingly acknowledged among design communities across the globe. Thirty years ago, Buckminster Fuller (1969) and Victor Papanek (1971) called for designers to adopt more social and moral responsibility in their work. While their writings were acknowledged[13], critical mass preferred to celebrate the designer as a celebrity (Burns et al, 2006: 26; Thackara, 2006; V&A, 2008) in industrial society. Fuller and Papanek sat at the fringes of design communities and industry for

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[10] Quoted from *Expanding Architecture: Design as Activism* Edited by Byran Bell and Katie Wakeford.
[11] Dorst states that academic "design research has a blind spot for issues to do with the designer" (Dorst, 2008: 7).
[12] Innovation is seen in this research investigation as "'… the successful exploitation of new ideas. It is the process that carries them through to new products, new services, new ways of running the business or even new ways of doing business" (Cox, 2005: 2).
[13] Papanek's book was translated into nine other languages over two years after the English publication in 1971.

many decades. However, since the turn of the century, their sentiments alongside a groundswell for social innovation[14], has led designers to re-direct their design skills to social issues (RED, 2004-6; Emilson, 2011). Design for social good, a phrase used in this research to encompass the aspirations of designers encountered in this research investigation, and breadth of approaches[15] taken to design for social causes (see bullet points below) is flourishing as a research topic among academics (See Manzini, 2001; 2005; 2006a; 2006b; 2008; 2009b; Margolin, 1998; 2002; 2007a; 2007b; Morelli, 2007; Jegou et al, 2008; Emilson et al, 2011, Kusz, 2010[16]), in academic institutions[17] and as an emergent practice on the fringes of industry[18]. The emergent field is evident by the coalescent areas[19] of design, or the different approaches designers take, when participating in design for social good. These areas include:

- Service Design or Design for Services[20]
- Design for Social Innovation[21]
- Social Design[22]
- Co-design[23]
- Transformation Design[24]
- Design for Public Services[25]
- Experience Based Design[26]
- Creative Communities[27]
- Design for Development[28]
- Sustainable Design[29]
- Design Activism[30]
- Design Thinking[31]
- Public Service Design[32]

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[14] Social innovation in this research investigation is understood as "new ideas that work in meeting social goals" (Mulgan, 2007: 8)

[15] Denotes a way of doing.

[16] Kusz says "(In general) design's primary purpose is to help make the world a better place" (Kusz, 2010: 29)

[17] For example at the Politechnico di Milano (Italy), Northumbria University (UK), Kingston University (UK), Central St Martins College of Art and Design (UK), RMIT University (Australia), Art Centre College of Design (USA), Parsons The New School for Design (USA), Stanford University (USA) etc.

[18] For examples IDEO, OpenIDEO (USA), Project H Design (USA), Work Worth Doing (Canada), InWithFor (Australia), thinkpublic (UK), live|work (UK), Uscreates (UK), Common Ground (UK), Participle (UK) etc.

[19] 'Areas' can also describe design approaches, because 'design' can be discussed as a verb as well as a noun. Heskett writes: "Design is to design a design to produce a design" where "every use of the word is grammatically correct" because design can be a noun (general concept of a field); a verb (action or process); a noun (concept or proposal) (Heskett, 2002: 5-6)

[20] For example as practiced by live|work (http://www.livework.co.uk) and Engine (http://www.enginegroup.co.uk). Also see Kimbell and Seidel (2008) and Young (2010)

[21] For example Common Ground. See http://gotocommonground.com and DESIS International community (Design for Social Innovation and Sustainability). See http://www.desis-network.org.

[22] For example thinkpublic. See http://www.thinkpublic.com. OpenIDEO. See http://openideo.com

[23] For example thinkpublic, InWithFor (http://www.inwithfor.org) and MakeTools (http://maketools.com)

[24] For example Participle. See http://www.participle.net

[25] For example Design Council. See http://www.designcouncil.org.uk

[26] *See* http://www.institute.nhs.uk/quality_and_value/experienced_based_design

[27] For example as researched by Politechnico di Milano. See http://www.sustainable-everyday.net

[28] For example Project H Design. See http://www.projecthdesign.org. IDEO. See http://www.ideo.com

[29] For example More Associates. See http://www.moreassociates.com. Work Worth Doing. See http://workworthdoing.com

[30] For example as explored by Ann Thorpe of the Open University. See http://www.designactivism.net. The Leeds Metropolitan University. See http://www.designactivism.org. *Design Activism and Social Change* conference (September 2011, Barcelona) organised by The Design History Society. See http://designhistoryfoundation.org/congres

[31] For example IDEO. See http://www.ideo.com

Each of these defines different research fields and sometimes defines design industries. They share overlapping practices and a common point of view that design can and should be used for social good. Emilson et al (2011) authored an excellent paper which articulates the origins of this area of design from three different countries. They identify a number of different approaches in the UK, Italy and USA in relation to design for social good. Emilson et al (2011) identify that:

- Service Design, Transformation Design and Design for Public Services came out of the UK, led by the Design Council's[33] work with government and public sector, and formation of the Service Design industry that works with both public and private service organisations;

- Creative Communities for Sustainable Lifestyle (CCSL) and Sustainable Design unfolded as a large research initiative based at the Politechnico di Milano in Italy. The CCSL research initiative identified several grassroots community innovations and explores the role of design to catalyse and scale them; and

- Design Thinking and Design for Development was popularised by many design companies and initiatives in the USA. This saw design used for a broad range of issues in developing countries (e.g. d school and Design for the Other 90%), public education (Project H Design) and health (Mayo Clinic).

In addition to this, other approaches should be noted including:

- Social Design – discourse used by social design agency thinkpublic (UK) and Victor Margolin to broadly refer to "design that is directed first and foremost to human needs" (Margolin, 2007a: 1);

- Design Activism – doctoral research by Ann Thorpe (UK) and explored in forums, workshops, and discussions through the Leeds Metropolitan University under the guidance of Guy Julier (UK). Thorpe describes design activism as the "use of artifacts and design processes to influence change by disrupting the status quo and revealing better visions for society" (Thorpe, 2011);

- Co-design – pioneered in practice by MakeTools[34] (USA) and thinkpublic (UK), involves key stakeholders throughout an entire design process from research to ideation to prototyping and the delivery of services; and

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[32] The UK Design Council established the programme Public Services by Design in 2009 to help public sector managers use the potential of design to improve and innovate UK public services. The Design Council state that "design methodologies can drive innovation in public services" for example prototyping and collaboration. For more see http://www.designcouncil.org.uk/our-work/Insight/Research/Research-Briefings/The-role-of-design-in-public-services

[33] The Design Council is the UK's national strategic body for design. Funded by the UK government, the Design Council promotes the use of design throughout UK businesses and public services. The Design Council seeks to demonstrate that design can play a vital role in strengthening our economy and improving our society.

[34] Founder Elizabeth Sanders has authored a number of papers on co-design for example Sanders, E. B. N. and Stappers, P. J. (2008) 'Co-creation and the new landscapes of design.' *CoDesign*, Taylor & Francis.

- Design Thinking – Written about by Rowe[35] (1991) and then popularised by design and innovation company IDEO (USA) in the mid-2000s. Design Thinking recognises that design not only pertains to material objects, but as a process and set of principles that can be applied to solving complex problems.

Design for social good is marked by a number of overlapping approaches in design showing its emergent character. As the field is relatively new, many initiatives have arisen exploring and showcasing design directed to social issues. A common starting point for such initiatives has been the creation of design manifestos. These manifestos are written declarations by designers outlining their vision for how design can be used to improve social issues. Some examples include: 'An Incomplete Manifesto for Growth' by Bruce Mau (1998) founder of Massive Change; 'Transformation Design' by RED (Burns et al, 2006); '1000 Words: A Manifesto for Sustainability in Design' by Alan Chochinov (2007) of Core 77; and '(Anti) Manifesto: A Call to Action for Humanitarian (Product) Design' by Emily Pilloton (2008), of Project H Design[36].

Many of these manifestos turned into practical initiatives characterised by various forms of activity such as programmes of design projects; charters; summits; conferences; exhibitions; websites; and online social networks. One key programme was the Design Innovation Education Centre[37] (DIEC) which was the predecessor initiative to Dott 07, that sponsored a number of projects in the North-East of England (NE) across academe and the public sector to pilot Service Design. A map (Figure 1.1) illustrates the landscape and a number of similar initiatives that have taken place around the world. The map shows both practice-led and academic research-led initiatives that have involved designers in creating products of design from the physical (building, product design etc) to the conceptual (services, systems etc) to address a broad range of social issues. The map does not identify singular projects[38]. While such projects make important contributions to the field, the map illustrates only large programmes of work across a continuum of physical to conceptual design, led by either academia or industry. The map's purpose within this thesis is to situate the research investigation's primary case study, Dott 07 among an international landscape of design for social good.

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[35] The origin of Design Thinking was from Peter G. Rowe who wrote about Design Thinking as a process of designing in architecture and urban planning. Later Cross (2007) refers to Rowe's (1991) work as an important piece that contributed to the emphasis on design cognition. Cross attributes Rowe's (1991) work among others as helping establish: "design as a coherent discipline of study in its own right, based on the view that design has its own things to know and its own ways of knowing them" (Cross, 2007: 3).

[36] Others include: 'The Designers Dilemma' now known as the Designers Accord by founder Valerie Casey (2007); 'Manifesto' by the SocialDesignBlog (2008); 'You know more than you think you do: Design as resourcefulness and self-reliance' by Emily Campbell (2009) Director of the RSA programme Design and Society.

[37] See http://www.onenortheast.co.uk/page/diec.cfm

[38] For example Engine's *SILK* (Social Innovation Lab Kent) project, live|work's *Make it Work* project that looked at worklessness or thinkpublic's *Experience Based Design* work with the National Health Service (NHS).
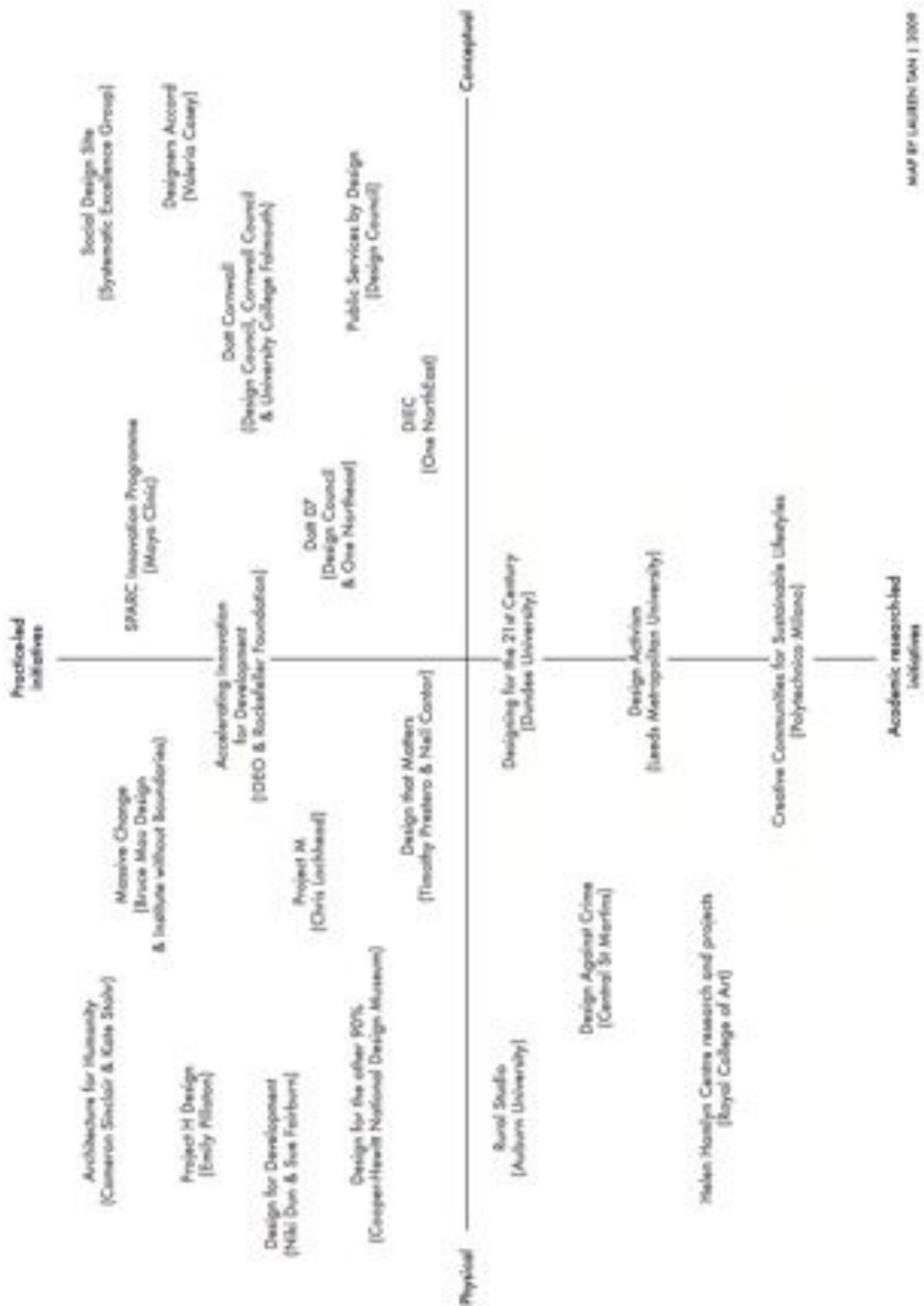
Figure 1.1. Map of research-led and practice-led initiatives in the space of design for social good. (This map first appeared in my paper 'Perspectives on the changing role of the designer: Now and to the future' presented at Icsid Design Education 2050 Conference, Singapore 2009)

In the UK some of the earliest work in design for social good was carried out by the Design Council's RED Unit and by social design agency, thinkpublic. Between 2004 and 2006 RED undertook a series of high profile demonstration projects showcasing how design could be used to address issues in health, ageing, democracy, energy and citizenship (RED, 2006). RED paved the way for a number of other design companies, and designers, to pursue design for social good by showing design's relevance to the UK political context. RED stated UK politicians were:

> "… trying to find new ways to reconnect the individual consumer or citizen to the institution. Tony Blair has said that he wants public services to be 'redesigned around the needs of the user; the patients, the passenger, the victim of crime.' But existing approaches to organisational change have limitations which make them unsuitable for tackling the predominant issues […] RED believes that the design process, and the skills inherent in designing, must form a key part of a new approach to tackling our most pressing economic and social issues" (Burns et al, 2006: 8-9).

In the early 2000s other favourable conditions encouraged the growth of an innovative design industry that began using and mastering approaches of design for social good[39]. Some of these favourable conditions included the interest of the National Health Service (NHS) in design via the NHS Institute for Innovation and Improvement. The NHS worked with thinkpublic to develop the approach of Experience Based Design (EBD) (Bate and Robert, 2007). The EBD approach brought "patients and staff together to share the role of improving care and re-designing services" (NHS Institute for Innovation and Improvement, 2006-2010). Another enabling condition that supported the growth of design in this area was NESTA's (National Endowment for Science Technology and the Arts) Creative Pioneers programme. It equipped entrepreneurial creatives with business skills and finance to kick-start their business ideas. Many companies such as thinkpublic and social change agency Uscreates[40] went through the Creative Pioneers programme and today run sustainable businesses designing for social good. Internationally, the concept of Design Thinking was also becoming widely known. Since 2003 IDEO have profiled 'Design Thinking' to promote the idea of design as a problem solving tool that could be used for a whole range of complex issues and contexts, particularly in business. IDEO later linked the idea of Design Thinking to social good by establishing an online platform, OpenIDEO, which would harness the power of an online design community to use Design Thinking:

> "… to create significant social change…. to address global social issues such as poverty, health, water, economic empowerment, access to financial services, and the need for basic services" (Brown in IDEO and The Rockefeller Foundation, 2009).

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[39] For more discussion see Mary Cook's (2012) forthcoming PhD study, *The Emergence and Practice of Co-design as a Method for Social Sustainability under new Labour,* University of East London
[40] See http://www.uscreates.com

In 2006 RED wrote in their *Transformation Design* manifesto stating that: "the beginnings of a new design discipline are emerging from groups around the world" (Burns et al, 2006: 11). RED's manifesto captured the mood of the moment where designers were exploring new uses of design where social issues were concerned[41]. Organisations and governments were also coming to recognise design for helping achieve social good:

- In the UK, the Young Foundation both recognise and critique the designer's involvement in social innovation;
- In Australia, the Australian Centre for Social Innovation (TACSI) adopts design alongside other disciplines to experiment with bold ideas to achieve better lives;
- In the USA, the Rockefeller Foundation, with the help of IDEO, developed a toolkit enabling social enterprises and NGOs to use Design Thinking; and
- In Denmark, MindLab, the government's cross-ministerial innovation unit, adopts design methods to help create new solutions for society.

With the groundswell of design for social good in recent years, many critical voices have recognised the limits of design (See Mulgan, 2009; Drenttel in Harrison, 2010; Schulman, 2010; Tonkinwise, 2010; Emilson et al, 2011). Mulgan states the weaknesses of design for social good included the:

- The designer's lack of economical and organisational skills;
- Their inability to drive the implementation process;
- The cost of design consultants; and
- The ignoring of evidence and field experiences (Mulgan in Emilson et al, 2011)

While these criticisms are accurate, there is still a significant amount to learn about the emerging area of design for social good. This research investigation aims to understand better the design methodologies in designing for social good. As seen in the numerous approaches designers adopt to design for social causes, the field lacks understanding where methodology is concerned. Dott 07 represents a critical mass programme in the application of design methodologies for social good and therefore presents an excellent case study for exploration.

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[41] Many companies such as thinkpublic, who were founded in 2004 were already using design to address social issues such as healthcare. RED (2004-2006) documented and shared this work, its practices and results, gaining national and international exposure through its association with the Design Council.

Dott 07 (Designs of the Time 2007)

One of the most high profile programmes in the landscape of design for social good was the Design Council's design innovation programme called Dott 07. Dott 07:

> "… challenge[d] communities to design and develop innovative new approaches to local issues that are also nationally relevant and support sustainable living in the UK" (Design Council, 2008: 21).

It did this by establishing a three-part programme that included public design commission projects[42]; education projects[43]; and design showcases[44] and provided the design support to lead these projects that addressed prevalent social, economic and environmental issues in the UK

Dott 07 was the first Dott to take place, in an intended 10-year programme, and did so in the North-East of England (NE) a region of the UK that sought to "establish itself as an internationally renowned design destination" (One North East, 2009). The NE provided the testing ground to explore how design could be used to address key social, economic and environmental challenges of a region. This exploration built on the NE region's investment in the DIEC project, as indicated previously in Figure 1.1, and Dott 07 would host a number of design projects led by designers, with an ethos of designing *with* and *for* people (Thackara, 2006; 2007a). Dott 07 was directed by John Thackara, a prominent design figure, author and founder of the international conference and network, Doors of Perception. Before the commencement of the Dott 07 projects Thackara spent six to nine months understanding the key priorities in the NE to curate the programme themes. By bringing together policy and grassroots community activity in the region, Dott 07 was given a thematic framework for a number of projects that would explore five key issues in everyday life in the NE. These were:

- Health;
- Education;
- Mobility;
- Energy; and
- Food.

These issues translated into seven projects in 2007, connecting designers to public sector organisations and local communities to work together to use design to address and respond to regional issues that were also nationally relevant. The projects were led by designers from different design companies and independent consultants. These seven projects are the key focus

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[42] These design-led projects were led by designers, and used design as an approach to address social, economic and environmental issues. In doing so, they would help define issues in a local context, generate solutions, prototype and deliver them.

[43] These projects would bring together designers and school students to use design principles and process to create sustainable solutions for everyday life.

[44] Dott would host a series of events and exhibitions to showcase the Dott 07 projects. They would involve the general public in exploring how design could be used to help tackle social, economic and environmental issues.

for this research investigation. These projects and their design teams are outlined in Figure 1.2.

Project name	Project description	Senior Producers (companies / consultants)	Project Stakeholders
Alzheimer100	This project co-designed the future of dementia care with people most affected by the disease i.e. people with dementia and their informal carers. Its ideas inspired national government policy to consider and eventually implement innovative models of dementia care.	thinkpublic	NE Regional Aging Forum; Alzheimer's Society
Design and Sexual Health (DaSH)	This project involved local communities to develop patient-centred sexual health care services for the town of Gateshead. The project's recommendations were integrated into a new sexual health clinic built in 2008.	Design Options (now known as Options UK) and Centre for Design Research, Northumbria University	Gateshead Primary Care Trust
OurNewSchool	This project helped a school develop its vision for the future of learning, and how government investment for new school buildings could support this vision.	Engine	Walker Technology College
New Work	This project explored a new model of small business support that saw micro businesses support and help each other grow and address their daily business challenges together.	Enabling Concepts and live|work, Newcastle	Six micro business owners
Move Me	This project developed and prototyped a new service model for car sharing called LiftExchange. It aimed to bring greater access to transport to a remote community.	live|work, Newcastle	Scremston First School; Arriva
LowCarbLane	This project addressed the issue of reducing carbon emissions in low-income households. It identified finance as a key barrier and proposed Saverbox, an energy loan that helps low-income households reduce their domestic energy consumption without affecting their financial situation.	live|work, London	One North East; National Energy Action (NEA)
Urban Farming	This project created a programme of work to involve local communities in cultivating, cooking and celebrating locally grown food in public urban spaces.	David Barrie, Debra Solomon and Zest Innovations	Middlesbrough Council; Groundwork South Tees

Figure 1.2. Dott 07 design projects, descriptions and design team

At the end of Dott 07, a two-week Festival was held on the banks of the Tyne River (16-28 October, 2007) showcasing all the Dott 07 projects (Figure 1.3). The Festival opened with an Awards Night to recognise the projects, and a series of debates[45] were held, to discuss the projects and their learning outcomes.

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[45] Called Dott Debates. For a capture of the Dott Debates see my research blog *Letters to Australia*:
http://www.letterstoaustralia.blogspot.com.au/2007_10_01_archive.html and
http://www.letterstoaustralia.blogspot.com.au/search?updated-max=2007-10-18T00:26:00%2B01:00&max-results=7

Figure 1.3 Photo of the site of the Dott 07 Festival and InterSections 07
at NewcastleGateshead, October 2007

At the close of the Festival, the InterSections 07 conference[46] took place at the same location, bringing together an international design community to debate "design know-how for a new era" (InterSections 07, 2007; Myerson, 2008). The conference debate identified four new practices of designers emerging in the discipline, naming these as the designer as strategist; rationalist; co-creator; and storyteller (Myerson, 2008). Many of these roles were discovered and are explored as key findings later in this research investigation.

While the framework[47] for Dott 07 was clear, a lot of complexity surrounded it for many reasons. This investigation was to help provide clarity on Dottt 07 as complexities arose from:

- The different and changing programme objectives from the partner organisations[48];
- The difficulty in evaluating the projects[49] (See Margolin, 2007b; and Emilson, 2011);
- The different, and largely unknown, approaches of design used (listed previously on p 3-4 and elaborated in the following section)[50].

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[46] See http://www.designcouncil.org.uk/resources-and-events/Designers/Intersections-071/Intersections07

[47] Manzini (2010) often speaks of Dott 07 as a framework programme. See http://letterstoaustralia.blogspot.com/2010/03/dott-cornwall-think-tank-inspired.html for a short review on Manzini's discussions.

[48] Objectives of Dott 07 were varied among the different partner organisations. The Design Council's vision for Dott 07 was to promote and engage the public in design, which led Dott 07 to be a high profile initiative. One North East, the regional development agency who provided three-quarters of the funding for the initiative (£4M base funding), wanted to use design to drive economic regeneration throughout the region. Finally the Dott 07 Programme Director wanted design to be used to catalsye practical solutions to regional issues whilst championing a sustainable design agenda.

[49] Margolin stated that generally social design projects aim to "transform unhealthy situations and individuals into healthy ones. Once people become healthy, they can then contribute to the market but the social return on investment is much lengthier" (Margolin, 2007a: 6). Evaluation of Dott 07 took place throughout the programme and right at its end by the Wood Holmes Group (2008). The difficulty in evaluating the projects stemmed from the varied and changing objectives of the programme and also capturing a snapshot of the projects, many of which would demonstrate its legacy 12 months after Dott 07 finished.

[50] While Dott 07 attempted to frame the projects with the Marketing-Design Fusion model, many design teams did not utilise the model in actual practice.

Design and Dott 07

One of the most widely used definitions of design is by Herbert Simon who wrote that, "everyone designs who devises course of action aimed at changing existing situations into preferred ones" (Simon, 1996: 111). Similarly, John Heskett writes:

> "… design, stripped of its essence, can be defined as the human capacity to shape and make our environment in ways without precedent in nature, to serve our needs and give meaning to our lives" (Heskett, 2002: 7).

Margolin adds "design is an act of invention, a process of conception and planning that can result in material or immaterial products" (Margolin, 2007a). These broad definitions of design are chosen to frame how this research investigation has seen design as – the idea that designers change existing situations into better ones using design to create both material and immaterial objects to do so. The definitions are broad enough to encompass the wide applications of design by designers in Dott 07. But while design in Dott falls under a broad definition, it challenges many paradigms in the discipline. These included: designers not designing for the market (Margolin, 2007a); designers designing *with*, not only *for*, people (Thackara, 2006); and designers creating immaterial, rather than material objects (Morelli, 2002; Manzini, 2003; Margolin, 2007a) as the final project outputs and outcomes.

Design finds its commercial roots in the arts and crafts (Heskett, 2002; Valtonen, 2005). Pre-industrial society saw crafts people prevail through the creation of goods for the wealthy aristocratic market. During the industrialisation of the mid 19th century, mass production processes saw the rise of engineering-designers and the demise of the crafts person. The concept of the division of labour drove the separation and specialisation of skills. Engineering became concerned with basic functionality and designers were relegated to the decoration of products at the end of the production process (Heskett, 2002). This paradigm still largely prevails in industry today where the designer depends "on situations created by others" (Margolin, 2007a: 3) and are "summoned to perform only limited, specific tasks after managerial and fiscal specialists have already made crucial decisions" (Mok, 2003). Margolin sums this up by saying: "since the Industrial Revolution, the dominant paradigm has been one of design for the market" (Margolin, 2007b: 24).

Margolin (2007a; 2007b) uses this to contrast design for social good or what he calls 'social design'[51] describing this where designers design for human need before market need[52]. Margolin

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[51] During the course of this research investigation 'social design' was an emerging concept with little definitions and elaboration in the literature. This can be seen with the Young Foundation's recent appointment in 2012 of a Head of Social Design to help define this concept. The phrase 'design for social good' was chosen for this research study because it explains the use of design to improve social issues which accurately reflects the Dott 07 designer's aspirations for the projects. 'Social design' as a phrase can allude to any design that is used for a social cause but does not describe what kind of result is sought when design used in this context. The Dott 07 designer expressed a clear ambition to create not just any change, but positive change, hence 'design for social good' continued to be used instead of 'social design.'

continues to say that "only rarely have designers the authority or foresight to create situations themselves" (Margolin, 2007a: 3). Hence many designers designing for social good, engage in more strategic uses of design, that is before designing, designers are involved in creating the conditions to enable design to take place. This occurs via the designer creating the "situations of practice themselves or else finding partners with whom they can work" (Margolin, 2007a: 3).

In directing design "first and foremost to human need" (Margolin, 2007a: 1), a shift in practice is required from only designing *for* people, to also designing *with* them. Designers are required to design *with,* firstly because they are not subject matter experts in complex social issues. Designing *with* people ensures designers understand the context, avoid reinventing the wheel, understand the available resources for implementation, involving people in the journey increases their ownership of the problem and solution, and embedding[53] design practices and skills in stakeholder organisations are likely to be part of the outcome[54]. Thackara advocates designing *with* people by saying "you will be surprised at the social innovation taking place in your environment" (Thackara, 2006: 2). His belief was that society was not short on good ideas and it was the role of the designer to help catalyse them. Of this Thackara says designers need to "evolve from being the individual authors of objects, or buildings, to being the facilitators of change among large groups of people" (Thackara, 2006: 6). He sees design as a "fresh lens" to help others do and perceive differently[55] but acknowledges that design practice has to change outlining these changes as being designing *with* people and communities[56]; having a more sophisticated understanding of the context[57]; and having the ability to design for services[58] (Thackara, 2006: 6).

The idea of design in Dott 07 was open to a number of interpretations. Most commonly design in Dott 07 is thought of as Service Design; Social Design; Transformation Design; Sustainable Design and Public Service Design. Dott 07 can be investigated using any of these design areas as lenses and this research investigation has used one of the more broader lenses – design for social good to encompass not only the variety of design approaches[59] used by designers but also the common vision and aspiration of the Dott 07 designers across all projects to change existing social situations into preferred ones[60] using design. On a more detailed level Dott 07 was explored under the remit of this research's co-sponsors, namely; Northumbria University,

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[52] Designing for market need means designing for increased market share and profits.

[53] Embedding design practices and skills means the skills sharing and skills transfer that occurred in many of the Dott 07 projects between the designers and the project stakeholders.

[54] These expansions of designing *with* people were largely derived from the qualitative research. thinkpublic's practice has also articulated many of these points (Such as in thinkpublic, 2009)

[55] Thackara also spoke frequently of seeing challenges as "design problems" Again making reference to the idea that design offers a different lens. PhD researcher Priti Rao (2012) also maintains the idea of a 'design lens' in her PhD that explores design for international development.

[56] Where people become partners in the design process, not just research subjects.

[57] Thackara (2006) notes designers need to be able to interpret, be reflexive and sensitive to the context.

[58] Where design companies shift from designing products to services.

[59] See list on page 2.

[60] Simon (1996).

School of Design and the Design Council, UK, whose mutual interest was to investigate design methodology in Dott 07. Part of the reason for this topical area was that designers in Dott 07 lacked an adherence to the Dott 07 design process model, called the Marketing-Design Fusion Model[61] (Figure 1.4) derived from the DIEC programme and promulgated by One North East as the key funder of Dott 07. The Marketing-Design Fusion Model was a key part of Dott 07 in its early days. The model followed a "four-stage process" (One North East, 2007a) similar to that of the Design Council's Double Diamond[62] (Design Council, 2005) (Figure 1.5). The four stages of the Marketing-Design Fusion Model were:

- **Discovery** – Research and analysis of the context and users;
- **Generation** – Creating a wide range of ideas;
- **Synthesis** – Combining the best ideas for the optimum solution; and
- **Enterprise** – Translating the solutions into business logic and language. (One North East, 2007a)
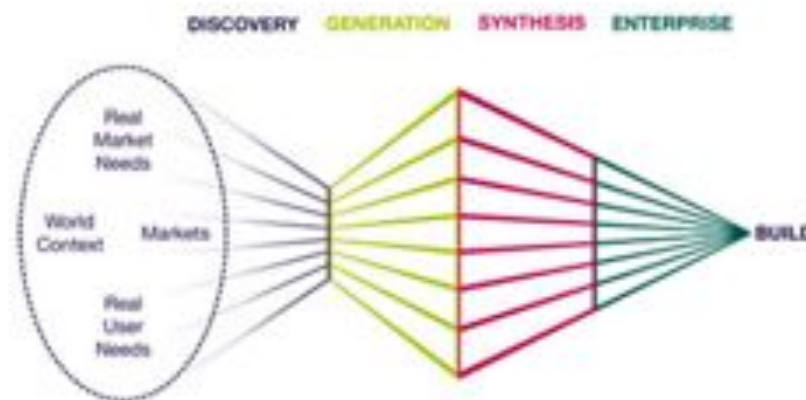
Figure 1.4. The DIEC Marketing-Design Fusion Model. From
http://www.diec.co.uk/page/marketing_design_fusion_model.cfm

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[61] http://www.diec.co.uk/page/marketing_design_fusion_model.cfm
[62] The Double Diamond showed a mostly linear diverging and converging diamonds to represent a general design process. Note that the picture of the model here is as the Double Diamond was in 2007. A more recent iteration can be found in *Figure 2.5* in *Chapter 3: Research Methodology* (p 35).
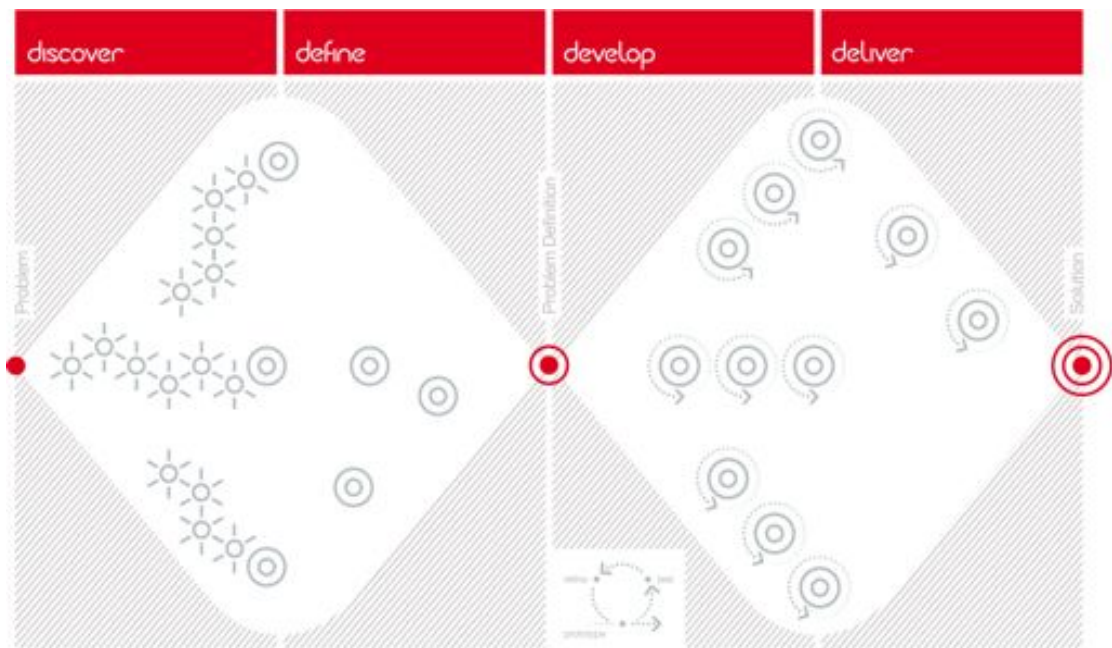
Figure 1.5. The Design Council's Double Diamond Model in 2007.

From 'Eleven lessons: managing design in eleven global companies. Desk research report.'

(Design Council, 2007b: 10)

The Marketing Design Fusion model received mixed responses from designers where some used the process to frame what they did in the projects[63] while others did not reference the model in their project. The latter was often due to design companies having formed their own design processes[64]. While the Marketing-Design Fusion Model was not widely used it provided an understanding of what was to happen in the projects for various stakeholders of Dott 07. This made the model an effective communication device at the start of projects but was of less value to in providing an in-depth understanding of the practices of designers in the Dott 07 projects. Models such as the Marketing-Design Fusion model outline the ideal design process. Models of the design process rarely capture what actually happens in design projects. In Dott 07 very few projects saw the realisation of all stages of the Marketing-Design Fusion model. Nor do models such as this help to identify new practices of design. For example if the Dott 07 projects were framed in the Marketing-Design Fusion model, innovations in design practice would have been overlooked. Such limitations of process models, were key to leading this research investigation to search for other ways to investigate and better communicate and articulate design methodology in Dott 07.

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[63] These Dott 07 projects included OurNewSchool (*Chapter 7: OurNewSchool The Designer as Facilitator* p 167) and Move Me (*Chapter 9: Move Me The Designer as Social Entrepreneur* p 215) who made the project clear by using the Marketing Design Fusion model to explain their process.
[64] For example see http://www.livework.co.uk/what-we-do and http://www.enginegroup.co.uk/service_design/our_process

Reframing design methodology

This research investigation recognises the limitations of studying design methodology as process, thus reframing design methodology from *process* to *people*. Nigel Cross defines design methodology as "the study of the principles of practices and procedures of design in a rather broad and general sense" (Cross, 1984: vii). Despite this broad definition design methodology research has investigated, emphasised and articulated design methodology primarily in terms of it as a process. The Design Methods Movement came into being in the 1960s establishing design methodology as an important facet of academic design research (Cross, 2007). The Movement recognised that better awareness of design methodology was needed if designers were to participate in more complex problem solving. John Chris Jones (1971/1992) presented a model of levels of designing (Figure 1.6) identifying that designers can design for components, products, systems and communities.
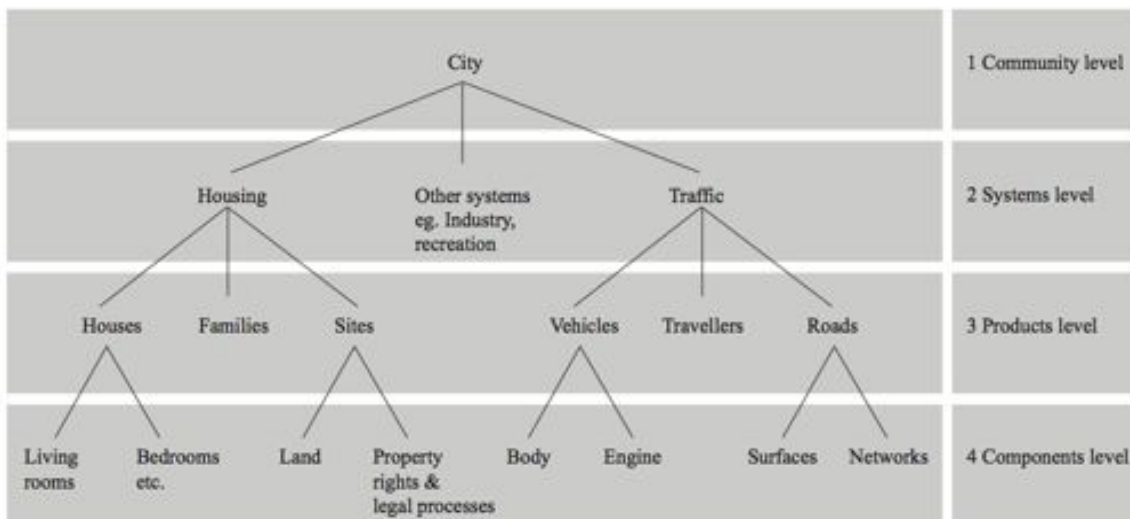
Figure 1.6. John Chris Jones's model (1971/1992: 32) of levels designers can design for which shows that at the systems level "many of the unsolved problems of designing occur"

Jones used the model to show that the systems and community levels were "beyond the scope of traditional designing and it is below the level of effective community action" (Jones, 1971/1992: 32). Jones stated the need for new methods and "multi-professional" designers (Jones, 1971/1992: 32) who could design for this gap and create a positive impact at all levels, from components to community action.

Jones (1971/1992) and Christopher Alexander (1964) are known as the Founding Fathers of the Design Methods Movement. They led the field by articulating and codifying the design process and methods in their published work. This combined with the prevailing positivist mindset of the time, led design methodology research on a trajectory to 'scientise' design (Cross, 2007: 1). Thus from the 1960s onwards, design methodology research became almost exclusively about

investigating the design process. These reflections were key starting points for this research investigation which came to realise the limitations of design methodology research and its emphasis on the process of design in isolation of its context (the environment in which a project operates) and content (object or subject matter of a design project) (Young, 2008).

In 2008 Kees Dorst stated that design methodology research was too focused on the process of design "to the exclusion of everything else" (Dorst, 2008: 5). He maintained that design methodology research omitted the study of other dimensions that needed to be investigated to "gain a deeper understanding" of design methodology including:

- The *object* (content) of design activity;
- The *context* in which designing takes place; and
- The *actors* involved (Dorst, 2008).

This thesis concurs with Dorst's (2008) argument that investigating the process of design is not enough, in order to understand design methodology. Its view is that a "deeper understanding" (Dorst, 2008) of design methodology is brought about by understanding *how* and *why* particular design practices are used. As outlined in *Chapter 3: Research Methodology* (p 54), this research investigation endeavours to look at different ways to enhance the understanding of design methodology and recognises that the gap in design methodology research is the study of the designers themselves, or what Dorst (2008) calls the *actors* involved. Dorst states that the designer is "still the missing person in design research" (Dorst, 2008: 8) and today this gap is still not being filled.

Many other authors and critics have recognised the need for more research into the different roles of the designer. Myerson summarised the key themes from the InterSections 07 conference as being "different models of design practice – different roles for designers" as strategist, co-creator, storyteller and rationalist (Myerson, 2008). In the following year, the *Changing the Change Conference* in Italy explored design for sustainability[65] and was "an international inquiry among researchers to see what they are working on… to bring important issues into focus" (Manzini, 2009: 5). Emergent research themes formed the *Design Research Agenda for Sustainability*, identifying one such as:

> "Understanding the new *designer role*: designers as connectors and facilitators, as quality producers, as visualisers and visionaries, as future builders (or co-producers). Designers as promoters of new business models. Designers as catalysts of change" (Manzini, 2009: 10).

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[65] Manzini defined 'Design for sustainability' as "everything design can do to facilitate the social learning process toward a sustainable society. That is, to sustain promising social and technological innovations and to re-orient existing drivers of change towards sustainability" (Manzini, 2009: 12)

While both conferences identified different roles of the designer, neither explored what these roles meant and which practices of designers are entailed in them.

Between 2007-2008 when *InterSections* and *Changing the Change* took place, this research investigation was in its early stages. It was not until later in 2009, that the different roles of the designer came to be the central focus of this research. As this emerged, reflections on the conference themes were used to confirm that designer roles was a valuable topic area for investigation. In particular the roles of designers in design for social good[66] and for design methodology research (More discussion in *Chapter 2: Literature Review*, p 23).

Academic research and conferences were not the only areas to recognise that research into designer roles is needed. In industry, observations[67] throughout this research investigation identified that the study of different designer roles could be beneficial to design practitioners and design practices. In the early stages of this research, conversations and field research identified that designers seemed to be uncertain about their identity and value. This characteristic of the industry further validated the direction of this research investigation, to explore the different roles of designers and their relevance to academia and practice.

This research reframed design methodology from the study of process, to design methodology as the study of people, or, the different roles of the designer. In this process of reframing, novel research methods were used to explore design methodology in terms of the different designer roles. As Dorst encouraged, "in the face of such an immensely complex area as design, only experimental methods can bring the clarity and understanding we are seeking" (Dorst, 2008: 21). These novel research methods are outlined in *Chapter 3: Research Methodology* (p 54).

This research argues that in order to explore, understand and articulate the different dimensions of design methodology, research must reframe design methodology from *process* to *roles*. This research primarily focuses its attention and explorations on the actors, that is the designers, who assume a number of roles in design projects. In order to do this, research studies must seek new and better ways to conduct academic design research, being open to and pursuing methodological innovations in design PhDs (Yee, 2008) that bring about new understanding and deeper insight into design methodology.

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[66] As Emilson et al propose; "some reflections should also be done about the role of the designer" (Emilson et al, 2011) in particular projects that use design for social innovation.

[67] Many such observations and conversations on using a single and dominant role of the designer occurred through Service Designing network events such as Service Design Drinks and Service Design Thinking which were attended between 2008 and 2010. See http://servicedesigning.org/cities/london this was an important element contributing to the process of knowledge building described in *Chapter 3: Research Methodology* (p 23).

The different roles of the designer in Dott 07

One of the most surprising realisations in investigating designer roles is that while the discourse recognises[68] and identifies[69] new and different roles of designer, little published research can be found that interrogates them and the value designers bring to design projects. This research investigation identifies the different roles of the designer in the Dott 07 projects. In order to interrogate the roles, each project draws upon the most dominant role in order to bring it into scrutiny and understand it through analogous literature reviews[70]. The reviews helped recognise key practices of the roles and identify their distinctiveness, in other words the valuable contributions designers made in the Dott projects. The different roles of the designer and their corresponding Dott 07 projects are illustrated in Figure 1.7 below.

Project name	Designer role	Literature review source (fields and disciplines)
Alzheimer100	Designer as Co-creator	Co-design
Design and Sexual Health (DaSH)	Designer as Researcher	Design Research; Ethnographic Research; Market Research
OurNewSchool	Designer as Facilitator	Design; Facilitation
New Work	Designer as Capability Builder	Design; Organisational Development
Move Me	Designer as Social Entrepreneur	Social Entrepreneurship
LowCarbLane	Designer as Provocateur	Design Activism; Critical Design; Futures Thinking
Urban Farming	Designer as Strategist	Design; Strategy

Figure 1.7. The different roles of designers in the Dott 07 projects

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[68] Demonstrates and awareness by a simple statements such as 'designer roles have changed.'
[69] Where a particular role is stated e.g. 'designers are now facilitators' and with little to no elaboration on the practices of the designer as facilitator. A list of literature where both recognition and identification of designer roles can be seen in *Chapter 2: Literature Review* (p 52).
[70] As these roles pre-exist in other disciplines.

Research aims and objectives

The key aim of this research investigation is to understand design methodology in design for social good through seven Dott 07 projects. It does this through:

- Reframing design methodology as the process of design, to seeing design methodology through the lens of the role of the designer;
- Using the qualitative research alongside secondary sources of research to create case studies of the Dott 07 projects for analysis and discussion;
- Identifying a dominant role of the designer in each Dott 07 project;
- Interrogating and discussing these roles using literature reviews from various fields and disciplines to identify key practices and the value of the designer; and
- Articulating (both in this thesis and throughout peer review sessions) the valuable contributions of designers in these roles, which relate to the greater context of using design for social good. If designers can articulate their value to other stakeholders, at the point of project inception, this will enable them to participate more in finding solutions to local, regional, national and global issues.

Thesis outline

This thesis comprises of a number of chapters. *Chapter 1: Introduction* (p 2) provides an overview of the research focus, Dott 07 and its projects. *Chapter 2: Literature Review* (p 23) shows that design methodology research heavily emphasises and encourages the codification of the design process and its methods. This chapter reflects on the history of the Design Methods Movement to understand how design methodology had been investigated and articulated, mostly as a process, over the past 40 years. It then juxtaposes this with contemporary views of design methodology, referring to Dorst (2008) and practicing designers in the qualitative research who critique design methodology research in terms of its relevance to practice. These contemporary views illustrate the need to change how we view, investigate and articulate design methodology.

To look at design methodology differently, research must be done in new and different ways. As Einstein once said: "We can't solve problems by using the same kind of thinking we used when we created them" *Chapter 3: Research Methodology* (p 54) looks at how this research investigation was undertaken. This research began by exploring design methodology through the context, content and process (Young, 2008) of each Dott 07 project. The research was based upon Grounded Theory where theory emerges from the data collected (Glaser and Strauss, 1967) and this included an analysis of project materials, semi-structured interviews with designers and stakeholders of each project, the development of case studies (Yin, 1994) and

Industry Ethnography[71]. Novel research methods were also employed in analysing the research such as the use of visual case studies and successive peer reviews. This hybrid research methodology generates knowledge based on the theoretical concepts of layering (Heskett, 2002); intersecting strands of data (Derrida in Pryke et al, 2003: 31); and the stockpiling of knowledge (de Certeau, 1986). This chapter outlines the research methodology and methods employed to gain new insight into design methodology through Dott 07 and its projects.

The thesis used the Dott 07 projects as evidence of design practice to identify seven different roles of the designer in design for social good. Looking at each Dott 07 project a dominant role of the designer was drawn upon to investigate and interrogate design activity. Comparing and contrasting the roles with their descriptions in literature across different disciplines, identifies the designer's key practices in their corresponding roles. The use of analogous literature also helped identify the value designers bring to projects where design is used for social good. This became especially apparent where literature, from analogous fields such as strategy, organisational development, entrepreneurship and facilitation were used to provide an understanding of the roles.

The short *Chapter 4: Introduction to the Dott 07 case studies* (p 97) outlines how the subsequent seven chapters are structured in identifying and discussing designer roles. These chapters, *Chapters 5-11* (p 101-288), can be seen as seven independent essays which present a *case study* of a Dott 07 project followed by a corresponding *discussion*. The complexity of the issues dealt with in the projects; the diversity of the design companies and design practices used (e.g. processes, methods, approaches); and the varying results of the Dott 07 projects, led the thesis structure to be formed as seven independent chapters that each accommodates a case study, followed by a discussion.

Each chapter follows a common structure (presented in further detail in Figure 4.2 of *Chapter 4: Introduction to the Dott 07 chapters,* p 99). The chapter firstly presents an in-depth *case study* of the project complied from a variety of sources from project documentation and artifacts to semi-structured interviews with designers and project stakeholders. The case studies are 'in-depth' because they not only state *what* the designers did but also *why*. The following *discussion* identifies the dominant designer role in the project and outlines a definition of the role. Definitions of the roles are informed by literature reviews from within the design discipline and from disciplines outside of design. The latter were used where it was found that the identified role had already well-developed definitions and discussions in another discipline. Integrated definitions of the roles are formed by 3-4 key practices of the designer. These practices are illustrated and discussed through the design activity in the case studies.

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[71] Explained fully in *Chapter 3: Research Methodology* (p 54).

Finally, in each Dott 07 chapter, the value of the designer and overlaps in the seven roles are discussed and articulated. The value of the designer emerged from undertaking analogous literature reviews where the activities of the designer could be compared and contrasted with more conventional definitions of the roles in other disciplines. This articulation helped identify the valuable contributions of the skills, approaches and methods designers bring to address social issues. Such articulations are important where designers increasingly have to work with other disciplines to address the complex issues faced by society. It helps designers to become acknowledged as a valuable and distinctive player among multi-disciplinary co-operations that aim to address local, regional, national or global issues.

The final chapter of the thesis, *Chapter 12: Conclusion* (p 289), summaries the case studies and their discussions. As each Dott 07 chapter accommodates a *case study* and *discussion*, there is no 'discussion chapter' like one finds at the end of a more conventional thesis structure. The *Conclusion* validates the seven designer roles of Dott 07 and summarises these roles – their practices and their valuable contributions where designers use design for social good. This final chapter also discusses several aspects of this new knowledge including the complexities of the roles; the novel research methods employed in this investigation; and the future research questions that have arisen from this research and may orient and signpost further explorations into related topical areas including that of the different roles of the designer in design for social good.

Chapter 2

Literature Review

Chapter 2: Literature Review

"… try to kind of define it it's like trying to define a butterfly.

As soon as you pin it down, it dies"

– John Thackara on innovation (but the same can be said of design).

Reflections on design methodology: Past, present and future

Nigel Cross describes design methodology as "the study of the principles of practices and procedures of design in a rather broad and general sense" (Cross, 1984: vii; Cross, 2002). The words 'methodology' and 'methods' are often used interchangeably but this research investigation takes design methodology to mean all the activities a designer undertakes while designing including the approaches, process and methods of design. It sees design approaches as the way a designer uses the design process and its methods in a design project for example, a designer could take a co-design approach where they use the process and methods of design to involve a number of stakeholders throughout a project[72]. The design process is known in this research investigation as, "a set of actions, or methods, to be carried out in series, or in parallel" (Jones, 1971/1992: xxvi). And finally methods are the different tools designers' use as they move through the design process. Or as Jones states, "A design method is any action one may take while designing" (Jones, 1971/1992: xxv). The relationship between design process and methods is that the design methods populate the process. This chapter outlines design methodology- its history, contemporary opinions and how we can enrich the knowledge of design methodology through exploring its different dimensions.

The Design Methods Movement was established in the 1960s and has been a subject of inquiry for design research that has moved through several differing schools of thought over the decades. The codification of the design process and design methods heavily dominated design research and this has seen only a moderate progress in design methodology research since its founding fathers first published literature on design methodology in the 1960s. In 2008, Kees Dorst critiqued design methodology research stating it over-emphasised on the design process to the exclusion of other dimensions of what constitutes as design methodology. Dorst urged the design research community to focus on other dimensions of design methodology (also see Young, 2008) these being:

- The *content* of the design problem;
- The *context* for where designing takes place; and
- The *actors* in designing i.e. designers and project stakeholders (Dorst, 2008).

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[72] Alternatively, the designer could take on a consultative approach where the designer establishes a designer-client relationship with less collaboration in the design process.

Dorst maintains that re-conceptualising design methodology to include these dimensions is needed in order to gain a "deeper understanding of design activity itself [and] enrich academic design research" (Dorst, 2008: 6). Dorst's (2008) viewpoint is strongly shared in this research investigation. Its proposition and exploration is to look at design methodology as *roles of the designer*. In doing so, it focuses on the *actor* in designing and seeks to enrich our understanding of design methodology in areas that are not that well articulated and elaborated in design research. This research aims to add valuable dimensions to design methodology research to provide a better understanding and articulation of what designers do for all stakeholders of design.

This chapter will explore design methodology, reflecting on its historical development in the Design Methods Movement; capture current opinions of contemporary designers on design methodology; and propose that we reframe investigations into design methodology by looking at design methodology less as the process of design and more as the roles of the designer.

Design methodology in the 1960s: Design methodology as design process

Cross identifies that the Design Methods Movement was a "period of study of design methodology" from the 1960s to the early 1980s (Cross, 1984: 303). The Design Methods Movement was inaugurated with the 'Conference on Design Methods' held in London in 1962 (Cross, 2001: 49; Jones and Thornley, 1963 in Cross, 2007: 1).

Subsequent conferences in the UK such as the 'The Design Method' in Birmingham in 1965 and 'Design Methods in Architecture' in Portsmouth in 1967, contributed to the development of the movement (Cross, 2007: 1) as well as the publishing of several books on design methods and methodology (such as Asimow, 1962; Alexander, 1964; Archer, 1965; and Jones 1970/1992). John Chris Jones and Christopher Alexander are commonly known as the founding fathers (Cross, 2001; Bayazit, 2004) of the Design Methods Movement and their published works contributed significantly to the field.

Christopher Alexander (1964) authored the first PhD in design methods called, *Notes on the Synthesis of Form.* Alexander codified a method which looked at how designers could overcome limited "cognitive capacity" (Alexander, 1964: 5) when designing. Alexander used an example of designing a kettle with no less than twenty-one requirements to demonstrate a method were a designer developed a "hierarchy of concepts" so all requirements could be viewed and dealt with at once (Alexander, 1964: 62) (Figure 2.1).
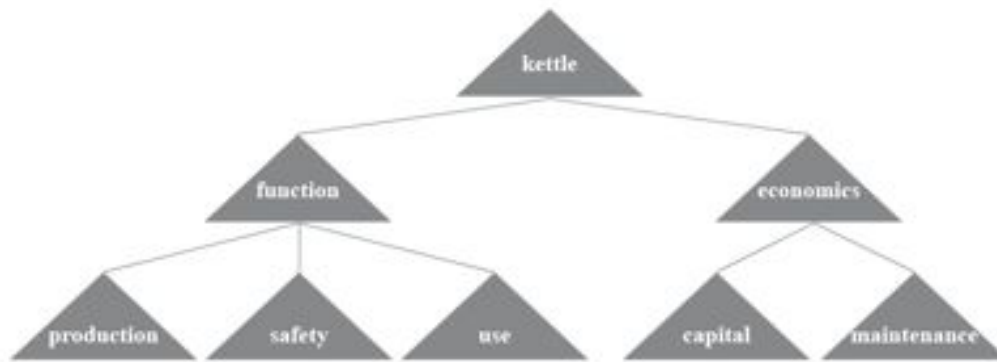
Figure 2.1. Christopher Alexander's (1964) 21 specific requirements for designing a kettle

While Alexander (1964) codified one design method, Jones (1971/1992) documented no less than thirty-five that appeared in the very first book on design methods, *Design Methods: Seeds of Human Futures*. In it Jones stated the need for new design methods as the "traditional method of design-by-drawing was too simple for the growing complexity of the man-made world" (Jones, 1971/1992: 27). New design methods would help designers address "massive unsolved problems that have been created by the use of man-made things [and the] human failures to design for conditions brought about by the products of designing" (Jones, 1971/1992). These problems included complex systemic and community level problems such as traffic congestion and shortages of low-cost housing and Jones (1971/1992) lays out these problems in a topology of four levels spanning the design of components; products; systems; and community[73].

The codification of design methods by Jones was underpinned by his belief that unless designers better understood design methods and were made more aware of them, they could not contribute to more complex problems:

> "Many of the unsolved problems of designing occur at the systems level of the hierarchy. This level is at present beyond the scope of traditional designing and it is also below the level of effective community action" (Jones, 1971/1992: 32).

Making methods more explicit would also aid in managing complex problems where other stakeholders are involved in the process. As Jones wrote:

> "Methods are attempts to make public the hitherto private thinking of designers; to *externalise* the design process… The underlying aim is to make designing more manageable, particularly at a systemic level. A major advantage of bringing design into the open is that other people, such as users, can see what is going on and contribute to its information and insights that are outside the designers knowledge and experience" (Jones, 1971/1992: 45).

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[73] See an illustration of this in *Figure 1.6* of *Chapter 1: Introduction* (p 16). A more recent model can be found in Young (2008) who presents a 'world-view model of levels of design content' where design occurs on the level of (ascending in levels of complexity) D1 – Product; D2 – System; and D3 – Policy.

Jones (1971/1992) also presented and described a codified three-stage process, which has had a significant influence on design methodology in research and practice[74]. The model showed that a designer progressed through three stages, these being analysis, synthesis and evaluation and Jones named and explained these as divergence, transformation and convergence to illustrate the:

- Breaking down of the problem into smaller pieces;
- Putting them together in a new way; and
- Then "putting this new arrangement into practice" (Jones, 1971/1992: 63-64).

Such codification of the design process and methods became very popular especially alongside the prevailing scientific ideology of the time. As Cross recounts:

> "Aspirations to scientise design surfaced strongly.... the desire of the new movement was… to base design process (as well as the products of design) on objectivity and rationality. The origins of this emergence of new design methods in the 1960s lay in the application of novel, scientific, and computational methods" (Cross, 2001: 49).

This led to a Movement that "did not have the effects Jones had hoped for" (Mitchell in Jones 1970/1992: xi). The Movement adopted an approach to design methodology research that "took design to be a completely rational, explicable process and used the methods as pretext for excluding intuition altogether" (Mitchell in Jones 1971/1992: xi).

Other authors fuelled the 'scientising' of design. Despite having different intentions for what science meant, Richard Buckminster Fuller, architect, designer, futurist and author called for "design science revolution" in the 1960s "based on science, technology and rationalism, to overcome the human and environmental problems that he believed could not be solved by politics and economics" (in Cross, 2006: 96). Herbert Simon a Nobel laureate also called for "a science of design" in his book, *Sciences of the Artificial*[75]. Simon suggested that design was important and central to all professions saying:

> "Schools of engineering, as well as schools of architectures, business, education, law and medicine, are all centrally concerned with the process of design" (Simon, 1996: 56).

He saw design as a science, a discipline in its own right, saying:

> "The natural sciences are concerned with how things are… design, on the other hand, is concerned with how things ought to be, with devising artifacts to attain goals" (Simon, 1996: 58-9).

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[74] For example, the Design Council describes their Double Diamond model as moving through divergent and convergent phases which is similar to some of Jones's explanation of the design process.
[75] First published in 1969.

But design had to legitimise itself by adopting:

> "… professional responsibilities just to the degree that they can discover a science of design, a body of intellectually tough, analytic, partly formalised, partly empirical, teachable doctrine about the design process" (Simon, 1996: 68-9).

Simon suggested a balance of the scientific and the empirical in a science of design, yet attempting to assert that design was like the sciences drove design methodology to be subjected to the positivist approaches for investigating and articulating design. As McCrory remarked about the ethos of the time, "the design method is as inherent to the design process as the scientific method is to scientific exploration" (McCrory in Gregory, 1966: 12). As a result, the design process and methods were analysed and then codified. This resulted in countless design process models being developed. Such as in McCrory defined design methodology and methods to be "the framework for the design process within which a sequence of action steps can be based and from which check-points to evaluate progress can be established" (McCrory in Gregory, 1966: 11). He illustrated a graphical representation of the design process (Figure 2.2).

Figure 2.2. McCrory's (1966) graphical representation of the design process

Others models that emerged in the same era including Asimow's (1962) model of the design process (Figure 2.3) and Archer's (1965) model of the design process which appeared in the Council of Industrial Designers (CoID, now known as the Design Council) *Design* Magazine (Figure 2.4). Design process models continued to be developed over the next five decades (such as Luckman, 1967; Norris, 1963; Alger and Hays, 1964; Walker, 1989 in Design Council 2007b; Pugh, 1990; Lawson, 1994; Cooper and Press, 1995; Clarkson and Eckert, 2005). Dubberly collated over one hundred design and development process models between 1939 and

2004 in the report *How do you design? A compendium of Models* (Dubberly, 2004). The proliferation of design process models demonstrated: "the belief that human behaviour could only be adequately explained in terms of observable, measurable and replicable patterns of activity" (Holness, 2000: 7). Thus:

> "… the whole process of design, it was believed, could be clearly and explicitly stated, relevant data gathered, parameters established, and an ideal artifact produced" (Rowe, 1996: 48).

The general form of design process models appeared as black and white graphic illustrations which were usually linear, and often included feedback loops, that is where steps would be repeated suggesting that while the design process was linear, it was also circular, or iterative, at certain points (See Press and Cooper, 2003: 104-107). The latter rose in response to the criticism of linear formats of the design process which suggested "that a project could be solved in one go, so revised models that incorporated loops and iterative phases… were developed" (Design Council, 2007b).
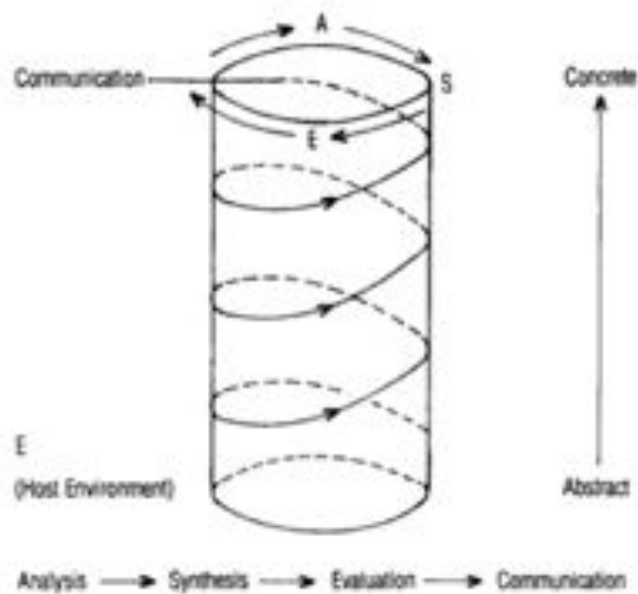
Figure 2.3. Asimow's (1962) model of a design process
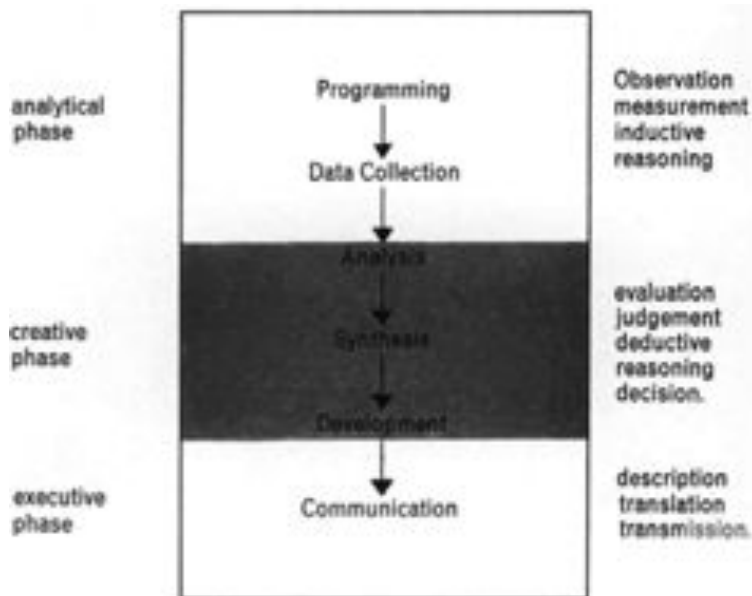
Figure 2.4. Archer's (1963) model of the design process for Design Magazine

Of the development of design methodology in the 1960s Jones reflects:

> "Design methods became more theoretical and many of those drawn to the subject turned it into the academic study of methods (methodology) instead of trying to design better things. The language uses… became more and more abstract. The words lost touch with how it feels to be a designer" (Jones 1971/1992: xi).

By the 1970s the founding fathers of the Design Methods Movement were rejecting the scientific and behaviorist direction of design methodology. Both Jones and Alexander expressed a clear rejection and a disassociation with the movement. Alexander stated:

> "I've disassociated myself from the field. There is so little in what is called 'design methods' that has anything useful to say about how to design buildings that I never even read the literature anymore. I would say forget it, forget the whole thing" (Alexander, 1971 in Cross, 2007).

While Jones pointed out:

> "I reacted against design methods. I dislike the machine language, the behaviourism, the continual attempt to fix the whole of life into a logical framework" (Jones, 1977 in Cross, 2007).

Design methodology in the 1970s: Design methodology as wicked problems

By the 1970s the Design Methods Movement was in turmoil with the rejection of its development by the founding fathers. It was Rittel and Webber's "wicked problems" that helped revive the Design Methods Movement when they showed that the characteristics of problems

designers dealt with were "unameanable" to the scientific approaches of design methodology in the 1960s (Cross, 1984; 2001; 2007). Rittel defined wicked problems as a:

> "Class of social system problems which are ill-formulated, where the information is confusing, where there are many clients and decision makers with conflicting values, and where the ramifications in the whole system are thoroughly confusing" (Rittel, 1972 in Buchanan, 1992: 11).

Wicked problems became "widely recognised" (Cross, 2007: 7) in characterising all problems designers dealt with. This built consensus among the design community during the 1970s that the development of design methodology in the 1960s was unsuitable to contemporary design problems. Rittel called design methodology of the 1960s first-generation methods and stated that they were "based on the wrong premises to be really useful in design" (Rittel in Cross, 1984: 304).

Thus the 1970s became a time of renewal for the Design Methods Movement. A second-generation of design methods explored new ways of investigating design methodology using more empirical approaches such as protocol analysis which "involve[d] the recording of problem-solvers concurrent verbalisations under controlled conditions" (Holness, 2000: 9). Research under controlled conditions was seen as very rigorous, but Darke (in Cross, 1984) took a less rigorous (Holness, 2000: 10) approach using semi-structured interviews to show how architects dealt with wicked problems. Her interviews showed that designers used "primary generators" ie. small objectives as a:

> "… way into the problem […] a way of reducing the variety of potential solutions to the as yet imperfectly understood problem, to a small class of solutions that is cognitively manageable" (Darke in Cross, 1984: 167)[76].

In Darke's research the "consistency of finding across a number of case studies proved overwhelming" (Holness, 2000: 10). Primary generators used by designers challenged most 1960s design process models, which usually began "by listing all the constraints" (Darke in Cross, 1984: 167) in a stage of analysis. Wicked problems and empirical findings such as Darke's (1979) primary generator were important demonstrations of the inadequacies of the 1960s design methodology as process models. This led to the reappraisal of design methodology research in the 1980s.

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[76] Darke found that designers began by "Fix[ing] on a particular objective or small group of objectives, usually strongly valued and self-imposed [and] these major aims, called here, primary generators, then give rise to a proposed solution or conjecture, which makes it possible to clarify the detailed requirements as the conjecture is tested to see how far they can be met" (Darke in Cross, 1984: 186-7).

Design methodology in the 1980s: Reappraisal of design methodology and design research

Despite more than three decades of the Design Methods Movement and design methodology research by the 1980s there was "no single model which [was] agreed to provide a satisfactory description of the design process" (Clarkson and Eckert, 2005). Design methodology proved to be a popular topic where "'doing design research into design processes' [had] become synonymous with 'doing design research'" (Dorst, 2008: 6).

But by the 1980s Holness explains that a move to reappraise the nature of design methodology was occurring where "methodologists began to question the philosophical basis on which design methods had developed" (Holness, 2000: 11). This led to the reappraisal of design research itself with many researchers, such as Archer (1980) and the Design Research Society (both in Jacques and Powell, 1981) positing questions and debating, "What is design research that it is different from other forms of research?" Cross (2001; 2007) notes that the emergence of design as a discipline was also happening in the 1980s marked by the launch of a number of design research journals (such as *Design Studies* in 1979 and *Design Issues* in 1984) and books publishing the results of design research (Cross notes Bryan Lawson's, *How Designers Think,* and Peter Rowe's, *Design Thinking*). Cross reflects on the 1980s as an era which saw:

> "The establishment of design as a coherent discipline of study in its own right, based on the view that design has its own things to know and its own ways of knowing them" (Cross, 2007: 3).

Cross (2006) called this "designerly ways of knowing" i.e. that there were unique ways of gaining knowledge in design that was specific to design. Donald Schon's (1983/1991) concept of the Reflective Practitioner was a powerful demonstration of one such way of "designerly ways of knowing" that did not require an articulation of a design process model to describe the practice of design. Schon throughout his explorations of how professionals think in action, coined the phrase 'reflection-in-action' to describe how "both ordinary people and professional practitioners often think about what they are doing, sometimes even while doing it" (Schon, 1983/1991: 50). One of his key case studies included professionals in design, where Schon observed how designers have a reflective conversation with the situation. Schon describes this in detail:

> "[The designer] shapes the situation, in accordance with his initial appreciation of it, the situation 'talks back,' and he responds to the situation's back talk […] in answer to the situation's back-talk, the designer reflects-in-action on the construction of the problem, the strategies of action, or the model of the phenomena" (Schon, 1983/1991: 79).

In his book, Schon proposed "an epistemology of practice implicit in the artistic, intuitive processes which practitioners bring to situations of uncertainty, instability, uniqueness and value conflict" (Schon, 1983 in Cross, 2007: 3). He critiqued the "technical rationality" of professional knowledge which saw "the application of scientific theory and technique" to practice (Schon 1983/1191: 30) proposing the concept of the reflective practitioner as the antidote.

Schon's contribution was "an attempt to address the dilemma and balance between rigour and relevance" (Spencer, 2009: 2) and paved the way for the acceptance of new forms of design research such as "practice-centred research" that regards design practice as "a component within a research degree submission" (Press and Cooper, 2003: 127) and Critical Design, pioneered by Anthony Dunne (1997) which uses an approach of undertaking and reflecting on design projects to draw out and discuss issues in design[77]. McCullagh (in Dudley and Mealing, 2000) frames such research approaches as design praxis where "practice [is] informed by theory, and theory informed by practice" (McCullagh in Dudley and Mealing, 2000). More recently Yee (2009) explored methodological innovations in Design PhDs. She studied and compared six Design PhDs to show the innovative use of research methods including that of 'Pick and Mix' where the researcher "combines methods from the social sciences, humanities and hard sciences to derive a suitable model of inquiry" (Yee, 2009). This also included uses of 'Visual Analysis' where "fieldwork data was translated into a range of visual representations" for comprehension (Yee, 2009). Dunne (1997), McCullagh (in Dudley and Mealing, 2000) and Yee (2009) show in detail the emergence of design being "studied on its own terms, within its own rigorous culture, based on a reflective practice of designing" (Cross, 2007: 3).

Since the 1980s, design has emerged to become its own discipline. However, the reappraisal of design research continues today. Buchanan asserts that "design has no special subject matter of its own apart from what a designer conceives it to be" (Buchanan, 1992: 12) and a broad range of topics are explored in design research, with design research communities continually reviewing and exploring how research into design is done and what constitutes as design knowledge.

One of the most recent reviews was undertaken in 2008 at the *Changing the Change Conference* in Italy where Nigel Cross stated that design research needed to be easily articulated, communicated and replicable[78]. Ezio Manzini (2009) added more detail to this in his paper, 'New design knowledge'*,* that reported and summarised key discussions from the conference.

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[77] Frayling (1993/4) frames such an approach, doing research *through* design is based on Herbert Read's (1943) idea of *Education through Art.*

[78] Taken from my notes from the conference here: http://letterstoaustralia.blogspot.com/2008/07/changing-change-in-turin-italy.html. Bruce Archer's (1995) 'The Nature of Research' was an early and influential paper that discussed characteristics of research in the sciences, humanities and the arts. He also discusses here "research through practice" elaborating on) Christopher Frayling's (1993/4) topology of academic design research as being research into, for and through design. Archer was a colleague of Frayling's at the Royal College of Art at the time.

Manzini defines design knowledge as:

> "A set of visions, proposals, tools and reflections: to stimulate and steer strategic discussions, to be applied in a variety of specific projects, to help understand what we are doing or could do. This knowledge has to be explicit (to be clearly expressed by whoever produces it), discussable (to permit the exchange of opinions among many interested interlocutors), transferable (to be applicable by other designers) and possible to accumulate (to form a reservoir of design knowledge that could be the starting point for producing further knowledge by other researchers)" (Manzini, 2009: 9).

Since the 1980s a reappraisal of design methodology and design research has occurred. Design methodology research began questioning its philosophical basis leading to a broadening of methods for investigating design. This has resulted in the discovery of different approaches such as practice-centred research (Frayling, 1993) and Critical Design (Dunne, 1997)[79].

Contemporary views of design methodology

Today many design researchers, authors, writers and companies still continue to develop models of the design process (For example see Press and Cooper, 2003; Design Council, 2005; Clarkson et al, 2007) and capture their methods (Engine, 2008; Design Council, 2008b[80]; Tassi, 2009[81]; Dott Cornwall, 2010[82]). In 2005 the Design Council proposed a model called the Double Diamond, to represent four phases of the design process these being Discover, Define, Develop and Deliver[83] (Figure 2.5). The Design Council argue that the Double Diamond model differs to most 1960s models where it "places emphasis on the Discover phase as one of the most critical, and the one which makes best use of the designer's knowledge and skills" (Design Council, 2007b: 10). In this phase the designer, "explores a design problem through user research and creative thinking" (Design Council, 2005b). This broad phase involves "divergent thought" (Design Council, 2005b) which seeks to generate a multitude of ideas for decision-making for the next Define phase.

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[79] For more on methodological innovations in design doctorates see Yee's (2009) review.
[80] In 2008, the Design Council created a Methods Bank wiki: http://www.methodbank.com/cgi-bin/view
[81] http://www.servicedesigntools.org
[82] http://www.dottcornwall.com/design-matters/design-methods
[83] Where each stage could be "stretched and morphed depending on the project's characteristics [and] each of the phases consists of a series of iterative loops where exploration and testing can happen" (Design Council, 2007b: 10). Note that this the latest iteration of the Double Diamond model. An earlier version can be found in *Figure 1.5* in *Chapter 1: Introduction* (p 1).
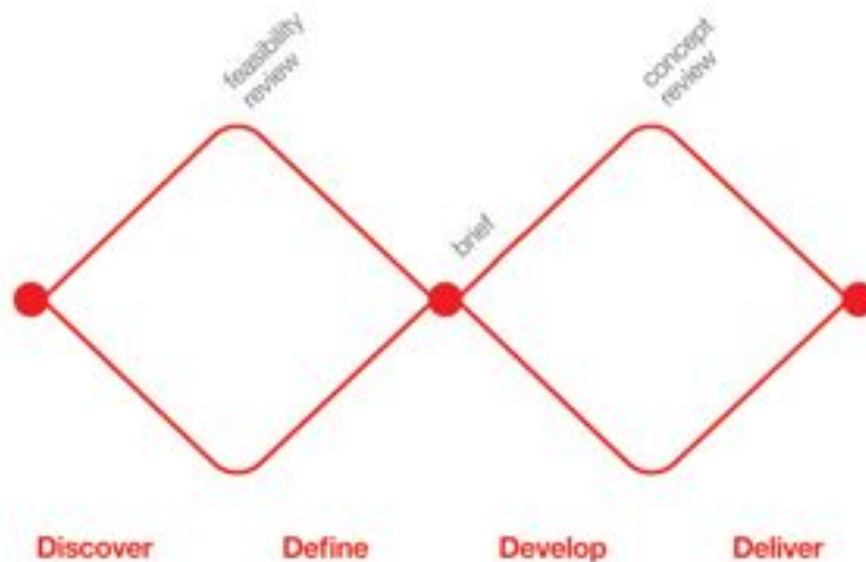
Figure 2.5. The Design Council's Double Diamond model in 2012.
From http://www.designcouncil.org.uk/designprocess

The history of the Design Methods Movement showed how design methodology was commonly viewed and articulated as a codified process. The 'scientising' of design saw a backlash of the Movement's founding fathers and Press and Cooper add that the Design Methods Movement shaped an "uneasy relationship" between academia and practice[84]:

> "Theory and practice have had at best an uneasy relationship within design. The design methods movement of the 1960's and 1970's was seen as an attempt to graft a rationalist cricket bat of method onto the delicate intuitive tomato plant of practice. While the movement raised relevant questions, it's distancing from the everyday practice of design (and the real world of designers) consigned it to a marginalised academic role. As a consequence the theoretical base of design has remained to a large extent impoverished, vulnerable to anti-intellectualism and perhaps justifiably, 'few practicing designers now see the relevance of what they know of design theory to what they practice'" (Press and Cooper, 2003: 127).

Dorst maintains that while this division between academia and practice is "something of a classic observation" much of the design methodology research community "has always shrugged off" the cynicism of practice, or industry, toward design methodology (Dorst, 2008: 7). But it is not just the research community that has "shrugged off" the disconnect between academia and practice in this debate, Young maintains:

> "Regrettably, design practitioners tend to dismiss opportunities to contribute to the debate about design methodology" (Young, 1996: 7).

Dorst believes that the design research community should address this tension "take it very seriously, and ask ourselves: 'is it true?', 'how come?', and 'why?'" (Dorst, 2008: 7). Design

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[84] For another discussion of this also see Young (2008).

methodology researchers should also ask designers rather than 'ask themselves' these questions. Therefore this section of the literature review includes contemporary views of design methodology from a practitioner point of view discovered in the qualitative research. Such opinions and viewpoints cannot be found in the literature and are important to understand if this research is to make valuable and relevant contributions to both academia and practice. Designers generally display a cynicism toward design methodology and methods. Some, who had already been interviewed by other researchers conveyed their fatigue on the topic by stating that "asking about design methods… it's just a bit annoying" (Designer 11, 2008). Further investigation and analysis in the qualitative research revealed many underlying reasons for this tension, which is important to correlate in this chapter with the discourse of design methodology research in the literature. In the qualitative research several arguments emerged as to why designers did not feel that design methodology research was relevant to them and their practices. They cited reasons such as; being more concerned with the outcomes of the project than the process; the inaccuracy of the phrase of 'design methods' which suggested designers owned borrowed methods from other disciplines such as marketing; and the strongly expressed importance of knowing-how to use design methodology over knowing-what of its process[85].

Outcomes over process

It is likely that the key reason for the tension between academia and practice in the space of design methodology is the different emphasis about what is important in design work. For designers the outcomes of a design project are key[86] whereas in academia, the study of the process is the focus. As one Dott 07 designer states:

> "… generally speaking, the majority of designers… are so much more outcomes focused than they are process focused. They couldn't give a shit about the process. They just want to know if it looks good at the end of the day" (Designer 5, 2008: 12)

In other conversations with designers they expressed thinking about the end point first and then worrying about how to get there later[87]. Designers have generally been dismissive of their process. Many designers find it very difficult to articulate and make explicit what they do implicitly and intuitively. Meanwhile academia endeavoured to codify designing. Innovation and design company, IDEO, have however attempted to bridge this divide between academia and practice with design thinking. In 2005 they coined this phrase to convey the idea that design should not be only perceived on the basis of the product it creates, but the thinking and process that produces those products. IDEO's design thinking was a demonstration that the common idea of design was focused on design as a noun, that is the products designers produce, rather

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[85] Ryle (1949) discusses the distinctions between know-how and know-that. Cross et al (in Jacques and Powell, 1981) make the distinction between know-how and know-that in design.
[86] Design is most commonly evaluated on the product of design and thus practicing designers focus on the outcome of design, rather than its process.
[87] In conversation with a freelance graphic designer.

than as a verb relating to the power and ingenuity of its process. Findings in the qualitative research further qualify the "uneasy relationship" (Press and Cooper, 2003: 27) between academia and practice.

Language

Designers expressed cynicism toward design methodology by saying that calling methods, 'design methods' suggests they are unique to design when in fact designers draw methods from many disciplines such as marketing and ethnography:

> "There [are] elements of [the] design process that we use and there are other elements of other disciplines that we use that are integrated with the design process. So it's not just design tools, it's design and anthropology and psychology tools" (Designer 1, 2008: 28-9).

The language of 'design methods' thus found very little support by designers. Designers also tended to use 'design tools' rather than 'design methods' in conversation. One designer commented that design methods sounded like "dressing up" design tools[88] and in the qualitative research one designer conveyed that "the idea of 'method' does sound quite scientific and not very designerly" (Designer 4, 2008: 12).

The successful use of methods from other disciplines was seen in projects, but they proved challenging in distinguishing the value of design. Particularly when they were compared with the fields of ethnography and marketing:

> "I think being really precious and saying 'oh, this is what designer do differently'... gets you into really difficult situations. I know from experience that you can sit in a meeting and say 'we can be really different and innovative and approach it in a completely different way than you have ever seen before. We're going to do X, Y and Z' and [the client says] 'Uh like what? The marketing company that just pitched before you?' I am sure in practice, we would probably do it differently" (Designer 4, 2008: 10).

Ownership

The language use of 'design methods' also raised issues of ownership. As designers drew methods from other disciplines they did not feel they were owned by the discipline of design. Furthermore, the ethos of designing *with* and *for* which was encouraged in Dott 07 saw designers share the use of methods with project stakeholders in the Dott 07 projects. Designers suspended ownership of methods where they needed to upskill and involve many people actively in the design process. This saw project stakeholders adopt and use design methods themselves, as one designer explains:

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[88] In conversation with a designer at Northumbria University.

"… as soon as you run a workshop with smart people, they are going to do it themselves. And they may not do it as well... [but] we are kind of a bit sick and tired of people trying to protect, or own, or claim newness around sticking Post-it notes on walls" (Designer 5, 2008: 22).

Know-how

While ownership, language and a focus on output rather than process contributed to the designer's critique of design methodology, one of the most discussed concerns of design methodology was the importance of knowing-how (to design) over knowing-that (of the design process and methods). As one designer said:

"… the important stuff, rather than the process and design methods, because I think they are well known, is how you apply them in different contexts" (Designer 11, 2008).

Cross remarks that both know-how and know-that are important, but know-how is "central to design activity" (Cross, 1984 in Young 2008). Cross et al (in Jacques and Powell, 1981) make the distinction between know-how and know-that with reference to Ryle's (1949) publication, *The Concept of the Mind*. Ryle discusses the "intellectualist legend"[89] which sees that "intelligent performance involves the observance of rules, or the application of criteria" (Ryle 1949: 29). Ryle proposes this as a myth, arguing that, "we often do not only reflect before we act but reflect in order to act properly" (Ryle, 1949: 30). This reflection-in-action was given currency in the design discipline by Schon's (1983/1991) work as previously discussed. Thus when investigating design activity, we must identify with what we already know i.e. know-that, but also identify with the know-how of the designer, who develops their practice from experience and action. But it was this "intellectualist legend" (Ryle, 1949) that led to a neglect of the importance of knowing how to perform a task, and also how to apply it in a situation. Cross et al explain the differences:

"Knowing that is the kind of knowledge which can be made explicit, which can be formulated into advice, into procedure or into organized rules for conventional wisdom [while] Knowing how can not be made explicit. It is that tacit knowledge which 'we know and cannot tell'. The architect's 'know-how' derives from the experience of planning and designing and constructing many houses, in discovering subtle tactics within the rule, of finding incidental, spontaneous ways of subverting the rules to greater benefit" (Cross et al, 1981 in Jacques and Powell, 1981: 26)[90].

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[89] Ryle states, "Theorists have been so preoccupied with the task of investigating the nature, the sources, and the credentials of the theorists that we adopt that they have for the most part ignored the question what it is for someone to know how to perform a task" (Ryle, 1949: 28)
[90] Richard Sennet (2008) also discusses similar ideas of gaining knowledge through craft in his book *The Craftsman*.

Dorst says that the limits of articulating design as process is that the process does not tell the whole picture of design methodology:

"It takes only one afternoon to explain one of the design process models to a group of design students. But knowing that model doesn't make these students a designer at all… the art of design is to deal with these *other* aspects of the design activity, the ones that a process model so conveniently ignores" (Dorst, 2008: 5).

One of the Dott 07 designers adds to this that "it's absolutely about tools, but it's more about people, skills and ability" (Designer 5, 2008: 22). Others expand on such skills and abilities by speaking of the adaptability and bespoke use of design methods in practice:

"You tend to develop [the design methods] as you go. You tweak things that you have already used before to a new situation, or you create something new" (Designer 14, 2008: 11).

Another adding that with design methods:

"You kind of have to cut the cloth to fit the particular types of people that you are going to be working with to do it. Because I think that with some methods you will get a good response for the methods, but with other people you will just get them rolling their eyes to the back of their head and not wanting to deal with you" (Designer 10, 2008: 10).

The legacy of design methodology in the 1960s is still seen in design methodology research and how design methodology is perceived by practising designers today. Darke critiques the sequential models of the 1960s by saying:

"One of the shortcomings of the early phase of the design methods research was that it concentrated on *design morphology*, a sequence of boxes bearing particular labels, rather than the way particular designers filled the boxes with concepts, and the course of the designer's concepts" (Darke in Cross, 1984: 187).

A critical part of knowing-how is the intuition of the designer. Young recounts that:

"During the early period of design research the bias towards scientific methods blinded research to the importance of the intuition component of design" (Young, 2008).

Many designers believed design methodologies did not need to necessarily be explicit as they saw design activity as an, "intuitive approach that people just kind of, know or think they know their stuff, at their fingertips" (Designer 4, 2008: 12). Another designer adds:

"Designers just have an innate ability to do! They don't necessarily consider it to be this amazingly cool, clever way of researching. They just kind of do it. And I remember you asked me ages ago if we document and keep [design process and methods] and no, because they are particular to projects and you use similar techniques…. they are just a tool, like an engineer would use, but they are not a precise scientific tool, they are kind of bespoke things" (Designer 14, 2008: 11).

Designers displayed an intuitive and tacit knowledge of design methodology rather than following a process. In the qualitative research designers often struggled to discuss their activity objectively and independently of a particular project. When I asked one designer if he could explain a general design process practiced by the design company he replied:

> "I don't know it off by heart. We have it somewhere, all stored. It's very detailed. I'm not sure the [of the] names…" (Designer 2, 2008: 19).

With little documentation of their methods and methodologies, I asked designers how they dealt with clients and project stakeholders, who would be more used to following a methodology. The same designer explained:

> "… we have to be confident about the process. You say, 'Well look, at the end of this, you know at the end of this we would have produced the right thing and that we would also be able to mobilise a lot of people like you" (Designer 2, 2008: 20).

But this ambiguity of design methodology had implications in the project as some Project Stakeholders found scheduling challenging having expressed:

> "We wouldn't always know until probably a week or two weeks in advance that something was going to be happening and that was quite problematic because obviously our diaries fill up way in advance, so probably timescales could have been managed maybe better" (Project Stakeholder 2, 2008: 14).

This demonstrates how the intuitive use of the design process can impact practical aspects of the project and raise project stakeholder concerns. Other project stakeholders spoke about their hesitation with the methods saying they; "always reminds me of party games and I am not really good with that either" (Project Stakeholder, 7 2008: 13). However, they were satisfied enough to participate in the projects and follow the lead of the designers, understanding that the use of design methodology was to bring a different approach to issues. For example, the same Project Stakeholder explained his understanding of using design methodology as a different approach:

> "I would say that if you always do what you always did, you always get what you always got… doing it the other way around we got rather different outcomes that are in many respects, more complete" (Project Stakeholder 2, 2008: 14).

It was observed that many designers in the Dott 07 projects could proceed without making design methodology as explicit especially where high levels of trust were present as a result of a strong designer-project stakeholder relationship.

The final concern that was conveyed by the designers about design methodology had to do with the perception that design methodology could stifle creativity:

> "I'm not such a methodological person in that way. So I think… with a methodology it's a way of structuring things and creativity… you don't want to

reign it in with too much structure" (Designer 12, 2008: 5).

And another designer adding:

"I think it is useful that everyone is working to the same brief…. but I think [the process of design] is very flexible and I don't think you will be able to hold people to [it]" (Designer 2, 2008: 20).

The designers displayed a variety of concerns with design methodology but they also spoke positively about it. They stated the importance of design methodology was in articulating the process by which design could inform project stakeholders of the different approach and value design could bring to social challenges. For example, a designer spoke about the visual representation of the DaSH project process (Figure 2.6) and the intent for it to show service providers such as the National Health Service (NHS) how design could be used to "re-approach their services from a user perspective" (Designer 4, 2008: 8).

Figure 2.6. A visual presentation of the DaSH project process.
Photo taken at the Dott 07 Festival, October 2007

Many designers found that design methodology was an important communication device to use with clients[91] and as a tool to help moblise teams at the early stages of a design project (Designer 2, 2008: 11). As a designer noted, "[the design process] helps to have everyone on the same page to have everyone have some general design principles" (Designer 2, 2008: 11).

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[91] Discussed in conversation with designers from Uscreates.

Finally, designers spoke positively about how design methodology, where they recognised it, could help prevent the project from straying outside its remit. And that using design methods for research, could uncover unexpected insights leading to new ideas: "You need a process to stop you wandering off into nowhere and you need tools to help you get to the unexpected" (Designer 5, 2008: 21). This echoes Jones's analogy of how designers use design methods stating that they are like "navigational tools and charts that the designer uses to plot the course of his journey so as to maintain some control over where he goes" (Jones, 1971/1992: 62). The analogy suggests that different methods may be used for each journey, echoing other views of designers who saw that the methods used throughout the process were "bespoke" (Designer 14, 2008: 11) and one must "cut the cloth to fit" (Designer 10, 2008: 10) the particular situation.

In this section contemporary views of design methodology from a practice point of view are reviewed and correlated with design methodology research literature. A number of designers displayed a cynicism toward design methodology, but also expressed that design methodology was important to practice. One of the most common concerns of the designers was that design methodology tended to emphasise the knowing-that of design activity, rather than knowing-how[92]. Their views in conjunction with literature, illustrate many of the neglected dimensions of design methodology research that Dorst (2008) proposed.

These concerns of designers represent contemporary views of design methodology research from practice. While this part of the qualitative research is not a literature review, it is relevant to discuss[93] here to understand the "uneasy relationship" (Press and Cooper, 2003: 127) between design academia and practice. This research raises issues for this investigation including:

- Shaping a vocabulary of design methodology that speaks to what designers do, while also recognising where they draw inspiration;
- Emphasising less the methods or process in design methodology and discovering new insights and knowledge that is relevant to design practitioners;
- How 'know-how' is researched and communicated rather than 'knowing-that';
- Exploring how designers articulate their value, beyond descriptions of the design process[94], in the early stages of a project to clients and stakeholders; and
- Re-engaging designers with academic design research and design methodology[95].

All these issues were integral to forming the research focus and its findings on designer roles.

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[92] In my 2008 paper 'Design in Public Sector Services: Insights into the Designs of the Time (Dott 07) public design commission projects' I discuss and distinguish between the 'knowing-that' of the design process, and the 'knowing-how' of using the process by designers. The paper showed that the know-how of a designer using a design process included their ability to: Know how to populate the design process with methods; Respond and adapt the process to the people and situation at hand; Engage and entertain project stakeholders with methods; Appropriate methods/tools for use by the project stakeholders.
[93] Furthermore the inclusion of qualitative research as part of the literature review reflects the research process that saw a continuous literature review as the research journey progressed into other stages such as the qualitative research. Heskett's (2002) concept of 'layering' describes how different research methods are overlaid to evolve the research.
[94] Even this is an important communication device for clients and stakeholders.
[95] Because the latter is important for design practice and practitioners.

Re-framing design methodology as roles of the designer

Dorst (2008) critiques how design methodology has been viewed, investigated and articulated throughout history. Dorst asserts that:

> "One would probably first *observe* this complex activity, and then describe it (which already involves a degree of interpretation). Then one would seek to create models that could *explain* the phenomena as observed and described. That explanatory framework could then be used to *prescribe* ways in which practice could be improved, developing methods and tools to support the practitioner and the student" (Dorst, 2008: 4).

Design methodology research focused on "*efficiency* and *effectiveness* of design *processes*" (Dorst, 2008: 5). This development and codification of models and methods suggested that particular design processes and methods would "be valid for every designer, dealing with every possible kind of design problem, in any situation" (Dorst, 2008: 5). Young further states that "devices for describing and explaining design… have not had a truly instrumental effect on the way designing is carried out" (Young, 1996: 7). A demonstration of this is seen in Yaneva's (2009) ethnographic study as a participant observer of an architecture firm. She encounters the design process model of the firm in the early days of her fieldwork and after a week she noted:

> "… only after a week of participation observation did I find out that the design process at the OMA[96] had its own internal rhythm and tempo… As other architects put it: 'When you look at the process from a distance it is a linear process, but doing the design it is really hard to say exactly where we are going'" (Yaneva, 2009: 13-14)[97].

Such encounters suggest that the field could benefit from understanding design methodology from new perspectives to drive new insight, understanding, articulations and knowledge that can be of value to designers in practice. The emphasis and focus on process models has disengaged practicing designers in academic design research and investigations have overlooked many other dimensions of what constitutes design methodology. Dorst lists these other dimensions as:

- The *object* of design activity i.e. The design problem;
- The *context* in which designing takes place; and
- The *actors* i.e. The designer and other project stakeholders (Dorst, 2008: 5).

Dorst maintains that design methodology research has primarily focused and emphasised the process "to the exclusion of everything else" (Dorst, 2008: 5)[98]. Dorst urged the design research community to re-conceptualise how design methodology is viewed by saying: "We should

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[96] Stands for Office for Metropolitan Architecture

[97] Yaneva goes on to say that "the analysis in this book will circumvent the linear and rational schema of design process" (Yaneva, 2009: 15).

[98] In addition to this, Dorst also states, "Yet when we look at the design methods and tools that are being developed within the design research community, we see that three of these four 'aspects of design activity' are often ignored within the descriptive framework that implicitly underlies our thinking on design. The overwhelming majority of descriptive and prescriptive work in design research focuses on the design process, to the exclusion of everything else" (Dorst, 2008: 5).

rethink what really is the object of our studies [to] gain a deeper understanding of design activity" (Dorst, 2008: 8). He argues the most important dimension as the designer, asserting that the designer is "the missing person in design research" (Dorst, 2008: 8).

As this research investigation progressed and more familiarly with literature and industry ensued, Dorst's (2008) propositions to focus design methodology research on the designer became more and more apparent. As this research investigation took shape it asked: could design methodology be investigated through the lens of designer roles, rather than looking at design methodology as process. The literature reviews, qualitative research and case studies that explored the content, context and process (Young, 2008) of the Dott 07 projects validated that exploring design methodology through the different roles of the designer would contribute new knowledge to the discipline of design and also engage design practitioners in the research as it addressed their concerns, as previously discussed. For example, the concept of the roles guided discussions on 'know-how' rather than only 'knowing-that' (Ryle, 1949; Cross et al, 1981) of the design process and methods. Furthermore using the vocabulary of designer roles places less emphasis on the phrase 'design methods' that circumvents the issue of ownership for the methods, and the scientific language which concerned and disengaged design practitioners.

Throughout the research investigation, many workshops, conferences and debates were attended. Designers roles were widely discussed among industry and academia yet no focused body of research had been undertaken to interrogate these different and expanding roles of designers, in particular the context of design for 'social good'. No body of research was found to understand and articulate the practices of these roles, especially in drawing upon analogous literature, where almost all identified roles existed as concepts or archetypes. The analogous literature aided in deepening an understanding of the roles and highlighted the valuable contributions of designers in assuming these roles. This value of the designer became apparent when comparing and contrasting the descriptions of the role in the analogous literature, with what the designers did in practice. More detail on the emergence and determination of the research question is provided in *Chapter 3: Research Methodology* (p 54).

The meaning of roles

Sociology theory explores roles[99] as "the study of the individual and his roles" (Handy, 1976/1999: 60) usually with an emphasis on the relational concept of roles i.e. The role a person plays, "*vis-à-vis* another person's role which is attached to a *counter position*, e.g. The doctor plays his role as doctor in relation to the patient's role" (Mitchell, 1979: 159). The concept of a role in this research investigation is used more narrowly to describe a person's function "within a particular situation" that outlines one's capacity, position, duty and/or responsibility (Waite

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[99] Commonly known as role theory. The term 'role' however was originally used to describe an actor's part, which was written on a roll of paper (Oxford American Dictionary, 2009).

and Hawker, 2009: 805). Articulating the different roles of the designer in Dott 07 therefore presents "a clutch of norms or rules that govern the *role*" (Bruce, 1999: 22) aiming to draw out a set of key practices performed by designers in each project.

Handy says that roles "provide another language, another framework to help us understand" (Handy, 1976/1999: 60) and this research investigation used designer roles as a vehicle to gain new insight into design methodology. Interpretations of each project drew out a singular and dominant role of the designer for further exploration. This exploration was done by comparing and contrasting analogous literature on the specific role, where it was found that the concept of the role already existed, and definitions and discussions of that role had already taken place. The analogous literature review provided an analogous perspective that allowed a deeper and broader understanding of the different designer roles identified in Dott 07 and consequently a greater insight into their relevance in design projects.

It should be noted that the roles do not aim to be prescriptive, nor absolute. Designers, or anyone performing a role, will demonstrate variances in how a role is performed. This is based on a mixture of their expertise, experience, capabilities, background skills and creative license[100]. Characterisation of the roles are influenced by the personality and competencies of each designer and design company, and the content of the project and its context. This limits an automatic prescription of the roles in other applications and contexts. Being aware and recognising the context will however help in determining what roles would suit a particular project and client. The roles of the designer in Dott 07 are reflections on design methodology, to understand what designers do, why and what value they bring, rather than prescriptive models for application.

In sociology literature it is recognised that "most people occupy a variety of roles" (Bruce and Yearly, 2006: 264) and this can be said to be true of the findings from the Dott 07 projects. Designers assumed many different roles in each project and while each case study recognises these various roles, in order to interrogate them, a singular and dominant role was identified for each project. These singular roles could also be explored and interrogated via an analogous literature review. The analogous literature transcends the disciplinary boundaries of design, and is necessary as the roles already exist as concepts that are either well developed and investigated or have relevance in other disciplines. For example, in the discussion of the role of the designer as social entrepreneur; social entrepreneurship literature from business and development studies was used to interrogate this role.

The analogous literature helped define and explore the key practices of each role, but it also highlighted the distinctiveness, or valuable contributions, of the designer performing these roles.

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[100] Designers in the qualitative research and also in conversation often remarked that each designer, and each company, may use a similar process or methods but perform them differently depending on their experience and background (as in Designer 11, 2008: 15)

As the interpretation of design methodology with regard to the roles of the designer *emerged* in this research investigation, an additional literature review was undertaken to further understand designer roles as they are known in the design discipline.

Roles of the designer in the design literature

The roles of the designer is a topic of contemporary interest in academic discussions[101] and also among practice[102]. But despite this, current literature and research on the different roles of the designer are limited. They are limited in various ways which include:

- Most literature only recognising and introducing roles, most with very little elaboration on what they mean and what constitutes them in practice;
- With little interrogation of the roles, very little was written on how these roles change the way design is practiced;
- Hardly any literature identifies the valuable contributions of designers when they assume a particular role. It was found that the value of the designer could be identified through undertaking analogous literature reviews; and
- Many new roles of the designer emerged from Dott 07 as it dealt with emerging practices of design in the context of design for social good.

Perhaps the limited elaboration on roles in the literature is due to roles being a way to reflect on practice rather than theory. The literature thus focuses on the journey to identify these roles, stopping short of elaborating on what they mean in terms of: key practices; how the roles expand the applications of design; and what value the designer brings among other professionals, but also among participants and stakeholders of design projects. These shaped the research investigations in terms of what it seeks to discover.

A lot of literature (see below for examples) identifies the different roles of the designer, but with little elaboration to characterise the role to draw deeper and new insight into design practice[103]. Dorst suggests that the designer is not often looked at in design methodology research "perhaps because [designers] are so complicated and open-ended" (Dorst, 2008: 6). Young adds that the focus of scientific method "blinded researchers" and when investigating design methodology they tended to select "only those aspects of design that reflected their own rationalist stance, however, design reality is highly complex" (Young, 2008). But a few notable authors, such as Bryan Lawson (1980/2005; 2004) and Karl Aspelund (2006) have taken approaches that view the designer as the "object" of study (Dorst, 2008).

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[101] For example as observed at the *Changing the Change Conference*, 2008; *Design Activism* workshop, 2008; and *Design for Development Debate*, 2009.
[102] Many conversations with designers occurred at various servicedesigning.org events which happened frequently during 2008 and on a monthly basis from mid-2009.
[103] Though there are a few exceptional pieces of literature which provide good evidence for the roles of the designer they identify. See Seidel, 2000; Valtonen, 2005.

It was generally found that literature discussing roles of the designer did not elaborate on the roles beyond one paragraph (for example see Roth, 1999; Press and Cooper, 2003; Burdick, 2007; Inns, 2007; Julier, 2007; Morelli, 2007, Myerson, 2008; Manzini, 2009). Nor did literature trace the history of the changing role of the designer with the exception of Anna Valtonen's (2005) paper, 'Six decades – and six different roles for the industrial designer'. Valtonen traces the history of Finnish industrial designers since the 1950s outlining that they moved through at least six different roles including (in chronological order): sole creator; team member on multi-disciplinary teams; end-user expert; design manager; creator of experiences and brands; and as "pushing innovation" in a national context, which illustrates the role of the designer in contributing to the national economy (Valtonen 2005).

Valtonen (2005) takes a broad overview that spans six decades showing how different factors have shaped these roles. However, she does not elaborate on the relevance of these roles to design methodology, nor does her topic permit her to focus on more contemporary roles of the designer such as those roles in designing for social good.

Jeremy Myerson's (2008) summation of the *InterSections 07 Conference* as "four new roles of design practice" speaks more to contemporary roles of designers. In his short pamphlet, 'Pressing the Pause Button' Myerson (2008) outlines four new roles of the designer, these being the designer as strategist, co-creator, rationalist and storyteller. As InterSections 07 was not a conference about the different roles of the designer but explored "design know-how for a new era" (InterSections 07, 2007) Myerson's (2008) roles were a reflection on the debates and discussions that had taken place at the conference and provided less elaboration on the roles than Valtonen (2005).

Ezio Manzini (2009) also identifies roles of the designer when he reflected on the *Changing the Change Conference*. In his paper 'New design knowledge' Manzini (2009) notes emerging issues from the conference that form a new research agenda for design. Manzini urges research on "forming new professional designers" and design research that seeks to understand:

> "… the new designer role: connectors and facilitators, as quality producers, as visualisers and visionaries, as future builders (or co-producers). Designers as promoters of new business models. Designers as catalysers of change" (Manzini, 2009: 11).

While both Myerson (2008) and Manzini (2009) introduced different roles of the designer they provided limited elaborations on the roles, in particular what designers do in these roles. Their writing tended to be reflections on the discourse, rather than the roles being an intentional subject matter for exploration.

There have however been other debates have that have been organised specifically around the theme of the roles of designers. These debates have also reflected on practice and identified roles, but again with little elaboration on what characterises them. For example in the think tank *The Future Designer*[104] that took place in London[105] in 2008, four leading designers debated four different contemporary roles of the designer. These roles were celebrity[106], collaborator[107]; catalyst[108]; and synthesiser[109] (V&A, 2008). The debate was insightful in its reflections on designer roles but it was largely based on what designers had been producing rather than reflecting on design methodologies used in such roles[110].

Much like the discourse, most design literature only goes as far as to identify and state the roles, usually as part or as a reflection of, a larger body of research or writing. In this next section, other types of literature on designer roles are identified.

Victor Seidel (2000) published research on four different roles of product design consultancies in strategic consulting. He outlined these roles as strategy visualiser, core competence prospector, market exploiter and design process provider[111] (Seidel, 2000). Other authors and researchers have focused on singular roles as a way to reflect on design projects and design practice. Lievesley and Yee (2006) discuss the 'Role of the Interaction Designer in Agile Software Development' also the title of their paper. Their reflections discovered that teams that employ user-centred design could benefit from a 'user champion' to maintain a balance between functionality, vision, and intended user-experience (Lievesley and Yee, 2006). Yanki Lee (2008) also uses designer roles to reflect three housing design projects[112]. Of this she discusses three roles of the designer to "provide a framework for the design community and their collaborators to develop their own way of designing with people" (Lee, 2008: 48). These roles include:

- "Design Developers working with the design community to transform design processes for participation;
- Design Facilitators designing with people to transfer design knowledge to emancipate people to improve their lives; and
- Design Generators collaborating with professionals to explore design thinking to different implications" (Lee, 2008: 48).

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[104] See http://www.vam.ac.uk/thinktank1/future_designer

[105] The think tank was hosted by the Victoria & Albert Museum (V&A).

[106] The designer as celebrity was described as in the occupation of creating "signature style pieces" (Project Stakeholder 3, 2008).

[107] Myerson says of this role that "designers are now sharing the creative space with scientists, engineers, entrepreneurs within the company, and with customers outside it" (Myerson, 2008).

[108] Where the designer is the "perfect host" between industry and the user (Charney in V&A, 2008).

[109] These debates were podcasted and transcribed on the V&A website. See: http://www.vam.ac.uk/thinktank1/future_designer/index.html

[110] Where the designer facilitates collaborative processes (McCullagh in V&A, 2008). Elsewhere, Myerson (2008) identifies that "designers are now sharing the creative space with scientists, engineers, entrepreneurs within the company, and with customers outside it" but does not elaborate on how.

[111] More of Seidel's research can be found in *Chapter 8: New Work: The Designer as Capability* Builder (p 202) and in *Chapter 11: Urban Farming The Designer as Strategist* (p 279-284).

[112] In her paper, 'Design participation tactics: the challenges and new roles for designers in the co-design process.'

Lee points out valuable reasons for the use of roles to understand and articulate practice by saying that the concept of roles helps:

> "… designers to make design a more holistic and tactical practice or research form, or even thinking that encourages mutual understanding for more collaboration between designers, researchers and users/people between different modes of participation" (Lee, 2008: 36).

Like Seidel (2000), Lievesley and Yee (2006) and Lee (2008) Banerjee (2008) also introduces a contemporary role of the designer in his conference paper, 'Designer as Agent of Change'. Rather than a reflection, Banerjee discusses his observations of design practice exploring in his paper a response to the question "what role will design have in the future in addressing the complex problems facing society and mutual survival?" (Banerjee, 2008: 2). Banerjee's view is that the role of the designer will shift "from being an 'identifier of needs and definer of systems' to 'agent of appropriate change' or 'a catalyst for systematic transformation.'" (Banerjee, 2008: 10). Banerjee characterised the designer as agent of change by framing attributes of the designer as the "design complex" a:

> "… gestalt of the skills, cognitive processes, design methodologies, attitudes, and structural aspects… [that] are pertinent for casting designers in increasingly strategic roles, and the combination of which make design unique" (Banerjee, 2008: 4).

Throughout this research, these papers were the only ones identified in the design literature that had a sole focus and elaborated on, a particular role of the designer. This demonstrates the limited research and literature on designer roles that this investigation aims to contribute to.

In doctoral research, a handful of researchers have focused on designer roles as stated in their titles. But it was largely found that these research studies mainly investigate roles of the designer in the contexts of product and strategy. A search on the British Library's theses catalogue for PhD titles with 'roles' and 'designers' in it, produced 240 results and only six design PhDs specifically focused on the role of the designer. Of these research studies, most focused on the design of products or textiles, with one focusing on the role of the industrial designer in strategy. None focused on the role of the designer in the context of design for social good where the designer deals with complex social issues. These theses and their titles are listed below (Figure 2.7).

Author	Thesis title	Yr	Institution	Summary
Aggrey, A. B.	The role of the textile designer in the British textile industry	1985	University of Manchester Institute of Science and Technology (UMIST)	Aggrey investigates the relationship of textile designers to the British textile industry though several case studies. It results in recommendations for designers, employers, education and government to strengthen the contributions of the textile designer to the textile industry.
Chung, Kyung Won	The role of industrial design in new product strategy, with particular emphasis on the role of design consultants	1989	Manchester Polytechnic	Chung investigates the role of the product designer in increasing the competitiveness of products through nine case studies. His research identifies that the designer adds the 'dimensions' of need-interpretation, discovery-transformation and integration-management to new product strategy.
Ibrahim, Marzuki	The role of the industrial designer in Malaysian small and medium industries	1999	University of Northumbria at Newcastle	Ibrahim studies the role of the industrial designers in new product development in Malaysia and the UK, comparing and contrasting them to inform design guidelines to improve Malaysian SMEs new product development processes.
Wilkinson, Mark	Exploration into the strategic role of designers and academics in shaping collaborative new product development across supply chains, towards a new methodology	2000	University of East London	Wilkinson's research resulted in a new product design methodology called 'Collaborative Envisioning' that would help industry meet the future expectations of customers and consumers. Wilkinson's focus is on more on the process model of 'Collaborative Envisioning' rather than the role of the designer.
Julio Frias-Pena	The strategic role of industrial designers in developing innovative products	2005	University of Nottingham	This thesis was not publicly accessible via the British Library or University of Nottingham. Other papers by Frias-Pena (2003; 2008) show his research aims to identify the role of industrial designers in improving innovation in Mexican SMEs. His focus on the barriers, that restrict industrial designers to broaden their scope of work in new product development, identifies a lack of knowledge about the design discipline by managers in Mexican enterprises (Frias-Pena, 2003).

Figure 2.7. The British Library's PhD theses catalogue for studies that look at designer roles

This short literature review has shown that there are only a handful of occasions where research investigations have focused and elaborated on the roles of the designer. But it is noted that forthcoming publications will no doubt be valuable additions to this collection. The Royal Society of the Arts (RSA) is currently commissioning a pamphlet that will debate the "role of professional designers in the 21st Century" (Campbell, 2009: 7). This debate is part of a larger programme of work at the RSA called, Design and Society, which explores the "resourcefulness that designers represent" (Campbell, 2009) and their contribution to contemporary society.

While limited literature exists that focuses on roles of the designer, many authors recognise roles as part of a lager body of research or literature. For example, the *Designing for the 21st Century* research initiative, a portfolio of forty-one academic design projects to explore contemporary design, identifies six different roles of the designer. Like Myerson (2008) and Manzini (2009), Inns[113] (2007) recognises these roles through reflection on the projects. He identifies six roles of the designer included that of negotiator; facilitator; visualiser; navigator; mediator; and coordinator (Inns, 2007: 24-6).

Similarly, Lawson (1980/2005) provides a short discussion on designer roles in his book, *How Designers Think.* Three broad roles are presented by Markus (1972 in Lawson, 1980/2005: 19-21) these being the designer as professional consultant; seeking change in society; and those who involve users in the process.

Press and Cooper (2003) also write about the role of the designer in creating customer experiences in their book, *The Design Experience: The role of design and designers in the twenty-first century.* Despite the book name, the authors only make explicit the roles of the designer-entrepreneur and designer as communicator (Press and Cooper, 2003: 154-156). Many other roles, such as that of designer as researcher, remain implicit throughout the text.

Julier (2007: 205) writing about the culture of design[114] discusses the role of the designer as facilitator, a frequently mentioned role in the literature, at conferences and in conversation with designers. Julier explains the designer as facilitator works at "the interface between end-user and a constellation of creative experts" (Julier, 2007: 205). In the conclusion, he says that designers "see their roles as 'trainers' rather than 'players', providing support and advice for clients" (Julier, 2007: 208).

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[113] Tom Inns is Dean of Duncan of Jordanstone College of Art and Design at the University of Dundee and Director of the research initiative, the *Designing for the 21st Century*.
[114] "Design culture is an object of study therefore includes both the material and immaterial aspects of everyday life. On one level it is articulated through images, words, forms and spaces. But at another it engages discourses, actions, beliefs, structures and relationships. The above concepts of value, creation and practice that motivate design culture as an object of study are processes that relate, respectively, to designers, production and consumption" (Julier, 2008: 7)

Like Julier (2007), many others draw attention in the literature to the designer as facilitator. Morelli[115] proposes "a shift of designers' activities from products to systemic solutions" where designers address more social and environmental responsibility (Morelli, 2007: 6). Here Morelli (2007) alludes to the role of the designer from creator to facilitator. Burdick (2007) also echoes and refers to the facilitator role saying that: "Designers are shifting from the design of artefacts in isolation to the design of interconnected nodes in elaborate systems" (Burdick, 2007)[116]. The role is slightly expanded by Roth[117] who states:

> "The traditional view of designers as creative genius or (worse) stylist is evolving to a perception of the designer as team member, interpreter of complex systems, communicator and problem-solver" (Roth, 1999: 20).

More recently Emilson et al (2011) discuss reflections on design for social innovation at the ServDes 2010 Conference[118]. Emilson et al mostly discuss the limits of design for social good and reflect on "an interesting discussion [that] took place around the role of the designer in social innovation" (Emilson et al, 2011). The conference recognised the role of the designer as 'the questioner'[119], maker[120], matchmaker[121] and for prototyping potential services (Emilson et al, 2011). Emilson et al state that "some reflections should also be done about the role of the designer in these kinds of projects" (Emilson et al, 2011) to not just better understand the contributions of the designer but also identify the limits of design for social good. In the review of the literature that identified with the roles of designers I have shown that many introduce the different roles of the designer but provide limited elaboration on what they mean.

It should finally be noted that while there is limited literature on roles of *designers*, there is abundance of literature that advocates and elaborates on the role of *design*. For example many authors discuss the role of *design* in new product development (See Hayes, 1990); business (See Design Council, 2008a; Sawhney and Prahalad, 2010; Walters, 2010); customer experiences (See Pine and Gilmore, 1999; Press and Cooper, 2003); services (See Hollins, 2006/2009); public services (See Mollerup, 1992; Design Council, 2008b); sustainability (See Manzini, 2006b); social innovation (See Morelli, 2007; Jégou et al, 2008; Manzini in Michel, 2007). Some take a broader view of the role of *design* in the 21st century where design contribute positively to a wide set of situations (See Inns, 2007/9; Danish Designers, 2010).

Many authors call for the need to understand the different roles of the designer, especially in design for social good (Manzini, 2001; 2005; 2006a; 2008; 2009; Margolin, 1998; 2002; 2007a;

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[115] In his paper 'Social innovation and New Industrial Contexts: Can Designers "Industrialise" Socially Responsible Solutions.'
[116] In her article 'Graduate education: Preparing designers for jobs that don't exist (yet).'
[117] In her paper ''The State of Design Research.'
[118] The Service Design and Innovation conference was held in Linkoping, Sweden. See
http://www.servdes.org/previous-conferences-2/linkoping-2010
[119] "… which means that designers should support the stakeholders involved in a process by highlighting issues and key aspects" (Emilson et al, 2011: 26).
[120] Visualising and bringing ideas to life (Emilson et al, 2011: 26)
[121] "Between stakeholders and diverse agendas" (Emilson et al, 2011: 28).

2007b; Margolin and Margolin, 2002; Morelli, 2007; Jegou et al, 2008; Emilson et al, 2011). Margolin and Margolin call for a model for "designing for social need" for product designers to "design for populations in need rather than focus for the market alone" (Margolin and Margolin, 2002: 24). They state that the "broad research agenda for social design must begin by addressing a number of questions" with the first being "what role can a designer play in a collaborative process of social intervention?" (Margolin and Margolin, 2002; 28).

This research investigation focuses on the different roles of the designer when designers design for social good. It aims to help advance the area of design for social good but also show how design methodology research can be reframed from *process* to *people* ie. the practices of designers to bring new insight. Identifying the different designer roles and exploring them though case study analysis and analogous literature reviews aims to create a better understanding and elaboration on design methodology, emphasising 'knowing-how' not just 'knowing-what' (Ryle, 1949; Cross et al, 1981). The analogous literature reviews where the designer roles already exist in other fields and disciplines also results in an articulation of the valuable contributions of designers when they use design to improve social issues. These articulations can be used by designers at the inception of projects to communicate their value to a wide range of stakeholders, partners and collaborators.

Conclusion

This chapter presents a review and discussion of the historical development of design methodology. To advance the field, design research must reframe design methodology to permit investigations to discover new knowledge in its neglected dimensions. As Dorst asserts "the design process is only part of the bigger story of design" (Dorst, 2008: 5). The history of design methodology research has emphasised and largely explored it as a process. This research reframes design methodology to understand it through the different roles of the designer in practice. It thus reframes design methodology research from *process* to *people.* In doing so, new and deeper insight in designing can be gained, contributing to building one of the neglected dimensions of design methodology research. It is hoped that this research investigation not only advances the field of design and design methodology research, but by its subject matter helps engage design practitioners better through providing relevant and valuable reflections and articulations on their activities, skills, competencies, responsibilities and to an extent, their identity[122]. The next chapter outlines the research methodology used to investigate the different roles of the designer through seven design projects of Dott 07.

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[122] See the *Prologue* (p x) for one of my personal questions coming into this research on my own identity as a designer

Chapter 3

Research Methodology

Research Methodology

"We can know more than we can tell"

—*Michael Polanyi (1967: 4) The Tacit Dimension*

Introduction

This chapter outlines the review of research methodologies that was undertaken and how and why the focal research methods were adopted for this research investigation. The research methodology influences the nature of the research and its outcomes and thus making explicit the research process demonstrates rigour, provides the potential for replicability within other research studies, and recognises the research limitations. Research methodology in this research investigation is broken down and discussed as:

- **The research purpose** – which outlines the aims and objective for the research;
- **The research perspective** – the epistemological and ontological positions that underpin this research and demonstrate how knowledge was generated;
- **The research methodology** – which shows the overall plan or research design;
- **The research tactics** – which describes the various methods used to undertake the research;
- **Research analysis/synthesis** – how the data was collected, comprehended and interpreted;
- **Research dissemination** – how research findings were shared, developed and peer reviewed; and
- **The limitations of the research methodology**.

Each of these components are discussed in the next section and an overview is provided in Figure 3.1.
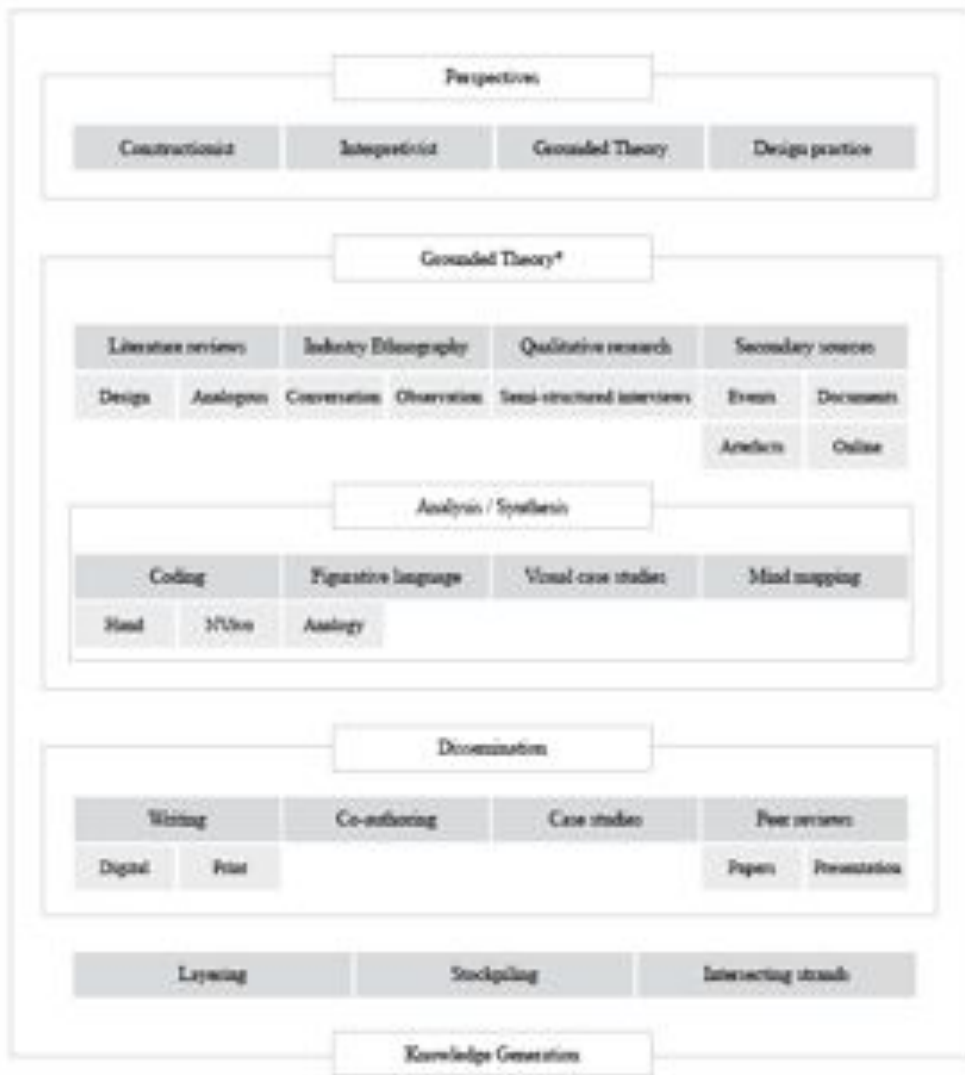
Figure 3.1. Overview of the research methodology

*Grounded Theory is a style of research and also a way of analysing data

Academic design research

There have been a number of authors who contend that design research is distinct to that of other disciplines such as the sciences (Glanville, 1999; Cross, 2007). Glanville shows how a scientific researcher is also a designer in planning the research thus maintaining that scientific research is "a branch of design: (scientific) research is a subset of design, not the other way round" (Glanville, 1999: 88-89). Meanwhile Cross discusses design as a discipline "in its own right, based on the view that design has its own things to know and its own ways of knowing them" (Cross, 2007: 3). It is therefore important to identify characteristics of academic design research as this has shaped the research methodology. Ezio Manzini states design research is:

> "An activity that aims to produce knowledge useful to those who design: *design knowledge* that designers and non-designers (individual, communities, institution, companies) can use in their processes of designing and co-designing" (Manzini, 2009a: 12).

Cross (2008) added that academic design research should also be easily articulated and replicable[123]. Manzini summarises that design knowledge should be:

> "… explicit (to be clearly expressed by whoever produces it), discussable (to permit the exchange of opinions among many interested interlocutors), transferable (to be applicable by other designers) and possible to accumulate (to form a reservoir of design knowledge that could be the starting point for producing further knowledge by other researchers)" (Manzini, 2009a: 9).

There are a number of factors that influence the design and undertaking of academic research. Bryman states that in the area of social research[124], influencing factors on the researcher include ontology; epistemology; values; theory; and practical considerations (Bryman, 2003: 21). Many of these factors are discussed in the following sections to establish the context underpinning this research investigation, its standpoint and how it was done.

Understanding design methodology in Dott 07

As early as October 2005 work began on establishing a national design innovation programme called Designs of the Times 2007, or Dott 07. This programme would "challenge communities to design and develop innovative new approaches to local issues that are also nationally relevant and support sustainable living in the UK" (Design Council, 2008d: 21).

Dott 07 occurred over the year of 2007 and at its completion the Design Council in partnership with Northumbria University, Newcastle upon Tyne, UK, established a doctoral research programme to investigate new design knowledge from Dott. The initiation of the research investigation was in response to the limited understanding and knowledge of design methodologies used in the projects. Dott 07 designers were applying design in new and different ways, and in new situations. In turn this was shaping new and different design methodologies and transforming design practice. The research was to identify these emerging practices of designers who address and create responses to social, economic and environmental issues.

The research purpose

As the research investigation was to focus on emerging areas of design practice the research purpose[125] was primarily exploratory. Robson states that exploratory research aims to:

- Find out what was happening;
- Seek new insights;

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[123] Noted from a presentation by Nigel Cross at the *Changing the Change* conference, Italy in 2008. Further reflections from the conference are noted on my research blog, Letters to Australia at: http://letterstoaustralia.blogspot.com/2008/07/changing-change-in-turin-italy.html
[124] Social research is research done in the area of social sciences which explores human activity.
[125] The research purpose outlines the aims and objectives of the research, also its nature in being exploratory, descriptive and/or explanatory.

- Ask questions;
- Assess phenomena in a new light (Robson, 1993/2002: 59).

Since the beginning of the research investigation the broad aim to understand better design methodology in Dott 07 has not changed. But the details within this broad aim have changed over time. Throughout the research investigation two key reports, the *Initial Project Application (IPA)* (Appendix 1) and the *Mid-point Progression report (MPP)* (Appendix 2) show how the research has evolved from a broad look at design methodology as process and method, to looking at design methodology through the different roles of the designer. A significant change also occurred from the original framing of the Dott 07 projects as Service Design to situating the research in a broader landscape of design for social good. At the time of Dott 07 there was a tendancy to frame design practices pursuing new areas of design under the umbrella of Service Design[126]. While many defintions of Service Design exist[127], Sangiorgi and Clark (2004) provide a well-rounded description stating that:

> "The design of a service refers to envisioning the service encounter and providing an *interaction platform*, made up of the physical tools and signs, people's competencies and roles, the provided information and interaction rules, that frame and support the way *service participants* interact." (Sangiorgi and Clark, 2004: 1)

This research investigation does study the industry commonly recognised as Service Design but does not use the concept of Service Design itself to frame Dott because the projects demonstrated a broad range of outputs and outcomes, beyond service designs, including:

- A film;
- An event;
- A brief;
- Service concepts in energy, health and business;
- Communication tools; and
- New organisational processes.

The use of social good better captures the aspirations of Dott 07 and in particular its designers. Many Dott 07 designers themselves questioned Dott 07 as Service Design[128]. Dott 07's broad and fluid aims (Smith et al, 2007) also do not define Dott 07 as Service Design. The Dott 07 aims were essential to the exploratory nature of Dott 07 and were necessary to incorporate the

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[126] Commonly "the development of a new service is usually characterized by trail and error" (Shostack, 1984: 133) or using a product development process which is inappropriate for services (live|work, 2009). This has led to wide-spread poor services (Shostack, 1984: 133) and a general underperformance of services (live|work, 2009). Ten years ago a small number of designers and design companies recognised these problems alongside the eclipse of services over manufacturing in the developed economies (Parker and Heapy, 2006; Peer Insight, 2007; Saco and Gonclaves, 2008: 10; live|work, 2009). They clearly saw the differences between products and services and thus the need for their development process to also differ. Thus the concept of Service Design became endorsed and pioneered in practice by a small UK design. Today Service Design is working toward establishing itself as a discipline of design whereby there is no one agreed upon definition.
[127] For example see Hollins, 2006/7; Parker and Heapy 2006; Saco and Gonclaves, 2008; live|work, 2009.
[128] This was found in many conversations with designers in the latter years of the PhD, in particular when designers began identifying how prospective clients misunderstood the use of the word 'design' and how it related to their context in the service sectors.

many partner[129] interests. To place Dott 07 in the context of design for social good recognises the broadest aspiration of Dott 07 and its designers to "improve national life through design" (Design Council, 2006). It permits this research investigation to consider emerging design practice and applications that may not have necessarily been part of a Service Design approach.

The research question intends to contribute new knowledge to the design discipline and design research. Historically, design methodology research investigations have focused almost exclusively on the design process. The focus on the process has led to an exclusion of everything else that constitutes the activity of designing (Dorst, 2008) including an absence of investigating designers themselves in design methodology research[130]. This is surprising given that it is the designer who brings design methodology to life. Investigating the roles of the designer in design methodology research deepens our understanding of what designers do and recognises the 'know-how' of the designer rather than only articulating the 'know-that' (Cross, 2006) of the design process. To further interrogate these roles analogous literature reviews were used to create a better understanding of them. All the roles exist and are discussed in other disciplines and fields where extensive thought and debate has already occurred. The existence of such substantial bodies of literature and knowledge could not be ignored. Using literature from fields outside the design discipline allowed for better elaboration of the meaning of the roles and a clearer articulation of the actual value of the contributions of designers in assuming these roles in the Dott 07 design projects.

Research perspective

When discussing research methodology Knafl (1994 in Goulding, 2002: 35) states that the "fit between the method and the person, between their style of working, who they are and how they think" are seldom discussed. Guba and Lincoln (1994) suggest four key areas for researchers to make explicit when discussing research methodology. These include:

- The paradigm question – What is the basic belief system or worldview that defined the nature of the world, the individual's place within it and the range of possible relationships to that world?
- The ontological question – What is the form and nature of reality, and, therefore, what is there that can be 'known' about it?
- The epistemological question – what is the relationship between the researcher and what can be 'known.' This has strong implications for the fourth question.
- The methodological question – How can the enquirer go about finding out what he/she believes can be known? (Guba and Lincoln, 1994 in Goulding 2002: 35-6)

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[129] These partners included the Design Council, One North East and Programme Director, John Thackara.
[130] There are a few notable exceptions such as Lawson (2004; 2006) and Cross (2001; 2011).

The paradigm question is related to the subject matter of design methodology in this research. The view of design methodology draws from a broad description given by one designer in the qualitative research phase who explained that design methodology was: "The journey of all the different stakeholders, the community, the students, the teachers, the designers. It's how we figured things out, why we figured things out" (Designer 6, 2008: 8).

In terms of design methodology research, Cross provides this description "the study of the principles, practices and procedures of design in a rather broad and general sense" (Cross, 1984: vii). Both these explanations of design methodology from practice and academia were adopted throughout this research investigation. In my professional practice as a designer, design methodology was considered a highly social process. This was evident in the process of engaging users in the development of products and services and in the participation of clients in the design projects. The participation of clients in design projects was of particular interest when it began to show a transformation of the client through the development of empathy for their customers bringing new meaning to their daily practice and work. These observations raised questions of the transformative potential of design methodology, and it was questions such as these that led to an interest in exploring and reflecting on design methodology in an academic context. Many others (Schon, 1983/1991: 78; Luck, 2003: Thackara, 2006: 99; Golsby-Smith, 2007; Dubhthaigh and Barter[131], 2006: 10; Wildman et al, 2006: 31) have stated that designing is a social process. Researchers such as Albena Yaneva (2009) and architect Frank Gehry (in Boland and Collopy, 2004) highlight that while the common perception is to view the designer as the sole creator of mostly products, the reality of practice sees ideas form and develop with many stakeholders (clients, users and other designers). Gehry even states that "the best work, is done in concert with the client" (in Boland and Collopy, 2004: 19). If design methodology is seen as a social process then the most appropriate approaches for design methodology research include the ontological position of constructionism and the epistemological position of interpretivism.

Ontological and epistemological positions influence the research- the way it's collected, dealt with and its findings. Ontology is "the science or study of being" (Blaikie, 2000: 8) or in other words, how we view social reality. Bryman (2004) proposes two ontological positions we can take in social research. These are objectivism, which implies "that social phenomena and their meanings have an existence that is independent of social actors" and constructionism, which "asserts that social phenomena and their meanings are continually being accomplished by social actors" (Bryman, 2004: 16-17). The constructionist position is adopted in this research as it has emphasised qualitative research that engages designers and project stakeholders to identify their experiences in designing and of design projects – what happened, how and why.

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[131] "Design is a social process and can act as the glue that binds different people, with different skills and outlooks, together" (Dubhthaigh and Barter, 2006).

Epistemological positions identify how we gain knowledge[132] (Blaikie, 2000: 8). There are two main schools of thought in epistemology – positivism and interpretivism. Positivism supports a research approach that is theory or hypothesis testing, mainly quantitative in nature and where the researcher maintains objectivity (Patton, 2002: 50) toward his/her subject matter. Interpretivism in contrast is about generating theory (Bryman, 2003: 20) or hypotheses and can be both qualitative and quantitative in nature, though qualitative research is usually dominant and often requires the researcher to be closer to his/her subject matter as a participant and/or observer (Patton, 2002). This research takes an interpretivist position due to the study of emerging practices of design[133] where the paucity of accepted and established theory reveals that there are gaps in design knowledge and literature. The emergent nature of design practice in Dott 07 made it difficult to link design in Dott to a particular theory, concept or field. Rather this research drew from multiple theories, concepts and fields, for instance; Dott 07 projects did not follow the service design model that was advocated by the majority sponsor of the Dott 07 programme; One North East, following their previous investment in the DIEC project. The implication of this for the research methods used in the PhD study are seen in the use of diverse and eclectic analogous literature reviews for the case study discussions and situating Dott 07 in the broad context of design for social good. The nature of design in Dott is also congruent to the multiple theories, concepts and fields of which this research investigation is based. In Dott 07, designers drew inspiration for methods from many disciplines, and designers came from a number of different backgrounds ranging from product design, interaction design and communication design among others, and from the social sciences such as demography and anthropology. Where literature and knowledge is sparse the identification of theories or concepts is challenging. Thus an interpretive position leads this research to emphasise hypothesis or theory generation, rather than hypothesis or theory testing.

In this research constructionist and interpretive perspectives are taken and influence the research, how it is collected, dealt with and what findings emerge. The interpretivist position of this research was appropriate for the observations and interactions with industry. Analysis and synthesis of the research was used rather that deductive methods[134] to treat the data. Michlewski's research on the cultures of design identified that designers simultaneously synthesise and analyses when designing (Michlewski, 2006: 139). He also used this simultaneous synthesising and analysing for his own research data comprehension (Michlewski, 2006: 17). Goulding elaborates on this by saying "synthesising involves merging the data and applying thematic analysis in order to identify common 'structures' of the experience" (Goulding, 2002: 24). Having described the underlying perspective to the research methodology, the next section discusses research methodology and methods.

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[132] It is described as "the theory or science of the method or grounds of knowledge" (Blaikie, 2000: 8).
[133] Though many researchers in the past have drawn on theories in social sciences such as actor-network theory or Activity Theory (Sangiorgi, 2008) and marketing such as product-service-systems (Morelli, 2002).
[134] "Deductive method: A deductive method works within a framework of a given theory" (Simon et al, 1994: 33).

Research methodology

The inquiry into the Dott 07 public design commission projects is framed by the research methodology of Grounded Theory (Glaser and Strauss, 1967/2008). Grounded Theory is "the discovery of theory from data systematically obtained from social research" (Glaser and Strauss, 1967/2008: 2). In other words, theory is discovered and grounded in the data collected. It provides a systematic and rigorous process that goes beyond the descriptive level of qualitative research to "lift the analysis to the level of abstraction and explanation" (Goulding, 2002: 36). This methodology was seen as the most appropriate in light of the investigation into emerging design practices where limited theory existed to draw upon. Goulding states that Grounded Theory "is most commonly used to generate theory where little is already known" (Goulding, 2002: 42).

Grounded Theory lies in congruence with the nature of design. This can be seen where both Grounded Theory and design methodology share a "fuzzy front end" (Rhea in Laurel, 2003: 145-154) at the early stages of the process. In these early stages of a design process the designer undertakes a phase of discovery:

> "… covering what to make, deciding whom to make it for, understanding why to make it and defining the attributes for success… the process is ill-defined, random and mysterious" (Rhea in Laurel, 2003: 145).

As the process unfolds and more is discovered, decisions are made simultaneously as to what will be done next[135]. As one designer in the qualitative research explained "quite often it's the process of going through the project that dictates what we spend more or less time on" (Designer 6, 2008: 6). Another described "we just went out and did things as questions arose" (Designer 14, 2008: 13).

Another similarity between the nature of design and Grounded Theory is that the latter is both a methodology for doing research and a style of analysing data (Robson, 2002: 190). Design is known and described as an activity of designing the 'thing' and also designing the process (Dott 07 Programme Director, 2007; Szebeko, 2008). The Dott 07 projects resulted in a range of outputs and outcomes from the tangible to conceptual with the more conceptual end producing new organizational processes to navigate, address and respond to social issues. In a few Dott 07 projects these processes attempted to be codified and scaled[136].

In Grounded Theory the activity of Theoretical Sampling is where the researcher "jointly collects, codes and analyses his data and decides what data to collect next" (Glaser and Strauss, 1967/2008: 4). Theoretical Sampling is where research data is used and comprehended to

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[135] This was expressed in the qualitative research such as by Designer 14 (2008)
[136] Such as in *Chapter 7: OurNewSchool The Designer as Facilitator* (p 167)

"direct the research further" (Goulding, 2002: 170). In Grounded Theory the researcher must therefore be flexible and remain open to a full range of possibilities. This can be said to be similar to the practice of the designer whereby they "think about doing something while doing it" (Schon, 1983/1991: 54). Schon (1983/1991) called this the Reflective Practitioner and much like Grounded Theory, the practitioner must remain open to possibilities to understand the range of opportunities which are possible to pursue. Finally, Grounded Theory's concern for its fit to practice where "the theory must closely fit the substantive area in which it will be used" (Glaser and Strauss, 1967: 237) is similar to how designers work by adapting design methodology to suit the people and situation they work with (Designer 6, 2008; Designer 14, 2008). While Grounded Theory and design are similar they have different goals, as Durling states:

> "Research has goals quite different to those of practice. Research asks a question, selects appropriate methods, tests the question, analyses the results, and disseminates the conclusions unambiguously… it lays down reliable knowledge that future researchers may follow, and methods that may be repeated if necessary" (Durling, 2002: 81).

Thus the most we can maintain here is that both Grounded Theory and design practices have methodologies that are synergistic. From these observations and my own experiences as a professional designer, Grounded Theory was an appropriate fit to the nature of design, as a subject of inquiry.

Grounded Theory offers an approach conducive to hypothesis or theory generation rather then testing. As a style of analysis, Grounded Theory offers a systematic method to define "a set of relationships that offer plausible explanations of the phenomena under study" (Goulding, 2002: 45). Grounded Theory aims to build theory and Morse elaborates on what constitutes theory in Grounded Theory:

> "A theory provides the best comprehensive, coherent and simplest model for linking diverse and unrelated facts in a useful and pragmatic way. It is a way of revealing the obvious, the implicit, the unrecognised and the unknown. Theorising is the process of constructing alternative explanations until a 'best fit' that explains the data most simply is obtained" (Morse in Goulding, 2002: 45).

Goulding adds characteristics of theory in Grounded Theory research, saying that theory is:

- A series of relationships across concepts and sets of concepts which can be traced back to the data;
- Plausibility strengthened through continual research; and
- The identification of patterns of action and interaction among various types of social units or actors. (Goulding, 2002: 45)

Glanville expands on the purpose of theory:

> "To combine, coordinate, and simplify the findings of experiments by developing generalising concepts; and, second, to examine these concepts in order to further clarify and develop them, reflecting back extended understandings into theory….
> The role of theory is to simplify, to generalise" (Glanville, 1999: 85).

Working with Grounded Theory a number of research methods were experimented with. Grounded Theory encourages the use of a number of data sources and a hybrid of strategic choices or tactics (Robson, 1995/2002: 548) were used to discover "theory from the data" (Glaser and Strauss, 1967). The use of a number of data sources saw a combination of research methods including literature reviews (Hart, 1998), case study reviews (Yin, 2003), peer reviews (McNiff and Whitehead, 2006), data reduction and displays (Miles and Huberman, 1994) and Industry Ethnography (interactions, observation and conversations) with design industry.

Research methods

The main research methods used in this programme were literature reviews, Industry Ethnography and qualitative research.

Literature Reviews

The literature review comprised a main review that looked at the history of design methodology research. An ongoing literature review comprised smaller literature investigations for each case study *discussion* that focused on the different roles of the designer by drawing and comparing analogous fields and disciplines.

Literature is a conventional starting place for a researcher (Dunleavy, 2003: 15) especially for the "initial mapping of the topic area" (Hart, 1998: 34). While Hart (1998) outlines it is helpful to map the topic area, he does not profile how it could be done. Undertaking the mapping was inspired by my background in communication and information design and also by Yee's use of literature maps in her PhD to "visualise knowledge [and] emphasise spatial relatedness, classification and connection" (Yee: 2006; 2000). In addition to being able to view broad areas of literature, the maps were helpful in identifying the variety of data sources that not only included literature from books, but also publishing on the web, reports by design companies, notes from design events, conferences, and reflective diaries. The map therefore recognises and shows, the abundance of data sources that contribute to the investigations.

In undertaking the mapping exercise, a very broad literature landscape for Dott 07 emerged and was mapped (Figure 3.2). The area was so broad that identifying a research focus in the early stages of the programme was difficult. In addition to this, no one hypothesis was made, upfront in the research programme, in the spirit of a Grounded Theory approach.

Current literature and references. These writings, people and events have been sources of inspiration and reference in my university and work since 2002 and for my PhD.

Figure 3.2. The broad literature landscape created in July 2007

Literature searches undertaken at this early stage did not lead to a conclusive research focus. In Grounded Theory there is no single and established hypothesis upfront and without one, it was difficult to navigate literature, so an early undertaking of the qualitative research resulted. Glaser maintains that:

> "It is important not to 'contaminate' perspectives and ideas with preconceived concepts. This… will force the data in the wrong direction and is more applicable to deductive approaches. The Grounded Theory approach calls for early data collection, analysis, further theoretical sampling and category saturation" (Glaser, 1978 in Goulding, 2002: 73).

The planning and early undertaking of the qualitative research would be used to signpost more focused literature reviews later in the investigation.

Industry Ethnography

Glaser and Strauss (1967) argue that an "intimate connection with empirical reality" contributes to a researcher's ability to generate theory from the data (Glaser and Strauss, 1967 in Eisenhardt, 1989: 532). In this research investigation interactions, conversations and observations with designers in industry created an Industry Ethnography[137] approach that became increasingly valuable. Research reflections and design industry practices were constantly evolving over time so participant observation of the industry became an important part of the research. In academic research, ethnography is seen as:

> "Distinctive in its approach to what constitutes 'data', paying close attention to social practice (what people do) as to social discourses (what people say). It also attaches particular weight to 'doing fieldwork; requiring the researcher to spend significant periods of time working with those whom they are studying, engaging in their everyday routines and exchanges - a process formalised as 'participant observation'" (Whatmore in Pryke, et al, 2003: 93).

Schon states that researchers should not "keep themselves removed from the contexts of action" (Schon, 1983/1991: 320). Most Industry Ethnography in this research project occurred as regular meetings and interactions with designers. These comprised either attending events or organising informal meetings. These events and meetings were documented as notes and archived for reference later in the research[138]. Peer review sessions[139] with many design companies, designers and the research sponsors where also undertaken. These were usually in the form of presenting research findings to prompt further discussions and ideas on the research (this cyclic nature of the research investigation is discussed later in this chapter under *Knowledge Generation* (p 91). Discussions at these peer review sessions were also documented for future reflection and reference.

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[137] This phrase is my own to capture my interactions as a researcher among the UK design industry.
[138] Either as archived personal notes or on my research blog, *Letters to Australia*. See http://www.letterstoaustralia.blogspot.com.au
[139] See Appendix 20.

Industry Ethnography added important insights to the research, such as maintaining its relevance and enriching the research analysis. Furthermore the Dott 07 projects developed extensive legacies, some of which were significant in informing government policy two years after Dott 07 finished. It was only through continued interaction and conversation with industry that these project legacies could be identified. The legacy of the Dott 07 projects were important to include in the case study discussion as some of them informed the discussions on the designer roles.

Industry Ethnography continued over the course of the research to gain further insight into design practice[140], provide opportunities for peer review to maintain the relevance[141] of the research and also identify project legacies. Industry Ethnography comprises; interactions, observations and conversations with industry that are documented and archived and contribute to the research investigations. Industry Ethnography was adopted for various reasons including:

- The need to gain a deeper insight into design practice to overcome the limitation of not being a participant-observer in the projects;
- The identification of key insights to assist the development of the research focus, the relevance of the research for practice and informing the research investigation of the ongoing legacy of Dott 07;
- My emerging role among industry as a source of independent industry knowledge and connection. This role evolved into helping establish a London design network and community to share knowledge and support discourse on design for service and social issues. Monthly events called Service Design Drinks (an informal drinks night for designers to network) and Service Design Thinks (a structured night of presentations that explore and discuss aspects of service design practice) were held from 2008 and are ongoing today, now part of a larger global design network at www.servicedesigning.org

Industry Ethnography was documented and recorded as personal notes on my *Letters to Australia* website (Appendix 20) or as 'Meeting Write-Ups.' The latter was a template used to record meetings with designers and Supervision meetings (Appendix 3 and 4).

Qualitative research

To discover new knowledge through Grounded Theory, qualitative research was a key method used in the investigations to gather data on design methodology in Dott 07. The qualitative research involved methods to collect data from designers and project stakeholders who held the knowledge of the projects – what happened, how and why. The qualitative research was also broad in its use of sources of data. Semi-structured interviews (Robson, 2003) with the Dott 07

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[140] Partly to compensate for the absence of participant-observation (Yin, 1994) in the Dott 07 projects.
[141] Some of the most important insights gained from the design industry have shaped topic areas for the final thesis e.g. identifying the changing role of the designer, not just investigating the methods.

designers and project stakeholders (i.e. individuals who participated in the Dott 07 projects) were set up to collect data for the development of case studies, data displays, data analysis and synthesis. Easterby-Smith et al state the advantages of qualitative over quantitative research where quantitative research focuses on "describing, coding and counting events" is done at the "expense of understanding why things are happening" (Easterby-Smith et al., 2002: 3). Bryman (2003) establishes the distinction between quantitative and qualitative research helping identify the appropriateness of qualitative research in this investigation (Figure 3.3).

	Quantitative	Qualitative
Principle orientation to the role of theory in relation to research	Deductive; testing of theory	Inductive; generation of theory
Epistemological orientation	Natural science model, in particular positivism	Interpretive
Ontological orientation	Objectivism	Constructionism

Figure 3.3. Differences between quantitative and qualitative research (Bryman, 2003: 20)

Bryman (2003) shows that qualitative research is best used in the generation of theory and also where the research takes the positions of interpretivism and constructionism. Various research techniques in qualitative research were used in the investigation. These techniques involved the collection of qualitative data to generate "well-grounded, rich descriptions and explanations of processes in identifiable local contexts" (Miles and Huberman, 1994: 3). The qualitative research techniques included interviews, written and visual case studies, coding and Industry Ethnography, which facilitated ongoing interactions with designers post-data collection. These interactions with industry also provided formal[142] and informal channels for peer reviews.

The qualitative research phase was separated into two broad areas – semi-structured interviews and Industry Ethnography. The interviews were conducted as one-on-one semi-structured (Robson, 1995/2002; Bryman, 2003) interviews with designers and project stakeholders of all seven Dott 07 projects. Discussion of the subsequent analysis and synthesis is elaborated upon later in this section.

Semi-structured interviews

The aim of the interview data was to discover knowledge about the Dott 07 projects to develop case studies for discussion and generate new knowledge. Eisenhardt (1989) shows how one can go about generating theory from case studies. She establishes that at the beginning of the process where there is no one hypothesis a "research focus" is necessary to help "specify the

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[142] Such as reviewing and co-authoring of papers.

kind of organisation to be approached, and, once there, the kind of data to be gathered" (Eisenhardt, 1989: 536). The idea of keeping the research hypothesis loose was in line with Grounded Theory in particular because "preordained theoretical perspectives or proportions may bias and limit the findings" (Eisenhardt, 1989: 536).

The research focus of this doctoral study in its initial stages was set by the co-sponsors – the Design Council and Northumbria University. The focus was to investigate design methodology in Dott 07 through seven Dott design projects. This helped narrow a focus in terms of what was to be investigated in Dott 07 and with whom, but in design methodology research much can be explored. As previously discussed, the research investigation takes the view that design methodology means "the study of the principles, practice and procedures of design in a rather broad and general sense" (Cross, 1984: vii). This suggests a much broader view of design methodology that extends beyond only investigating the process of design and its methods. Early in the research investigation many other activities of designers in the Dott projects were recognised such as: project management; client interactions and relationships; the recognition of the policy context etc. Design methodology posed a broad range of issues to explore in the qualitative research. The strategy of Grounded Theory allowed for a wide exploration of issues and themes in Dott.

Various research methods were used to capture Dott 07 projects. Early conversations with designers of Dott 07 helped create a better understanding of the projects before the qualitative research phase begun. In August 2007 a week-long investigation was undertaken and initiated conversations with designers in the field. One-on-one meetings were held to provide a general understanding of the projects and their issues which helped shape the research focus for the qualitative research. A presentation of emerging themes resulted from this short investigation and was delivered to the Design Council and Northumbria University (Appendix 5).

Many of the issues designers discussed were not explicit in design literature e.g. designers spoke of the importance of trust in projects; of the challenges of their business models; and the challenges of scaling their projects. Many of these issues influenced the research investigation significantly. This short and early investigation helped advance the research in three key ways:

- It helped establish research boundaries for the interviews;
- It indicated that initiating the qualitative research early, was important as not enough was known about the field; and
- The meetings established a positive rapport with the designers.

Between August and December 2007 planning for the qualitative interviews was undertaken (Appendix 6). As interview times with the key sources of data were limited, extensive background research on the Dott 07 projects was undertaken in preparation for the data

collection. Good knowledge of the projects, their process, activities and outputs would help focus the interviews on other issues within the projects rather than review only what happened. Eisenhardt states that case studies will "typically combine data collection methods" (Eisenhardt, 1989: 534) and Yin outlines six sources of evidence for case study development including: "Documents, archival records, interviews, direction observation, participant-observation, and physical assets" (Yin, 1994: 83). Familiarity with the Dott 07 projects was essential for planning and devising the interview discussion guides, and later on for the case study writing. Research on Dott 07 was found through many existing sources of publications, descriptions and evaluations including:

- Archival records (e.g. Dott 07 website and blog)[143];
- Reporting from the programme sponsors and other organisation[144];
- Media and internet[145];
- Dott 07-related events including the Dott 07 Festival, Dott 07 Debates, InterSections 07 Conference and the Dott 07 Explorers Club;
- Physical artifacts from the projects[146].

Grounded Theory encourages research to be collected from many data sources including "letters, biographies, autobiographies, memoirs, speeches, novels and a multitude of nonfiction formats", which are also "serviceable for generating theory" (Glaser and Strauss, 1967: 161). The identification and use of such data is limited only to "imagination, some ingenuity, and most of all, a considerable shift in attitude toward qualitative materials themselves" (Glaser and Strauss, 1967: 161). With this literature and desk research available on Dott 07, interviews and conversations were conducted and documented "in early days of the research, to help… understand the substantive area [of study]" (Glaser and Strauss, 1967: 162). Interviews and conversations with the Dott 07 Management team, and the Design Council provided a contextual understanding of the programme in line with national policy and regional issues. These interviews also identified the appropriate project stakeholders to interview.

A synthesis of the early meetings with designers and desk research on Dott 07 was used to generate project timelines (See Appendix 7). The timelines mapped the Dott 07 projects chronologically. Design projects can be viewed as time-based activities and this was the simplest method for organising and identifying what happened across all the projects. The timelines were used to gain familiarity with the projects ahead of the qualitative research and during the interviews, as prompts to discuss certain points of the project or to jog memory as it had been up to six months since the completion of Dott 07 in October 2007. The timelines were

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[143] Available at http://www.dott07.com
[144] For example unpublished work by Design Council and the evaluation report on Dott 07 by the Wood Holmes Group.
[145] For example publishing and reporting by the press, blogs and websites.
[146] Collected from designers and photographed at the Dott 07 Festival.

also used by the Design Council who developed Dott 07[147] case studies for their website.

The background research on the Dott 07 projects was valuable in preparation of the qualitative research. It used a number of data sources to gain familiarity with the projects and enabled a set of project timelines to be generated for use as discussion prompts in the interviews. Many data sources were also used for data triangulation (Patton, 1987; Denzin, 1988) to help "compar[e] different kinds of data (e.g. quantitative and qualitative) and different methods (e.g. observation and interview) to see whether they corroborate one another" (Silverman, 2001: 307). All this research would further feed into the development of the case studies.

Collecting data

Data collection began in December 2007 in the first year of the research. The cases selected were the projects that formed the stream of 'public design commission projects' in Dott 07. A total of seven projects were investigated and these projects involved teams of designers working with public sector organisations and local communities to address issues in five areas – health, education, mobility, energy and food.

Sampling strategy

The sampling strategy was based on collecting data from interviewees who could speak about each of the seven projects. Each project was led by a Senior Producer (the lead designer) who were assisted by a team of designers of the same company, and occasionally from other companies. These teams worked directly with Project Stakeholders, individuals who were from public sector organisations or the local community who participated in the project, providing additional resource and knowledge to the project. For the semi-structured interviews two designers (a Senior Producer and Designer) and two Project Stakeholders (a Project Owner and Project Champion) of each of the seven projects were interviewed. The projects involved many more individuals but to enable consistency and manageability of the data collection a limit of four people per project were interviewed.

The following table (Figure 3.4) identifies the types of interviewees, their role in the project and what project knowledge they would contribute to the investigation.

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[147] Available at http://www.designcouncil.org.uk/Case-studies

	Interviewees	Project function	Expected knowledge contribution to the research investigation
Design Team	**Senior Producer**	Project lead, and also undertook design functions	Statement of project intent, profile of project context, project content (or issue) and an overview of the design methodology used (the research on design methodology would help shape questions for the second round design interviews)
	Supporting Designer	Provision of design support in the projects	Focused on the design methodology used in the project
Project Stakeholder (PS)	**Project Owner**	The lead on the client-side who was a key-decision maker in the project and/or part-funder of the project	Statement of project intent, profile of project context, project content (or issue) and overview of experience on the project
	Project Champion	A participant in the project that supported and championed the design approach used	Discussion of the project content (or issue) and overview of experience on the project

Figure 3.4. Interviewee types or sample groups, their roles and contributions to this investigation

Prior to the data collection phase, short meetings with either the Senior Producer or Supporting Designer were held. These meetings aimed to gain:

- Further insight and understanding of the project to assist the development of Discussion Guides;
- Establish a rapport with the designer and inform them of the research;
- Assist in the identification of Project Stakeholders to interview.

The purpose of interviews with the Project Stakeholders were to:

- Increase reliability of the research through a triangulation of different perspectives on the project;
- Increase the credibility of the knowledge through "multiple comparison groups" (Glaser and Strauss, 1967: 231);
- Increase the depth of understanding of the project through investigating multiple experiences, activities and perspectives on the project;
- Capture feedback to help improve emerging design practice.

Other planning documentation was also drawn up in the preparation of the designer and project stakeholder interviews (Appendix 8 and 9).

Interviewee consent

A Confidentiality Agreement document (Appendix 10) was drawn up as part of the preparation of the qualitative research. The were used before the interviews took place to gain consent and inform the interviewee of the research; how it would be used; seek permission for recording the interview; for use of names; and to inform interviewees of the researcher's contact details. The following table (Figure 3.5) identifies each of the projects and shows the number of designers and project stakeholders involved.

PROJECT	SENIOR PRODUCER	SUPPORTING DESIGNER	PROJECT CLIENT/S	PROJECT CHAMPION/S
Alzheimer100	Designer 1	Designer 2	Project Stakeholder 1	Project Stakeholder 2 Project Stakeholder 3
DaSH	Designer 3	Designer 4	Project Stakeholder 4	Project Stakeholder 5 Project Stakeholder 6
LowCarbLane	Designer 5	Designer 6	Project Stakeholder 7	Project Stakeholder 8
Move Me	Designer 7	Designer 8	Project Stakeholder 9	Project Stakeholder 10
New Work	Designer 9	Designer 10	Project Stakeholder 11	Project Stakeholder 12
OurNewSchool	Designer 11	Designer 12	Project Stakeholder 13	Project Stakeholder 14
Urban Farming	Designer 13	Designer 14	Project Stakeholder 15 Project Stakeholder 16	Project Stakeholder 17

Figure 3.5. Table of projects and interviewees

Pilot interview

Robson (1995/2002) and Yin (1994) encourage the undertaking of a pilot interview as "a small-scale version of the real thing" (Robson, 1995/2002: 185). The pilot interview was valuable in shaping the format of the semi-structured interviews from being team-based to individually-

based. Planning, undertaking, analysis and reflections[148] from the pilot interview can be found in Appendix 12. The key reason for adjusting the research design from team to individual interviews was to maximise the time for the contributions of individuals in the interviews.

Revisions to the interview questions in the Discussion Guides were also undertaken after the Pilot interview. Planning documentation (See Appendix 8 and 9) was written up to ensure careful research design (Tellis, 1997) and systematic collection of the data (Yin, 1994). Key points in the planning documentation were condensed onto one-page that served as a checklist for the qualitative interviews to outline the aims and objectives, materials needed and a guide to introduce the research to the interviewees (See Appendix 11).

Discussion Guides

Semi-structured interviews (Robson, 1995/2002; Bryman, 2003) were undertaken to draw out knowledge through the experiences of designers and project stakeholders. The interviews explored a wide range of issues in the projects and allowed interviewees to provide candid and honest reflections.

To ensure the interviews were consistent and aligned to achieve the aims, a Discussion Guide was put together for the interviews. The Discussion Guide was consistent across each interviewee group. The redundancy of questions across the groups allowed for explorations of different perspectives and to triangulate data. The Discussion Guides did not significantly change throughout the research but any changes were additions to the Discussion Guide to ensure the questions remained consistent throughout.

The Discussion Guides created a structure in the interviews if it was needed. Interviewees tended to cover most issues when prompted with a single question. It is important to note that repeating questions often encouraged interviewees to explore what they said more deeply. Time limitations were challenging. Marking out a set of essential questions to ask was important to ensure that consistent and relevant data was collected. The Discussion Guide framework comprised of key areas for exploration with subsequent sets of questions. A Discussion Guide was created for the designer group and project stakeholder group (Appendix 12 and 13). The questions were open-ended to ensure the interviews were exploratory. Through the process of interviewing, questions were added for further exploration with other interviewees. These questions were used to validate themes and issues.

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[148] The reflections in summary were: Designers need time to express and discuss their design process; Interviewing them separately would mean gaining time to adequately cover and distribute the Discussion Guide between individuals; Logistically it was going to be difficult to get the design teams together; Separate interviews allow focused insight on both a strategic and tactical level.

Conducting interviews

The interviews were conducted as semi-structured interviews (Robson, 1995/2002) where "the interviewer has a series of questions that are in the general form of an interview guide but is able to vary the sequence of questions" (Bryman, 2003: 543). A semi-structured interview approach was decided upon due to the exploratory nature of the qualitative research. The flexibility of this approach was in line with Grounded Theory, where new knowledge is emergent from the data collected (Glaser and Strauss, 1967). The semi-structured interview approach enabled opportunities for ideas and issues to emerge.

Part of the interview process involved informing interviewees about how and where the interview data would be used. It also allowed the interviewee to decide on the degree of confidentiality. Confidentiality Agreement documents were given to each interviews and one was signed at each interview, which granted interviewee consent and permission in the research.

Other practical considerations for the interviews are listed below:

- Cost – Transport to different locations around the UK entailed time and considerable costs, especially where travel by train was required between Newcastle and London to interview London-based designers;
- Time – A maximum of 1 hour for each interview was requested. Interviews ranged from 45 minutes to 1.5 hours;
- Place – All interviews took place at a location that was convenient and familiar to the interviewee. It was important to maximise interviewee time and also to conduct the interview where they felt at ease and comfortable. Their places of work were most ideal as it provided access to any project process work during the interview;
- Access – Having access to the designers was relatively easy. By the time of the qualitative research phase, a rapport with many of the Dott designers had been established and most were familiar with the research investigation by the time of the interview. Access to the project stakeholders was also relatively easy through the connection of Dott 07 and individual designers. Only one project stakeholder declined to be interviewed due to the belief that they had not been as actively involved in the project as others. The flexibility of a full-time research investigation made it convenient to visit during work hours at a location of the interviewee's choice. It is also worthwhile noting that the recent completion of Dott 07 and emergent approaches of design such as Service Design and Co-design encouraged the enthusiasm and access to designers for their participation in the research investigation.

To show that literature searches continued throughout planning and the beginning stages of the qualitative research, the following maps (Figure 3.6) show the focal point of design methodology and sources identified to explore the topic. Design methodology was reframed early on in the research as design practice, to include a broad range of activity in the projects e.g. project management and client relationship development. Historical and current literature on design methodology helped contribute to defining the research topic, "justify the research topic, [research] design and [research] methodology" (Hart, 1998: 13).

In 2008 the qualitative research dominated the research investigation. In 2009 the data collection including; field insights and the knowledge pools of literature, were synthesised to create the research focus, that is; the study of the designer in design methodology.
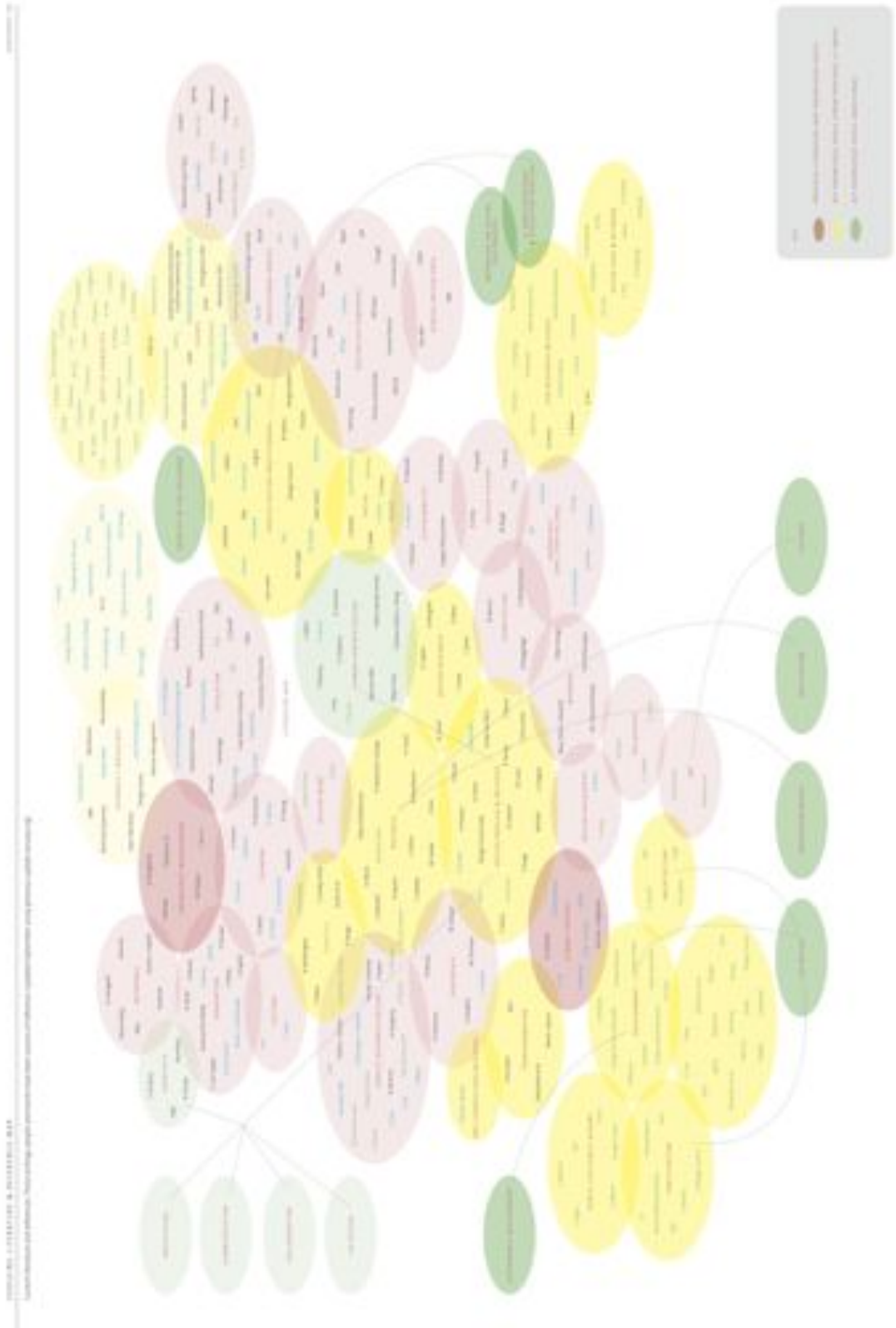
Figure 3.6. The literature map in September 2009. The green circles denote the analogous literature reviews (See Appendix 15 for larger version)

Similarly to Yee's (2006) literature maps the figures above show how the research focus changed over time. As the maps evolved toward particular focus areas helping redefine the research boundaries. In becoming more focused, certain pools of knowledge in the PhD became apparent as key influences to the study of the designer in design methodology in Dott 07 projects, while other areas were reduced in emphasis. Additions to the maps were also made to show the analogous literature search and review.

At the initial stages of the research it was difficult to identify key literature topic areas. This was due to the emergent nature of design practice in Dott 07. Due to the sparse literature of emerging design practice in the social and public sectors, the early qualitative research phase helped to inform the research focus and also identify pertinent areas of literature.

Without starting the research fieldwork, the literature search would have expanded into more and more areas without gaining focus. A key data source on most of the map was the Internet, labeled as 'Web.' Since beginning the research it was observed that social media was commonly used to support discourse around the emerging practice of design in the context of social and public sectors. Online publishing proved to be an efficient channel for many writers and designers to express opinions and observations on emerging areas of design. The online networks also enabled designers from around the globe to connect and cohere around this discourse. The opportunity afforded by social media influenced the development of the research. A PhD-specific blog was set up and maintained over the course of the programme. It provided a valuable platform for documentation, dissemination and feedback and it is discussed later in this chapter.

The maps show the progression of the literature and data sources referenced. They follow a divergent and convergent process, at one point pulling out a key focus area on design methodology, and then digressing to encapsulate the entire literature and data influences on the research. In the latter stages, the maps were used to help plan the research write-up.

The nature of the literature review in the PhD can be seen as two distinct phases. The first, called the initial literature search and review, looked mostly at design methodology. The second literature review is seen as ongoing and was used to ground the exploration of the roles of designers in Dott 07. This ongoing literature review drew from a number of other disciplines and fields such as business and anthropology. The need for analogous references was to ground the qualitative research with theories and concepts that design literature did not adequately cover. These explorations avoided a reinvention of roles where a substantial body of literature and thinking already existed. The analogous literature reviews were also found to be congruent with the emerging practices of designers, who used many methods drawn from disciplines and fields such as business and anthropology etc.

Transcribing and transcripts

All interviews were recorded on a voice recorder after interviewees gave their consent. At the start of comprehending the data all transcribing was done by myself and whilst this was time-consuming, it allowed many advantages such as:

- Noting mannerisms in the transcripts as reading words can have many interpretations;
- Creating a more intimate relationship between myself and the data;
- Allowing annotations, or memos (Miles and Huberman, 1994) and coding as the recordings were played and transcribed.

Transcript Templates (Appendix 16) were formed to provide consistency across all the transcriptions. A Contact Summary Sheet (Miles and Huberman, 1994: 51) was provided at the start of each transcription to give a quick overview of the interview, also to note initial themes, codes, issues and impressions of the interviews (See p1-2 of Appendix 16)

It is commonly recognised that in academic research, analysis of the data is the least codified (Eisenhardt, 1989; Breslin and Buchanan, 2008). Eisenhardt's (1989*) Building Theories from Case Study Research* was written to help close this gap in research analysis and outline how theory was generated from case study research. She provides a roadmap for this by combining literature from Strauss and Glaser (1967), Miles and Huberman (1994) and Yin (1994). She states that many researchers develop their own methods in addition to, and in variation to methods outlined in the literature. Methodologies for research seem to be evolving in theory-building research (Eisenhardt, 1989: 539) and throughout this PhD programme, the literature review process, observations during fieldwork and participation in several PhD conferences and seminars have shown the diversity and variation of research approaches, the messiness of research processes and additions to research designs[149]. Texts such as Glaser and Strauss encourage and "stimulate other theorists to codify and publish their *own* methods for generating theory" (Glaser and Strauss, 1967/2008: 8).

First stage coding

Coding while transcribing was done in three instances:

- Among the text as the interview was being transcribed;
- Hand coding along the margins with printed transcriptions (Glaser and Strauss, 1967/2008: 106); and
- Collecting codes in the Contact Summary Sheets (Miles and Huberman, 1994: 51) that outlined factual information for the interviews such as name, date, time and location.

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[149] Such discussions occurred at the *Writing Across Boundaries* workshop in 2009; 2010 and *the Leeds Festival of Design Activism* in 2009.

These forms of manual coding, and coding by hand on printed transcripts, were found to be an effective process. The manual coding, or coding by hand, permitted interviewee quotes, phrases and/or words with a common meaning to be grouped together. Often designers described what they do using different words or phrases. For example to describe the design research stage of their projects, designers of OurNewSchool called this 'Discovery', while in LowCarbLane designers called this phase 'Insights'. The manual and hand coding allowed the grouping of common meanings, whereas in the second stage of coding in NVivo, this was limited. Guldbrandsen used hand coding her in PhD investigation, preferring it to using computer software. She describes her process as follows:

> "By going through all the quotes again they were grouped into piles with other quotes that seemed to have some commonality – they represented a theme in the data. Some quotes would be given more than one descriptive code, and would therefore be photocopied so it could go into more than one group" (Guldbransen, 2006: 56).

(See Appendix 16 for an example of a full transcriptions including Contact Summary Sheets and coding as the interviews were transcribed).

Second stage coding with NVivo

The second stage of data analysis was done with NVivo. It generated 17 different codes (Appendix 17) but did not arrive at conclusive findings. The coding experience was found to be limiting, not only because designers used different words to describe similar activities, but also because NVivo only considered the interview data and other electronic documents from meetings and conferences and not visual material (e.g. images) and evolving ideas and impressions (e.g. hand notes, sketches, mind maps and Industry Ethnography). The coding in NVivo was found to be too reductive in its process of breaking down the data and re-combining it in new ways to abstract and form new concepts that could show patterns. These concepts grouped together would form categories. This reductive process did not recognise the interpretative thinking throughout the research. Fulton-Suri says that intuition is "informed by experience and tempered by continual doses of reality" (Fulton-Suri, 2008: 54). She also describes interpretation as:

> "The synthesis of evidence, recognition of emergent patterns, empathic connection to people's motivations and behaviours, exploration of analogies and extreme cases, and intuitive interpretation of information and impressions from multiple sources" (Fulton-Suri, 2008: 54).

Both intuition and interpretation are difficult to document because we sometimes cannot make all our tacit knowledge explicit, as philosopher Michael Polanyi says, "we can know more than we can tell" (Polanyi, 1967: 4). Nonaka says tacit knowledge is:

"Deeply rooted in action and in an individual's commitment to a specific context – a craft or profession, a particular technology or product market, or the activities of a work group or team. Tacit knowledge consists partly of technical skills – the kind of informal, hard-top-in-down skills captured in the term 'know-how.' A master craftsman after years of experience develops a wealth of expertise "at his fingertips" but he is often unable to articulate the scientific or technical principles behind what he knows" (Nonaka, 1991: 98).

Thus tacit knowledge in this research comprised of observations and conversations with industry and past experience as a designer. In tacit knowledge not all our knowledge can be externalised and Nonaka states this is due to the "cognitive dimension. It consists of mental models, beliefs, and perspectives so ingrained that we take them for granted, and therefore cannot easily articulate them" (Nonaka, 1991: 98). The challenge with NVivo was that the coding required data to be explicit for it to be documented electronically. Intuition and interpretation and one's own tacit knowledge is difficult to capture in just words, it is this kind of knowledge that contributes significantly to the synthesis and analysis of the research data. Thus NVivo was found to be limiting in data synthesis and analysis, and while it was used, it was not used for the final analysis of the Dott 07 projects. The following section details a number of other research techniques that were used for interpreting the data.

Visual case studies

Much literature discusses the need for different kinds of research philosophies, strategies and methods (Archer, 1980; Frayling, 1993/4; Holness, 2000) to communicate and draw out unique aspects of design that tend to get engulfed by the rigour and inflexibility of traditional academic research methodologies.

Miles and Huberman state that; "most analysis is done in words" (Miles and Huberman, 1994: 7). They present methods of data reduction and display as other ways to comprehend the research data. Data reduction can aid in reducing the sheer amount of data through the production of "summaries and abstracts, coding, writing memos etc" (Robson, 1995/2002: 476). Data display can provide "better means of organising and displaying the information… [that] may be found in the use of matrices, charts, networks etc" (Robson, 1995/2002: 476). Methods of data reduction and display utilised in the research investigation have included:

- Session summary sheets;
- Memoing;
- Interim summaries;
- Data displays (Miles and Huberman, 1994).

In data displays, visual case studies were developed to disseminate the Dott 07 projects on a single-page (Figure 3.7. See Appendix 18 for the full set of Dott 07 visual case studies). Yin

(1994) presents a key criticism of case study research as being too lengthy in narrative. The development of visual case studies served as a synthesis of design methodology and the project experiences of designers and project stakeholders. It quickly disseminated findings and identified the design process, methods and outputs and outcomes of the project. The visual case studies were valuable in the case study development and were key to synthesis and analysis of the research. The visual case studies were assembled to articulate five main features of each project. These were:

- Key aspects of the design process[150];
- Corresponding feedback to these key aspects by Designers[151];
- Associated feedback on these key aspects by Project Stakeholders[152];
- The outputs of the project[153];
- The legacy of the project[154].

The visual case studies were also used for "member checking" (Robson, 1995/2002: 174) with several designers. They provided a quick mechanism for peer review to test accuracy and researcher bias of the qualitative research and its interpretations[155] (Robson, 1995/2002: 175).

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[150] The visual case studies drew out those methods which were spoken about, unprompted by designers and clients.
[151] Which on the whole, mostly conveyed the designer's experience on the project.
[152] Which on the whole, mostly conveyed the client's experience on the project.
[153] Outputs denoted the tangible aspects of the project's response to the problem.
[154] As understood at the time of doing the interviews.
[155] Robson says member checking is about "returning… to respondents and presenting to them material such as transcripts, accounts and interpretations… made" (Robson, 1995/2002: 175).

Our New School visual case study

Figure 3.7. Example of a visual case study created for the OurNewSchool project in Dott 07

Mind mapping

As a way to capture intuition and undertake interpretation, visual mapping was used extensively throughout the research investigation (see Figure 3.8 for an example). "Visual knowledge is particularly conducive to visual-spatial learners" (Gardener, 1985 and Silverman, 1989 in Yee, 2009) who think in pictures rather than words. Mapping was used to quickly map ideas, thinking, impressions and issues. Mapping makes ideas and thinking tangible and visible and has the ability to create linkages between ideas. Articulating the linkages do not often fit in the structure of written prose making mind maps valuable. Visual mapping helped to bring synthesis of ideas easily and quickly through drawing. The maps were further used in eliciting discussions providing "visual prompts" (Yee, 2009) to share ideas with other people, including designers. A limitation to the visual maps was the tendency to "over map" and mapping required further detail and explanation before conclusive research findings could be shown (Yee, 2009).

Figure 3.8. Example of a mind map

Figurative language

One way Nonaka suggests making tacit knowledge explicit is "finding ways to express the inexpressible" through figurative language (Nonaka, 1991: 99-100). One form of figurative language is analogy, of which Nonaka says "clarifies how two ideas are actually alike, and not alike" and it is analogy, which harmonises them by being "an intermediate step between pure imagination and logical thinking" (Nonaka, 1991: 101). Analogy was used to help bring together the complexities and number of components in the Dott 07 projects. An analogy of

theatre production was used to convey the entirety of a Dott 07 design project and its many influencing factors (Figure 3.9). The analogy of theatre production provided an organising principle to help deconstruct design practice and identify the various components that make up a design project. It was inspired by the writings of the Hollywood model (see Morely and Silver, 1997; Florida, 2002; Mintzberg in Mintzberg and Quinn, 1998/2002) where business problems can be organised in ways that Hollywood films are produced. The analogy profiled various components of the context, process and people in design practice. The analogy shows the scope and complexity of investigating design projects and this research focused on a subset of one component, which is the designer under the 'cast of characters.' It is highlighted in Figure 3.10.
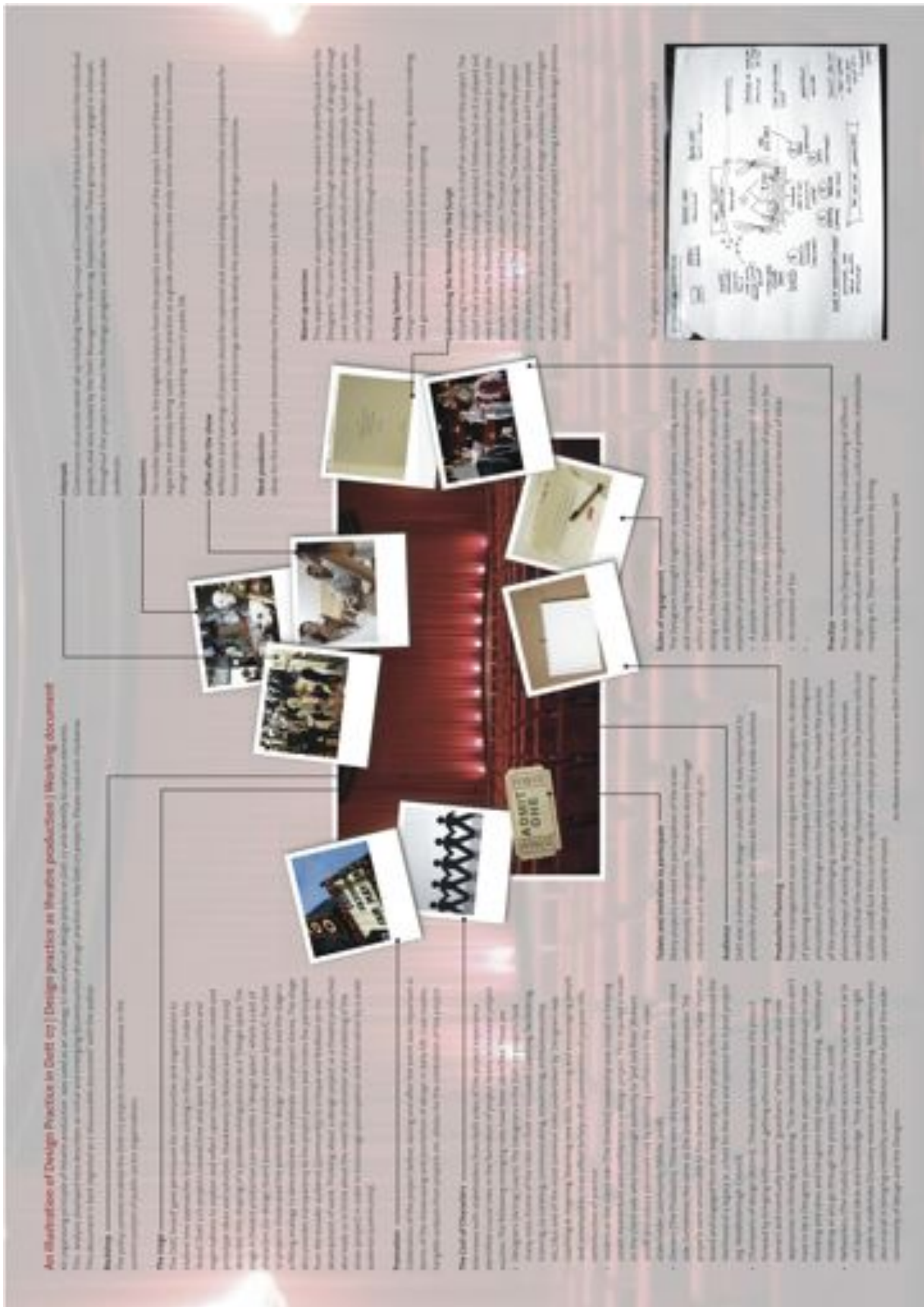
Figure 3.9. Design practice in Dott as theatre (Also see Appendix 19)

The Cast of Characters

Interviews with stakeholders from both sides of the project experience identified crucial roles in the formation of project teams to increase project success. The following emerging roles have been identified. These are:

- Designers (Acting Coach): The Designers in the Dott 07 projects took many roles (Some of the roles in Dott 07 included: Coaching, facilitating, training, co-creating, communicating, researching, entrepreneurship etc.) But one of the most common roles undertaken by Designers was coaching ie. inspiring, teaching new skills, listening and encouraging people and communities in an effort to help shift communities of purpose into communities of practice.

- Leaders on the client side (The Director). Leadership was crucial in helping create momentum and confidence in a design project. This required a leader on the client side who had enough authority to "put out fires" (Robson, 2008) and reduce perceived risk by instilling confidence in the wider stakeholder community (White, 2008).

- Owners (The Producers). These were the key decision makers on the client side. Sometimes the same as the Leaders, but sometimes separate. The projects were answerable to the Owners and it was crucial to have them on board and engaged from the beginning of the project as this increased the likelihood of a legacy ie. a host for the idea and sponsor for it post-project (eg. Middlesbrough Council)

- Champions of design (Actors). These people helped move the project forward by bringing enthusiasm, getting others on board, overcoming barriers and eventually become "guardians" of the principles and new approaches to thinking and doing. "To be involved in that process you don't have to be a Designer, you have to be an open-minded individual to share thinking and ideas and Designers help shape your thinking ... facilitate your thinking as you go through the process." (Townson, 2008)

- Networkers (The studio). Designers need access to the local network as to not duplicate ideas and knowledge. They also needed access to the right people to undertake Discovery research and prototyping. Networkers were also crucial in bringing credibility and confidence at the face of the wider community of design and the Designers.

Figure 3.10. Design practice as theatre: The Cast of Characters

Research dissemination

Further research dissemination for peer review included a research website (Appendix 20) and monthly newsletter (Appendix 21). Both were used to; update the progress of the research, share knowledge, give insight into evolving thinking and ideas, and offer additional channels for peer review and feedback. These communication channels provided a means to establish a dialogue with a wider community of interest to the research.

Writing

While written prose was found to be less helpful than mind maps in initially connecting ideas, it provides an accessible and shareable platform for many others to engage with the research. Many papers and presentations were authored, co-authored and shared throughout the research investigation. Writing helped layer reflections, make ideas explicit and identify new issues, which often emerged especially in co-authoring. Co-authoring was undertaken as a joint reflective process with the designers of Dott 07. This contributed to the data analysis and interpretation through the 'layering' (Heskett, 2002) ideas and reflections, and the 'stockpiling' (de Certeau, 1986) and 'intersecting strands of data' (Derrida in Pryke et al, 2003: 31) helped generate new knowledge. During the research investigation two papers were co-authored on the Alzheimer100 and DaSH projects. The Alzheimer100 project was published in the *Australasian Medical Journal* in November 2009. It looked at the co-design practices in the project. The paper was later cited on the NHS website[156] in March 2009 as an exemplar of Experience Based Design in healthcare. In co-authoring, the designers both added further reflections and validated the interpretations of their projects. In DaSH, the co-authoring became a process of drawing out what was distinctive about designers, particularly in addressing social issues. The full paper was not published due to a miscommunication with the journal editors, but the project was acknowledged in the journal as a short summary. A list of other papers authored and published can be found in Appendix 22.

Case study development

The final technique for analysis and synthesis for the research data was case studies:

> "A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and contract are not clearly evident" (Yin, 2003: 13).

Yin's (1994; 2003) Case Study Method was largely followed in the research design, but one key part was challenged with the Grounded Theory approach. Yin's Case Study Method advises that

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[156] See
http://www.institute.nhs.uk/quality_and_value/experienced_based_design/the_ebd_approach_(experience_based_design).html

theory is developed before data is collected (Yin, 1994: 49). In the sprit of Grounded Theory, where theory emerges from the data, this first step of the Case Study Method was not conformed to[157]. Eisenhardt's roadmap[158] for generating theory provides a more fitting approach to this research investigation[159] advising that the early stages of case study research needs to "retain theoretical flexibility" (Eisenhardt, 1989: 533).

Case studies were used because they were found to be a suitable communication method to convey "the complexity and particular nature of the case in question" (Stake, 1995 in Bryman, 2003: 48). Case studies in other disciplines such as law, medicine and business are used to understand, "core principles and being able to apply those principles in different situations" (Breslin and Buchanan, 2008: 36). Eisenhardt's technique to include writing up case studies as pure description can generate new insight (Gersick, 1988 and Pettigrew, 1988 in Eisenhardt, 1989: 540) but also "help researchers to cope early in the analysis process with the often enormous volume of data" (Eisenhardt, 1989: 540). Case studies were also used in the synthesis of the research and led to the identification of the different roles of the designer in Dott 07. The Dott 07 projects form seven chapters as the main body of this research thesis. Each chapter begins with the project as a *case study* followed by a *discussion*[160].

Case studies in the discipline of design are valuable as Breslin and Buchanan state that there is currently a very limited "repository of cases to draw upon" (Breslin and Buchanan, 2008: 37). Case studies in design are written but are usually used as a marketing tool for design companies. This type of case study is less useful for reflection on a design project. The limited number of case studies for reflection stems from a number of reasons. Firstly design methodology is usually seen as the intellectual property or "organisational intelligence" of the company and is therefore:

> "… often regarded as privileged, proprietary information that cannot be shared with the public. This secrecy does not lend itself to in-depth examination by outsiders" (Breslin and Buchanan, 2008: 37).

Project costs and contracts also do not usually include allowances for the creation of detailed case studies for reflection. In this research investigation, case studies were created and used to detail design practice and discuss the different roles of the designer.

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[157] Glaser and Strauss advise that, "Potential theoretical sensitivity is lost when the sociologist commits himself exclusively to one specific preconceived theory… For this person, theory will seldom truly emerge from data" (Glaser and Strauss, 1967: 46).
[158] Eisenhardt outlines eight steps in the roadmap for building theory from case study research. These steps include: Defining the research focus; selecting cases; using multiple data sources; entering the field to collect the data and conduct analysis; analyzing the data; shaping the hypothesis; use of literature to compare and contract; and researching closure (Eisenhardt, 1989: 533-545). While this roadmap can be seen to describe this research methodology, it places emphasis on case studies as the key source of theory generation. In this research investigation, a more balanced approach was taken to consider other data sources such as the Industry Ethnography, which produced a number of key insights, and the cross-disciplinary literature reviews, which grounded the designer roles and identified the valuable contributions of designers.
[159] Eisenhardt's (1989) framework is a synthesis of Glaser and Strauss's (1967) Grounded Theory principles, Yin's (1994) Case Study Method and Miles and Huberman's (1994) approaches to anaylsing the data, all currently utilised in the research design. She also states that her roadmap is well suited to "new research areas or research areas for which existing theory seems inadequate" (Eisenhardt, 1989: 548-9).
[160] See *Figure 4.1* for chapter structure in *Chapter 4: Introduction to the Dott 07 Chapters* (p 98).

Co-authoring

The value of the interactions and conversations with industry saw an opportunity to work toward co-producing knowledge "from a process of interaction in which both the fieldworker and the informant participated" (Rabinow, 177 in Pryke, et al, 2003: 108). Co-authoring was undertaken with designers of Dott 07 projects, resulting in a number of published papers, as previously mentioned. Co-authoring was an effective method for engaging practitioners in academic research and reflection, validating the case studies and research findings, and publishing to contribute new knowledge about design. It is encouraged that more co-authoring occurs between academic researchers and design practitioners to advance the design discipline.

Peer review

Peer reviews (McNiff and Whitehead, 2006: 157-165) have been undertaken throughout the research investigation, mainly with the co-sponsors of the research and the designers who were involved in Dott 07 (see Appendix 24). "Peer briefing and support" (Robson, 2002: 175) with other PhD researchers were also undertaken, either at PhD workshops or organised events, where sharing research findings, methodologies and methods occurred. These peer groups gave feedback but also helped to "guard against researcher bias" (Robson, 2002: 175). Other less formal conversations with designers and PhD researchers saw many "critical friends" (McNiff and Whitehead, 2006: 159) become involved in the research investigation. These people are "sympathetic to what you are doing but are also aware of the need to challenge your thinking" (McNiff and Whitehead, 2006: 159). While less formal, they occurred more frequently than co-authoring and publishing papers.

While many peer review sessions were undertaken, the geographical location and time limitations made it difficult to conduct them on a formal and systematic basis. The geographical location difficulty was primarily due to residency taken up in both Newcastle and London over the course of the three-year programme. Each location had limited access to the industry or research communities. Informal peer review sessions worked well and suited the practicality of the availability of peers in disparate geographies.

The peer reviews discussed so far aimed to provide internal validity, that is to identify "whether there is a good match between researchers' observations and the theoretical ideas they develop" (Bryman, 2003: 273). Peer reviews have also happened with a wider, external and international audience. Many presentations and papers were blind peer reviewed for conferences and journals. A list of all peer review sessions, informal to formal can be found in Appendix 23.

Knowledge generation

So far, this chapter has reviewed the research methodology used in this investigation. An articulation of the knowledge generation process reveals how knowledge in this research was created using the concepts of layering, stockpiling and intersecting strands of data. Crang (2003) discusses a philosophical stance of how knowledge is gained drawing upon the writings of de Certeau. de Certeau (in Pryke, et al, 2003) views the generation of knowledge as "a series of loops coming from a home base and out into the field. He argues that interpretation is about turning our travels to and from the field into a stockpile of knowledge" (de Certeau in Pryke, et al, 2003: 139).

The time-based process of stockpiling knowledge sees knowledge emerge over time and identifies the process of this research as both drawing from qualitative research data and discourse in industry. In doing so "the accumulation consists of building these disparate elements into a coherent stock of knowledge" (Crang in Pryke, et al, 2003:139). Clark further elaborates on this stockpiling process by showing that the interaction of research with the real world is about:

> "The philosophical opening of word to world has important implications for what count as 'available resources and materials' for posing problems and composing questions" (Clark in Pryke et al, 2003: 45-6).

Much of the research which interacts with the real world occurred in conversations with designers. These were captured, recorded and archived. The process of attending and also hosting[161] industry events such as, conferences, seminars and networking nights further permitted a richer and deeper insight into the evolving design field[162]. Crang describes such an approach as "journeying through, rather than standing over our material" (Crang in Pryke et al, 2003: 143). If we take on this idea, then it might be more appropriate to describe this research investigation as doing research *with* design in recognising the frequent contact and interactions with industry. Dorst suggests such an approach where he states that "design researchers should join design practitioners in co-creating the design expertise and design practices of the future" (Dorst, 2008: 11).

The frequent interactions with industry throughout this research investigation ensured the opportunity to create what Derrida describes as "the event of the coincidence… where the innumerable threads of causality fall together, coincide, begin to cross and reconfigure" (Derrida cited in Ulmer, 1994: 201 in Pryke et al, 2003: 35). In this process, the different

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[161] See http://www.servicedesigning.org
[162] At the close of the qualitative reach stage, continued interaction with industry by means of observation and conversations further informed the development of this research, its reflections and relevance to design practice. One of the outcomes of such interactions has been the establishment of a London service design network (See http://wwwservicedesigning.org) to facilitate discourse on service design practice through a series of monthly events.

strands of data (such as literature, interviews, conversations etc) intersect over time and converge. Convergence happens through a circular process, one which begins with conversation then capturing, interpreting and communicating it to an audience to elicit further conversation to develop and iterate thinking and ideas. This process is cyclic and builds, or stockpiles, knowledge (de Certeau in Pryke et al, 2003). The circular nature of research is a common description (see Glanville, 1999: 88; Pryke et al, 2003). Pryke et al state that in social research:

> "A circular process is encouraged: to research through reflecting, mulling over, speculating, is to practice the continual honing of thinking crafts to be employed and shared further through research" (Pryke et al, 2003: 4).

This circulatory identified the emergent focus of this research investigation as well as its question and the findings. A workshop called *Writing Across Boundaries*[163] (WaB) also recognised the circularity of doctoral research. The workshop brought together a group of social science PhD researchers to discuss, reflect and share research experiences. The workshop was attended in 2009 and in 2010. In 2009 the workshop group recognised this circular notion of knowledge generation. Reporting from the workshop stated:

> "The 'circularity' of the PhD process: There seemed to be a consensus among the WaB group that a PhD is not a linear process, but a circular one. Some of us have found that we cannot retrofit existing theories to our research. This has required us to go back to discover, think and reflect more on what our research is telling us. Presenter Jennifer Mason actually said that a very few of us would be able to fit an existing theory neatly on top of our research and that most, would probably draw from many theories" (Quoted from *Reflections on Writing Across Boundaries,* 30-31 March 2009).

Finally in my own review of the research process, a circular motion of knowledge development became apparent:

> "The knowledge has gone around in circles. The data confirmed things in the circle as it got rid of others [themes that were] thought about upfront as having a small part actually emerged as the main [theme]" (1 September 2009, electronic communications).

The final reference used to describe knowledge creation in this research draws from design history the notion of layering, a concept used to convey the historical development of the field of design. Heskett writes that the history of design as a process of layering where "new developments are added over time to what already exists" (Heskett, 2002: 6-7). Layering describes this research process where design knowledge is formed by integrating 'designerly'

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[163] The *Writing Across Boundaries* workshop series was a 2-day course to help PhD researchers bridge the "scary gap" between the data collection and writing up of a PhD thesis. Its secondary aim was to gather experiences of writing PhDs for a forthcoming book of the same topic by the workshop organisers Bob Simpson (Durham University) and Robin Humphrey (Newcastle University). More information can be found here: http://www.dur.ac.uk/writingacrossboundaries My reflections on the 2009 workshop can be found here: http://letterstoaustralia.blogspot.com/2009/04/writing-across-boundaries-workshop-30.html

approaches[164], to identify the richness of designing activity, and more conventional academic research methodologies to add rigour, reliability and validity. Designerly approaches are a reference to the principles leading this research investigation that include:

- A human-centered (designer as actor) focus in investigating design methodology;
- Communicating the research and its ideas with tangibility to create understanding and accessibility to a wide audience;
- Embracing both rigor and reflexivity;
- Creating visual, as well as written, research outputs;
- Being collaborative in peer review and co-authoring;
- Listening to voices within the industry; and
- Engaging and emphasising reflection on design practice in Dott 07.

The creation of new design knowledge in a research study is often a messy process of moving between different data sources that ranged from desk research, to qualitative research to informal observations and conversation with industry.

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[164] Nigel Cross writes that there are "designerly ways of knowing, distinct from the more usually-recognised scientific and scholarly ways of knowing" (Cross, 2007: 22). More recently Sevaldson has discussed different modes of design research that may better contend with design's "complex field of knowledge production [where] such a complexity demands an equally rich repertoire of interrelated methods and positions" (Sevaldson, 2010: 8).

Limitations to the research

The following table (Figure 3.11) outlines the limitations to the research design. It explains the steps taken to reduce these limitations.

Limitation	Actions and proposals for reducing the these limitations on research design
Little opportunity for participant-observation (Yin, 1994) in the projects due to timing in commencement of the research investigation	• Industry Ethnography helped gain deeper insight into the practices of designers; • Increased reliability by redundancy of questions in the Discussion Guides; • Comparison groups (Robson, 2002) as part of the research design enables triangulation of the data; • Use of multiple data sources for case study development enables the "triangulation of evidence" (Eisenhardt, 1989: 533); • Conducting the qualitative interviews at the place of work of each interviewee enabled observations in the field (Eisenhardt, 1989: 539) i.e. the designers' environment and culture.
Reliance on self-reporting by designers was due to the structure and timing of the research but it is at risk of "post-rationalisation: the tidy explanation after the event of what was, perhaps, a rather different experience" (Glanville, 1999: 83)	• Triangulation of data sources (Eisenhardt, 1989: 533) such as secondary sources and comparison groups (Robson, 2002) such as project stakeholder interviews helped validate what actually happened in the project.
Subjectivity and personal interests can affect objectivity with researcher biases	• The Prologue identifies any researcher biases; • Use of peer review, member checking and critical friends reduced researcher bias, The constant layering and stockpiling of knowledge sought continual feedback and validation from the design industry and other design stakeholders throughout the investigation; • Co-authored papers and visual case studies provided internal validation of the case studies.
Limited time in the interviews meant that occasionally not all questions in the Discussion Guide could be completed	• Follow-up emails and contact were requested, undertaken and documented; • Member checking with papers and visual case studies helped cover the full breadth of the Discussion Guides after the interviews.
Timing of interview affected interviewee's focus on the interview e.g. Some interviewees were under a lot of time pressure	• Some interviews involved a lot of time upfront to focus the interviewee; • Notations in Contact Summary Sheets (Miles and Huberman, 1994: 51) helped to understand the context of the interview; • Multiple interviews for the same case study were undertaken to enable other interviewees to fill in any missing information; • Follow-up emails and contacts were requested, undertaken and documented.

Any study of design (or designers) that presents it within a pre-existing framework or theory is always at risk of camouflaging or overlooking certain aspects of design, which may be important. The limitation in this research investigation is the connecting of the designer to a particular role that draws on a concept from another discipline, rather than the invention of a new role.	• Drawing on existing roles in other fields and disciplines was needed for the interrogation of the different designer roles in Dott 07. In the discussions of each case study, we see how comparing and contrasting the activity of designers to descriptions of the roles in other fields and disciplines illuminates the valuable contributions of designers; • One way that the investigation could have occurred was without a pre-existing framework or theory. An ethnographic study of a particular design practice could have been undertaken, such as in the case of Yaneva (2009) who spent two years as a participant observer at an architectural firm. She published her findings explaining her approach as: "I simply describe various design practices without sticking to reference outside architecture, while also relying on the assumption that these infra-reflective accounts will be self-exemplifying" (Yaneva, 2009: 101). The limitation of this research was that the case studies look at several Dott 07 projects that were led by a number of different design practices rather than just one.
The single role for each Dott 07 project where the research findings can be seen as 'too neat.'	• It is emphasised that each role is the *dominant* role of the designer in the Dott 07 project; • In order to interrogate a designer role, only a single role can be discussed for the number of projects that needed to be investigated. The elaboration of designer roles is largely absent in the design literature and to study and analyse the roles, only one role from each project could be discussed; • Overlaps in the roles are discussed in each chapter and in *Chapter 12: Conclusion* (p 326).
The analogous literature reviews draws on thinking, concepts, theories and ideas from other fields and disciplines. The limitation here is that design becomes "less precise about what design should include. Design must have its own inner coherence... develop their subject *in its own terms"* (Cross, 2006: 5-6).	• In the analysis and discussion of the Dott 07 case studies the concepts and theories from the analogous literature reviews did not seek to retro-fit the activities of the designer. Rather the literature sought to inform a deeper understanding of the designer role. These roles had already been established before the analogous literature was reviewed. Eisenhardt describes this as where "researchers constantly compare theory and data – iterating toward a theory which closely fits the data." (Eisenhardt, 1989: 541).
Certain approaches in this research investigation may be difficult to replicate in future PhD investigations due to the context of which this research investigation took place. In particular the time of the research (where the state of the field was emergent) and the personal relationships developed over the course of the research (which is largely dependant on the individual researcher and also the interviewees).	• This chapter has been as honest and explicit as possible in conveying how the research was undertaken and what methods were used (truth-to-tell process); • It is important to note that geographical proximity and access to the design industry allowed for Industry Ethnography and enhanced the research interpretations and findings significantly. This aspect of the research investigation may not always be able to be replicated in other PhD investigations.

Figure 3.12. Limitations to this research and actions for reducing them

Additional uses of the qualitative research

Throughout the PhD programme the research has been engaged with and used by the co-sponsor, the Design Council UK. The research has made contributions in the following areas to the Design Council and Dott programme;

- Insights into the emerging Service Design industry who participated in Dott 07;
- A Dott methodology: A workshop that occurred in August 2008 and resulted in a Dott-specific methodology which was adopted by Dott Cornwall and published on the Design Council website[165];
- The Design Council's Service Design Knowledge cell workshop[166];
- The Design Council's Public Services by Design programme;
- A report on Dott 07 to capture the programme's public design commission projects legacies and learning outcomes..

Conclusion

This chapter has reviewed how this research investigation was undertaken. It has outlined

- The research purpose;
- The research perspective;
- The research methodology;
- The research methods;
- Research analysis/synthesis;
- Research dissemination; and
- The limitations to the research.

It discusses these various aspects of the research investigation and novel research methodologies, such as Industry Ethnography, visual case studies and co-authoring that have been utilised. It was found that such methodologies enrich, validate and comprehend the research and data. Further uses and development of these novel methodologies are encouraged to develop investigations into design as a subject of academic inquiry. Doctoral programmes in design are relatively new (Banerjee, 2008) and this research investigation adds small contributions toward developing methods for the field of academic design research.

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[165] See 'Transforming Public Services' by John Thackara on the Design Council website at:
http://www.designcouncil.org.uk/en/Design-Council/1/What-we-do/Our-activities/Public-services-by-design/Transforming-public-services
[166] See http://www.designcouncil.org.uk/about-design/types-of-design/service-design/what-is-service-design

Chapter 4

Introduction to the Dott 07 chapters

Introduction to the Dott 07 case studies

The seven projects of Dott 07 form seven chapters of this thesis where each chapter presents the qualitative research and the key findings. This thesis therefore does not conform to a conventional thesis structures as there is no discussion chapter, rather a concluding summary of the seven chapters (Figure 4.1 presents an overview). Due to the breadth, complexity and number of Dott 07 case studies[167] and the direct correlation made between the case studies and the roles, each chapter presents a Dott 07 *case study* followed directly by a related *discussion*. This ensures a continuous flow of narrative from the qualitative research to its analysis. The conclusion chapter therefore, only summarises the research findings of the seven designer roles in Dott 07.

Chapter	Project case study	Discussion
5	Alzheimer100	The Designer as Co-creator
6	Design and Sexual Health (DaSH)	The Designer as Researcher
7	OurNewSchool	The Designer as Facilitator
8	New Work	The Designer as Capability Builder
9	Move Me	The Designer as Social Entrepreneur
10	LowCarbLane	The Designer as Provocateur
11	Urban Farming	The Designer as Strategist
12	Conclusion	

Figure 4.1. Thesis structure: Chapters of case studies and discussion

Each chapter follows a uniform structure presenting a *case study* and *discussion* of the dominant role of the designer in the project. An outline of a chapter structure can be found in Figure 4.2.

CASE STUDY OF DOTT 07 PROJECT	Case study that articulates the context, content and process of the design project
DISCUSSION	Statement of (dominant) role of the designer in the case study
	Literature review (design and/or analogous) relevant to the identified role
	Definition of the role and its key practice
	Validation of the role using the Dott 07 case study
	The value of the designer role
	Overlaps with other roles in Dott 07

Figure 4.2. Chapter structure

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[167] More specifically the breadth and complexity of the issues, and the range of design practices and processes involved across all seven Dott 07 projects.

Each chapter begins with a *case study* of a particular Dott 07 project. The case studies were informed by investigating at the context, content and process of design (Young, 2008) with data collected from semi-structured interviews with the designers and project stakeholders of each project. Secondary data sources such as the Dott 07 website and project artifacts were also used in the case study development.

Discussion in the chapters begins by identifying the dominant role of the designer in the Dott 07 project. This is followed by a short literature review relevant to the role. The review can be from the discipline of design or analogous disciplines and fields of practice to design. It was found that some roles are not widely discussed in design literature. Literature was drawn from a broad range of disciplines and fields including marketing, anthropology, organisational development, facilitation, social entrepreneurship, strategy and futures thinking. This literature helped define the roles and their key practices. The Dott 07 case studies then provide the evidence of these roles and their practices, and these are elaborated on.

The analogous literature reviews allowed for the identification and articulation of the value of the designer role when they design for social good. This knowledge emerged from comparing and contrasting the designer's roles in Dott 07 to discussions of the roles in the literature. These articulations are important for design practitioners early in strategic design projects to convey their valuable contributions, particularly in multi-disciplinary co-operations that aim to address complex social issues.

In the final section of each chapter, the overlapping roles in Dott 07 are acknowledged because designers take on many roles in projects. The repetition of seven roles were observed across all Dott 07 projects, but the idea of emphasising a single dominant role per project was to provide a focused way of interrogating and then understanding their nature and significance.

The chapters of this thesis are deliberate in their order. The sequence follows the Dott 07 case studies where designers take an approach of designing *with* people, to designing *for* them (Figure 4.3). Each Dott project sits along this spectrum, which was developed upon reflections of them in terms of how many stakeholders designers involve in the process, and for how many stages. For example in the first case study, Alzheimer 100, at the designing *with* end, designed *with* people by involving as many stakeholders as possible in almost every stage of the project process. At the opposite end of the spectrum, the final case study Urban Farming, designed *for* people. This saw less stakeholder involvement in the development of the project ideas where designers created and presented a strategy for implementation.

The spectrum does not suggest that either end is good nor bad. Both Alzheimer100 and Urban Farming projects resulted in strong legacies that included informing government policy. It was found in Dott 07 that the best project results were where designers identified and then adapted their roles to suit the client, content and the context.

DESIGNING WITH ⟵⟶ DESIGNING FOR

| Alzheimer100 | DaSH | OurNewSchool | New Work | MoveMe | LowCarbLane | Urban Farming |

Figure 4.3. Spectrum of designing with to designing for and the Dott 07 projects

Chapter 5

Alzheimer100:

The Designer as Co-creator

Alzheimer100: The Designer as Co-creator

Case study: Alzheimer100

Dementia has a devastating impact on the lives of people. The disease Alzheimer's is the most common cause of dementia, a term used to describe progressive symptoms such as memory loss, mood changes, communication problems and difficulties completing daily tasks and activities. While the disease is fatal, individuals can live up to twelve years after diagnosis (Project Stakeholder 1, 2008: 5; Department of Health, 2009a: 10), which requires a significant amount of care provided by others. Such care usually comes in the form of informal and unpaid carers[168], that is partners, family and friends, who make up three to four times as many people than those with dementia whose lives are affected by the disease (London School of Economics et al, 2007). In the UK 700,000 people have dementia and this number will increase to over a million by 2025 (London School of Economics et al, 2007; Department of Health, 2009a). If informal carers are added to these numbers, then the future of dementia will affect an enormous amount of people and their lives. In addition to this, the current government spend on dementia per year[169] is set to treble[170] in thirty years time (Department of Health, 2009a: 16). If significant improvements and innovations are not made in the areas of dementia awareness, diagnosis, care, support and living with dementia "… the cost of not making the changes will be immeasurably higher, both in financial and human terms" (Department of Health, 2009a: 74).

The Dott 07 project Alzheimer100 set out to address some of these challenges of dementia. The project looked at innovative ways to improve the daily lives of people with dementia and their carers. The project took place in the North-East (NE) region of the UK where a network of organisations already existed that identified and promoted issues around dementia[171] (Years Ahead, 2011) and where a number of Alzheimer's Society branches were located[172].

Social design agency thinkpublic were appointed by Dott to lead Alzheimer100. Their vision for the project was to develop innovative responses to dementia issues by listening to the voices of and working with the dementia community (Designer 1, 2008; Designer 2, 2008). The project involved a broad range of stakeholders including researchers, academics, carers and people with dementia. These project stakeholders participated in the research, design, development and implementation phases of the project. Such an approach was well received where the current landscape of dementia care had rarely "involved the people with dementia… in voicing what

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[168] A carer is known as "people who provide unpaid care to family, partners or friends in need of help because they are ill, frail or have a disability" (Pickard, 2004: 3).
[169] The Department of Health (2009a: 16) estimates that the national cost of dementia per year is £17 billion.
[170] In 30 years, the national cost of dementia is predicted to be £50 billion (Department of Health, 2009a: 16)
[171] See http://www.yearsahead.org.uk
[172] The Alzheimer's Society is the UK's leading care and research charity. It is a membership organisation that undertakes a number of activities to help lead "the fight against dementia" such as raising awareness about dementia, providing information for people affected by dementia and providing research into dementia. See: http://alzheimers.org.uk

they felt like they needed from services"[173] (Project Stakeholder 2, 2008: 7). Furthermore, Alzheimer100 was timely because it coincided with the UK government's announcement to create the country's first national dementia policy to address the nation's current and future dementia issues. Alzheimer100 was an opportunity to demonstrate how design could contribute to addressing and responding to challenges of dementia in the region and also nationally.

thinkpublic established a number of ways to raise awareness, invite and involve people in the project. A project name[174], logo (Figure 5.1), pamphlet[175] (Figure 5.2) and website[176] (Figure 5.3) were all part of the project communication to create awareness and different avenues for engaging people.

Figure 5.1. The Alzheimer100 logo. Image from http://www.alzheimer100.co.uk

Figure 5.2. A pamphlet from the Alzheimer100 project. Pamphlet supplied by thinkpublic

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[173] Of this another Project Stakeholder added "This resulted in "many services that affect the lives of millions of people [which] are… not fit for purpose" (Project Stakeholder 1, 2008: 17).
[174] The project name, Alzheimer100, acknowledged the 100th anniversary of the discovery of Alzheimers.
[175] These were posted to the community of interest to encourage participation.
[176] See http://www.alzheimer100.co.uk
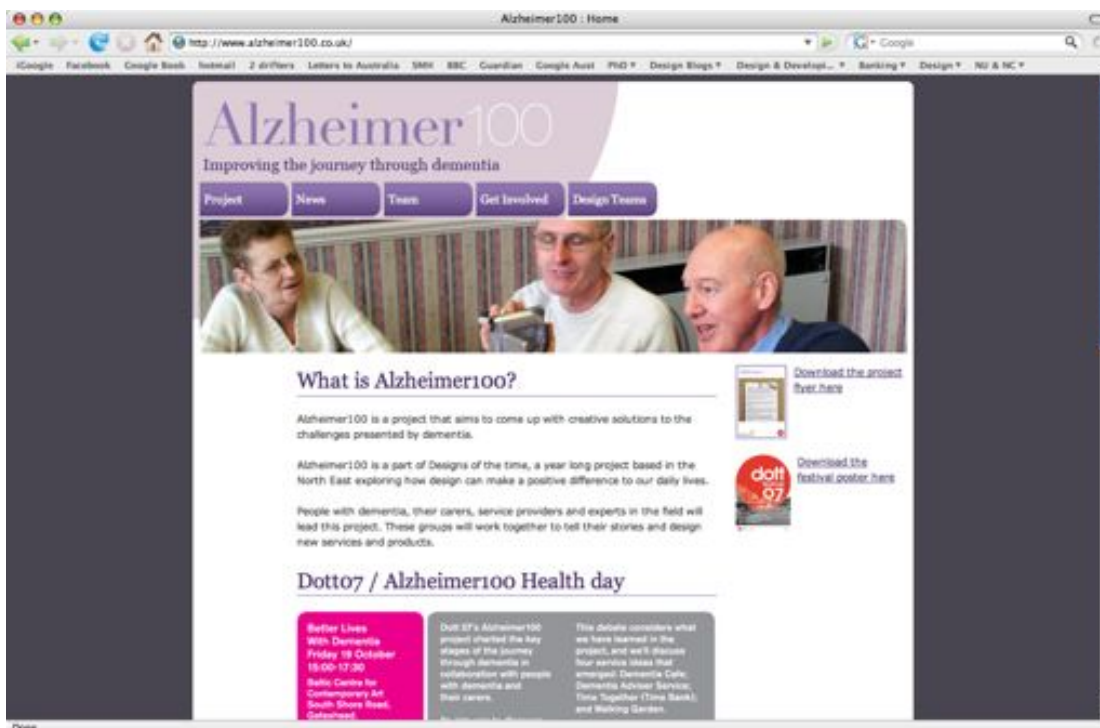
Figure 5.3. The Alzheimer100 website and blog.
Screen capture from http://www.alzheimer100.co.uk

One of the first events of the project was a Stakeholder Meeting. It brought together the community of interest, including all thirteen NE branches of the Alzheimer's Society, the Society's management, researchers, carers and people with dementia to make key decisions on the direction of the project and to introduce how design would be used in the process. The designers outlined how they wanted to be "as open as possible" about the project to invite:

> "… anyone who wanted to be involved, to be involved… Allowing people to make decisions about what needed to be changed and then take ownership for how it should be changed. So allowing people to identify the problems and become part of the solution" (Designer 2, 2008: 12).

With a community of interest established, thinkpublic looked at ways to stimulate conversation around issues of dementia. In the project they used storytelling and film to create a "conversation tool" (Designer 1, 2008: 10) to inspire new ideas for dementia care. thinkpublic recruited a small team of under-65s affected by dementia and their carers. The team was called the SMART team (Skills, Memory and Recreational Therapy) and their involvement in the project was to capture daily life and experiences with dementia for a film. The film was to be used as part of the process during the project's key event, the Co-Design Day.

thinkpublic ran a Skills Share Day[177] to build skills in film-making and interviewing with the SMART team (Figure 5.4). thinkpublic designers recognised that film technology was not

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[177] This day was organised and led by thinkpublic and a cameraperson from the BBC (British Broadcasting Corporation).

familiar to the SMART team and that it was important for members of the team to be behind the camera, to overcome challenges of trust for those being filmed in sharing their stories and experiences. The SMART team spent a few weeks capturing footage for the film and thinkpublic would edit and produce the film. However issues with consent forms, to give permission to show the footage halted the process.

Figure 5.4. The Skills Share Day and capturing experiences. Image from Dott 07 website

Consent forms had been created early in the project and despite being approved, a restructure of the Alzheimer's Society saw the new centralised office reject approval of the consent forms. This meant release of the film footage was not to be permitted. The designers expressed their disappointment saying that the consent forms did more than halt the production of the film it: "stopped the project [and became] a big challenge" (Designer 1, 2008: 8) by compromising the trust between thinkpublic and the dementia community[178].

Despite this the Co-Design Day took place and was a key event in the project. Around one hundred people were in attendance of the day. thinkpublic developed a number of creative activities to get people working together to reflect on the challenges of dementia and create responses to them. The first half of the day focused on networking and discussing the current challenges of dementia faced by the community. thinkpublic set up a 'marketplace' of challenges where market stalls represented a different challenge. People voted on the challenge that was most important to them, and this was used to organise the group into six teams who would work together to create plans to respond to the issue. The team activities took place during the second half of the Co-Design Day. Each team created ideas and responses to their chosen challenge.

In the following weeks, teams worked on their plans, with thinkpublic providing continuing support through 'Design Clinics.' At these clinics designers helped move ideas forward using

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[178] This included the time invested in collecting footage by the dementia community which would be potentially wasted and the expectations thinkpublic set in the production of a film.

design, for example communicating ideas through visualisations. By the end of the Alzheimer100 project a number of proposals had resulted including a film, as the consent forms had been given approval. More than a dozen ideas that addressed the challenges of dementia were showcased as part of the Dott 07 Festival. These ideas included:

- **A Signposting Service proposal** – That helped people navigate and access disparate dementia services through a 'signposter', a person who would guide and direct people to relevant and appropriate support (Figure 5.5). This was in response to the lack of access to services experienced by the dementia community simply because they did not know about them. A lightbox visualisation illustrates the numerous services available but not accessed (Figure 5.6);

- **A model of a Safe Wandering Garden** – A garden concept which would give people in a dementia care home more freedom, shelter, colour, mobility, interaction and opportunities for outdoor activity (Figure 5.7);

- **A volunteer mentoring service for carers** – Which would help carers, who often had little or no support, share daily duties;[179]

- **Proposals for dementia cafés at high street locations** – This looked to celebrate and propose more visible locations for Dementia Cafes[180] that were already taking place around the UK;

- **A 15-minute film profiling and capturing the daily life of people with dementia and their carers[181]** – The film captured real-life footage taken by the SMART team and chronicles several personal stories and challenges of living with dementia. (Figure 5.8).

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[179] The model was inspired by an existing organisation, Time Bank, who encourage and support a network of people and businesses in volunteering time (Timebank, 2009).
[180] Dementia Cafes "provide support and information for people affected by dementia, [which] create a welcoming, relaxed setting where people could share their fears and concerns about dementia and receive help and support" (Graty, 2009).
[181] The film has been one of the most successful outcomes of the Alzheimer 100 project due to its collaborative approach and help in raising the profile of dementia. While initially intended for use as a conversation tool in the project process, the film today is disseminated at conferences, presentations and used in training sessions (Project Stakeholder 3, 2008).

Figure 5.5. The Signposting Service proposal.
Photo taken at the Dott 07 Festival, October 2007

Figure 5.6. The lightbox showing the disparate services.
Photo taken at the Dott 07 Festival, October 2007

Figure 5.7. A model of the Safe Wandering Garden.

Photo taken at the Dott 07 Festival, October 2007
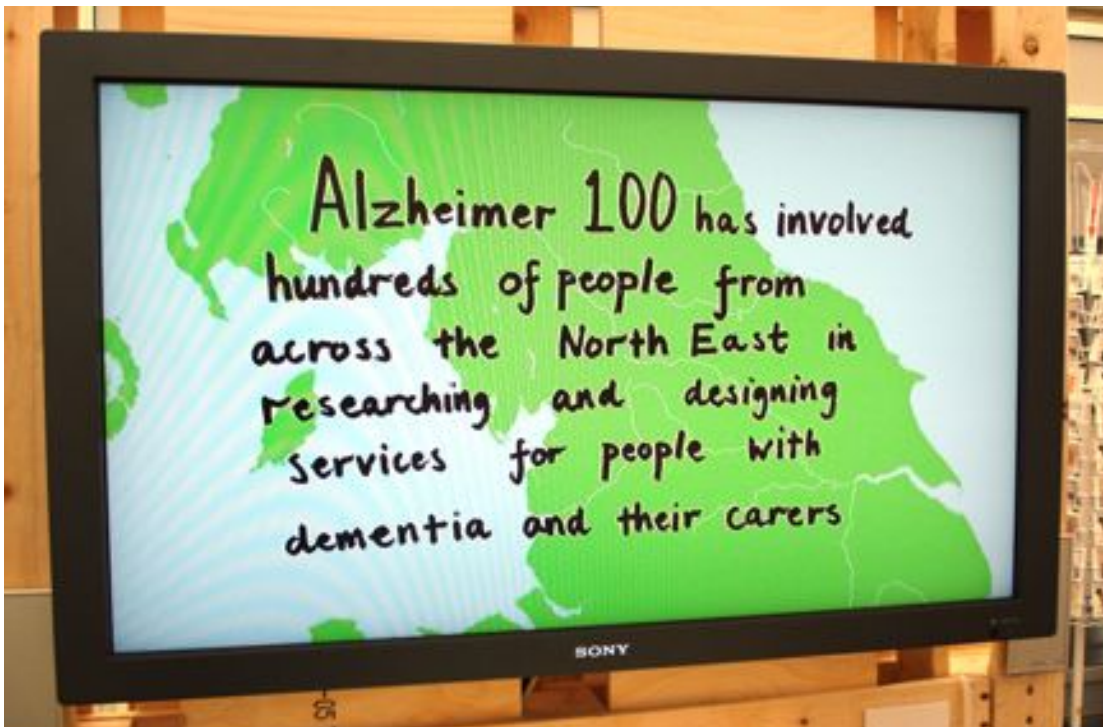
Figure 5.8. The film that profiles daily life with dementia.

Photo taken at the Dott 07 Festival, October 2007

Due to the time and budget limitations, none of these idea were implemented during Alzheimer100. But the project's legacy began to show six months after project completion.

The participation of people in Alzheimer100 resulted in the development of new skills[182] among the dementia community. One branch of the Alzheimer's Society spoke of how the project process showed them alternative approaches to developing services, where the project: "helped us to look at the ways that, instead of thinking about the service, let's design the service" (Project Stakeholder 3, 2008: 5). The branch began prototyping a service to support married couples, where one person is diagnosed with dementia and the other takes on the role of informal carer. The branch admitted the idea had been "something that we have often talked about" (Project Stakeholder 3, 2008: 5) and it was the participation in the Alzheimer100 project that gave them experience in developing services in a low risk and low cost way via prototyping. Prototyping is a popular method used by designers "for developing, testing and improving ideas at an early stage before large scale resources are committed" (NESTA and thinkpublic, 2011. Also see NESTA, 2011: 6). The branch also used the interviewing techniques learned from the Skills Share Day, to better understand couple's challenges to further develop the service.

Another initiated idea was an allotment project, which involves people with dementia in maintaining allotments. A Project Stakeholder spoke of how Alzheimer100 allowed them to respond to the needs of the dementia community:

> "The Dott 07 project has given us the incentive to do [a project that] maybe we wouldn't have done… had we not realised how the people felt about services and lack of facilities" (Project Stakeholder 2, 2008: 17).

The most visible legacy of Alzheimer100 occurred two years after the project finished. In February 2009 the National Dementia Strategy (Department of Health, 2009a) was published by the UK government incorporating thinkpublic's recommendations of the Signposting Service where it stated that living well with dementia, and the future of dementia care in the UK, should include:

> "Objective 4: Enabling easy access to care, support and advice following diagnosis. A dementia adviser to facilitate easy access to appropriate care, support and advice for those diagnosed with dementia and their Carers" (Department of Health, 2009a: 40).

The Dementia Advisor directly references the model of the Signposting Service from Alzheimer100. Since the launch of the Strategy, thinkpublic have worked with the Alzheimer's Society and local communities to develop and roll out the Dementia Advisor Service (DAS).

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[182] "[Before the project] I wouldn't have ever used a video camera or a microphone or anything. And it's given a lot of confidence really […] And it developed skills with technology. Computer skills, you know, doing presentations… I meant I went and spoke to Northumbria University about our SMART Team, using PowerPoint and even used a memory stick!" (Project Stakeholder 2, 2008: 5-7).

The DAS provides people affected by dementia with an advisor, who signposts relevant and appropriate services[183] and is a point of contact throughout the journey of dementia. Between 2009 and 2010 DAS was rolled out across twenty-two sites in the UK (DesignWeek, 2009) with thinkpublic providing a supporting role in the implementation. In late 2010 interim evaluations of the DAS began being published with one reporting that "An overwhelming majority of respondents (85%) were either very satisfied or fairly satisfied with the service" (Westwood, 2010: 4-5)[184].

The project stakeholders spoke highly of the value of involving people with dementia and their carers in the project. Alzheimer100 gave them an opportunity "to speak out with their own voice. Not [to] be reading from someone else's script [about] their life, their experience" (Project Stakeholder 3, 2009: 14). The project also showed that people with dementia contribute a vital role in addressing and responding to challenges:

> "Commissioners of services sometimes feel like somebody who has dementia are not able to voice their needs because of the symptoms such as memory loss and not [being] able to communicate. Well that is not true, they can voice what they need and they can communicate and I think that's been proven" (Project Stakeholder 2, 2008: 8-9).

This was especially valuable for the informal carers, whose perspectives and voice had rarely been listened to, despite their expertise in care. One Project Stakeholder conveyed; "for years nobody has really listened and carers always feel frustrated that nobody listens to their voices" (Project Stakeholder 2, 2008: 11).

thinkpublic's approach and the legacy of Alzheimer100 demonstrates how design can connect people to policy, connecting the voice of people at a grassroots level to commissioners and government to influence change. Alzheimer100 shows how design can place people with dementia and their carers at the heart of developing innovative dementia care services. This set the course for changing the way services were developed among the community of interest and its results went on to be written into national government policy.

The Alzheimer100 project raises many roles of the designer including that of facilitator[185] and capability builder[186]. However, the involvement of many stakeholders throughout several stages of the project process sees the dominant role of the designer in Alzheimer100 as co-creator.

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[183] Advisors are supported with an advisor-maintained intranet and folder that logs relevant information. For more on Dementia Advisors see: http://alzheimers.org.uk/site/scripts/download_info.php?fileID=532
[184] The report showed that feedback was of "consistently positive nature" from service users (Westwood, 2010: 52) and suggested room for improvement with a list of eight recommendations to take the DAS forward (Westwood, 2010: 51).
[185] As demonstrated by the Co-design Day.
[186] As demonstrated by the Skills Share Day.

Co-design is a key approach used by thinkpublic in many projects[187]. They maintain co-design:

> "… is about capturing lots of different perspectives, insights and experiences to work together towards better solutions using innovative and creative techniques" (thinkpublic, 2009).

The Alzheimer100 project illustrates how designers design *with* and *for* people, creating innovative responses to complex social issues that form a lasting legacy.

Discussion: The Designer as Co-creator

In Dott 07 co-design[188], was found to be a key approach used across all projects. However, the use of co-design varied among the projects and this is later discussed at the end of this chapter. In Alzheimer100 designers assumed a dominant role of co-creator, using co-design as their approach to engage a wide range of stakeholders throughout the project process.

The landscape of co-design in the design literature is relatively young and emergent[189]. Some of the first pieces of co-design literature were only published at the turn of this century. Co-design is a creative approach that supports and facilitates the involvement of a wide range of people in the design process. Think tank DEMOs describes co-design as "the effort to combine the views, input, skills of people with many different perspectives to address a specific problem" (Bradwell and Marr, 2008: 17). Co-design is thus known as designing both *with* and *for* people (DDA, 2009). thinkpublic maintain that co-design can be used to address many different issues such as health, crime, education, housing, local government and employment (thinkpublic, 2009). But while co-design literature is emergent, there have been many other areas of design that share many of its principles, in particular, those involving the participation of people at some, if not all, stages of the design process.

A review of relevant literature for the Designer as Co-creator

A historical perspective on Co-design

The idea of involving people in decision-making processes can be traced back to the fourth century where Plato outlined citizen participation in *Republic* where he discussed the "concepts of freedom of speech, assembly, voting, and equal representation" (Sanoff, 2006: 132). In the 1950s and 1960s "the idea of involving local people in social development" (Sanoff, 2000: 1)

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[187] For example thinkpublic's 'Community Coaches' project worked with a local Council, the local community and partner organisations to co-design and test ideas for supporting families with complex needs. See http://thinkpublic.com/case-studies/community-coaches

[188] Sanders and Stappers recognise that "The terms co-design and co-creation are today often confused and/or treated synonymously with one another" They take co-creation to "refer to any act of collective creativity, i.e. creativity that is shared by two or more people" Whereas co-design is the; "collective creativity as it is applied across the whole span of a design process. Thus, co-design is a specific instance of co-creation" (Sanders and Stappers, 2008). The latter is how this research sees the relationship between co-design and co-creation. It has guided the use of co-design and the designer as co-creator in this chapter.

[189] For example Elizabeth Sanders who writes extensively about co-design only began publishing papers on the topic from 1999. See http://www.maketools.com/papers.html for her collection of published work.

became popular with international oganisations such as the World Health Organisation (WHO) and the United Nations (UN). They advocated citizen participation in policy development and programmes (United Nations, 2000; 2008a; 2008b)[190] that required "the creation of opportunities for all people to be politically involved and share in the development process" (Sanoff, 2000: 1).

In the 1960s and 1970s the field of architecture and planning, and the Scandinavian Participatory Design (PD) movement were the first areas of the design discipline to adopt the practice of involving people in the design process. PD emerged out of the Scandinavian countries of Norway, Sweden and Denmark (Beck, 2002; Sanoff, 2006; Sanders, 2008: 3) and was based around workplace democracy to "enable workers to have more influence on the introduction of computer systems in the workplace" (Winograd, 1996; Spinuzzi, 2005 in Sanoff, 2006. Also see, Kuhn and Muller, 1993; Muller, 2007; and Sanders, 2008: 3-4). PD saw that involving workers in the process of design and decision-making in computer systems would have a positive impact on people during implementation (Beck, 2002; Luck, 2003; Muller, 2007). By permitting the involvement of people, PD opened up the design process to many who were not professionally trained in design. This challenged traditional approaches of design that saw the designer as the sole creative[191] and that design and creativity was a mystical and unknown practice[192]. At the conference *Design Participation*[193], Nigel Cross called for new approaches in design:

> "…if we are to arrest the escalating problems of the man-made world and citizen participation in decision making could possibly provide a necessary reorientation, hence this conference theme of 'user participation in design'" (Cross, 1972 in Sanders, 2008: 4).

Almost parallel to PD in the 1970s, architecture, urban planning and landscape architecture was also beginning to consider the inclusion of people in design processes. They called this Community Design and it was developed out of a:

> "… growing realisation that mismanagement of the physical environment [was] a major factor contributing to the social and economic ills of the world and that there are better ways of going about design and planning" (Sanoff, 2000: ix).

Architecture and planning explored practices in which people could be involved "in shaping and managing their environment" (Sanoff, 2000: x) as it was believed that:

> "… the environment works better if the people affected by its change are actively involved in its creation and management instead of be treated like passive consumers" (Sanoff, 2000: x).

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[190] See http://www.beta.undp.org/undp/en/home/mdgoverview.html
[191] See Valtonen (2005).
[192] See Jones (1970/1992: 46).
[193] Organised by the Design Research Society.

Shortly following architecture and planning, in product design, Victor Papanek (1971) called for designers to integrate more social and environmental responsibility in their work in his manifesto *Design for the Real World: Human Ecology and Social Change*. Papanek supported the participation of people in design writing that:

> "When everything must be planned and designed, design has become the most powerful tools with which man shapes his tools and environments (and by extension, society and himself). This demands high social and moral responsibility from the designer. It also demands greater understanding of the people by those who practice design and more insight into the design process by the public" (Papanek, 1971/1985: ix-x).

But with well-intended thought leadership in the creative disciplines, the following decades saw the demise of Papanek's agenda (Papanek, 1971/1985: xv) and a tokenism approach to participation in architecture (Lee, 2008). The CoDesign Journal sheds some light as to why these intentions remained at the fringes of design communities. The Journal suggests that the idea of PD was weakened with rise of the Design Methods Movement. The Design Methods Movement saw the designer being able to "serve any need"[194] following a codified design process (Binder et al, 2008: 2). This was in parallel to the rise of the role of the designer in industrial society that saw designers as stylists (Roth, 1999), celebrities (Project Stakeholder 3 in V&A, 2008) and sole creators who:

> "… had almost full control of the design process; the designer got an inspiration, started sketching, designed the object and only then was the potential object presented for production. The designer was the creator and the artist behind the object" (Valtonen, 2005: 2).

In architecture Lee explains that "looking at the issues of 'why' or even 'should people participate'" (Lee: 2008: 31) resulted in a tokenistic approach by the discipline. She stated that this could be rectified by research that focused on emphasising "the issues of 'how' or the actual design practice in order to avoid tokenism" (Lee, 2008: 31). The awareness of the moral and social responsibilities of the designer in the 1970s and 1980s fell by the wayside to the fringes of design communities. Today 40 years later these ideas would see a renaissance among design communities around the world.

Since the beginning of the 21st century the social and moral aims of design, that has its roots in 1960s and 1970s participatory design movements, began being put into action by contemporary designers. In 2004 in Canada and the UK some high profile design programmes and initiatives began demonstrating design for social good. Bruce Mau's *Massive Change* exhibition and book profiled examples of design addressing social, economic and political challenges. *Massive*

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[194] "Looking back on the debates from the 1970s through the 1980s, however, we can see that the strength of the participatory agenda weakened as the claims of the methods movement to enable designers to serve any need narrowed the initial call for inclusive multi-party participation in shaping design decisions into a political quest for influence on design specifications" (Binder et al, 2008: 2).

Change was internationally acclaimed and today hosts a global network[195] of people interested in the power of design to create positive change.

In the UK, between 2004 and 2006, the Design Council's RED Unit used a number of design projects to demonstrate innovative uses of design to tackle social and economic issues faced by UK society. RED's work was grounded in the UK political context. Its governments since the time of John Major advocated the ideas of public involvement, community empowerment, citizen-centred public services and more recently 'Big Society' which aims to "distribute power and opportunity to people rather than hoarding authority within government" (Cameron and Clegg, 2010). In their modern-day manifesto RED cite then-Prime Minister Tony Blair who stated that he wanted "public services to be 'redesigned around the needs of the user; the patients, the passenger, the victim of crime'" (Blair in Burns et al, 2006: 8). RED believed that design was the key to this public sector reform. They suggested the use of:

> "… the design process as a means to enable a wide range of disciplines and stakeholders to collaborate. It develops solutions that are practical and desirable. It is an approach that places the individual at the heart of new solutions, and builds the capacity to innovate into organisations and institutions" (Burns et al, 2006: 6).

RED drew inspiration from the PD movement and defined this 'new discipline' (Burns et al, 2006: 7) as Transformation Design which was "a new approach to tackling our most pressing economic and social issues" (Burns et al, 2006: 9)[196]. RED extended the application of design to contexts beyond that of the work place and technology where PD found its origins, broadening the relevance and application of design to areas such as healthcare, energy and citizenship (RED, 2004-6; Burns et al, 2006). By 2006 RED had separated from the Design Council, and continues today as a newly formed London-based social business called Participle[197].

RED also recognised that changes in design practice were necessary if designers were to work in the areas of designing for social good. RED highlighted both practical and philosophical challenges for designers including:

- The loss of personal creative authorship;
- Shaping behaviour rather than form;
- Exposing the principles and skills of design (Burns et al, 2006: 26).

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[195] Since 2004 Massive Change has "taken on the form of a traveling exhibition, a book, a series of formal and informal public events, a radio program, an online forum, and this blog. Since the exhibition's opening in October 2004, several school boards have expressed interest in incorporating the project's ideas into educational curriculums" (From http://www.massivechange.com/about).
[196] An updated overview of the paper can be found on the Participle website where they state: "The report outlines the emerging response to the new complex, messy and ambiguous problems of the 21st Century: transformation design. The discipline, which has a small but growing number of practitioners is set to change the face of design; finding new ways to change behaviours rather than form, by applying systemic thinking to complex problems and collaborating with other disciplines in order to produce solutions on a broader social economic and political scale" (Participle, 2009).
[197] See http://www.participle.net

Other challenges to be contended with by the design discipline they recognised included:

- The lack of shared language;
- A small evidence base;
- A small community of designers interested and equipped to work in this way (Burns et al, 2006: 26-7).

Since RED's Transformation Design movement, many other areas of design have sought to adopt the principles of co-design such as Service Design and Experience Based Design (EBD) the latter which takes place in the context of healthcare[198]. These areas share in the belief that involving people in decision-making processes results in a range of positive outcomes such as mobilising and utilising existing resources and knowledge, and creating a strong sense of ownership of an idea increasing the success of implementation. Many other areas of design use co-design, such as User-centred Design (Norman, 1986) and Community Design (Sanoff, 2000). The table in Figure 5.9 outlines a brief overview of these areas and explores the subtle differences among them.

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[198] The role of design and the designers in healthcare over the past few years has been a growing phenomenon. Medical organisations, such as the Mayo Clinic in the USA and the National Health Service (NHS) Institute for Innovation and Improvements in the UK; the growth of design companies working primarily in this area such as thinkpublic, Uscreates in the UK and fuelfor in Spain; the interest by not just design journals such as Touchpoints but also medical journals as the *Australiasian Medical Journal*; and finally the inclusion of design-led approaches in healthcare policy, such as *The National Dementia Strategy* have all been converging to shape a role and space for designers and design approaches to be used in a health context.

Area of design	Context of use	Key definition	Approach	Comparison to Co-design
Community design and participation	Used in architecture and planning	The emphasis is on including people in the design and development of buildings and spaces. Users also participate in management, evaluation and adaptation of the design outcomes (Sanoff, 2000).	Involves people in the design process, but is often a 'tokenistic' approach (Lee, 2008)	Mainly used in architecture and planning showing its main difference is the context of which it is used, compared to PD for instance.
Participatory design	PD emerged out of Scandinavia in the 1960s and was commonly used in workplace decision-making (Luck, 2003; Muller, 2007).	Involves people i.e. non-designers, in the design, development and decision-making in the workplace and in workplace technology.	Involved people in the process "as a partner" (Sanders, 2008). By doing so workplace design and computer systems would result in more meaningful outcomes for those who would use them.	PD originated in a context that focused its attention to issues in the workplace and technology.
User-centred design (UCD)	Used in many contexts and most commonly in product design (Norman, 1986), IT (Neilson, 1993), business and management (Brown, 2008a).	"User-centered design' (UCD) is a broad term to describe design processes in which end-users influence how a design takes shape" (Abras et al, 2004). UCD designs for the person who will use the product or service. An issue of UCD is that the user is sometimes not the purchaser of the product or service. For example, in a hospital the user is the patient, but the purchaser of a product is usually the hospital.	UCD puts people at the centre of product and service development. People are the "subjects of research" (Sanders, 2008) that occurs early in the design process.	UCD focuses mostly on users, usually in the early and evaluative stages of the design process. UCD only partly fulfils the definition of co-design, which aims to involve as many stakeholders as possible throughout the whole design process.

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Area of design	Context of use	Key definition	Approach	Comparison to Co-design
Inclusive or Universal Design	Mainly product design. Inclusive Design is central to the Royal College of Art's Helen Hamlyn Centre for Design[199]. It initially emphasised design for people with disabilities. Universal Design, the American phrase for Inclusive Design, can be seen through OXO's products who say Universal Design is central to their philosophy[200].	"The design of mainstream products and/or services that are accessible to, and usable by, as many people as reasonably possible ... without the need for special adaptation or specialised design" (British Standards Institute, 2005).	Similar to UCD in mostly involving users in the design and development process for the creation of products.	Inclusive or Universal Design focuses on the user, rather than all stakeholders, and is mostly used in the context of product design.
Interaction design (ID)	Information technology	"A new design discipline, dedicated to creating imaginative and attractive solutions in a virtual world, where one could design behaviors, animations, and sounds as well as shapes. This would be the equivalent of industrial design but in software rather than three-dimensional objects" (Moggridge, 2006: 14).	ID focused on the interactions and behaviours of people. Co-design also deals with these aspects in the development process.	ID is concerned with IT focusing on people who will use and interact with its systems. ID is different to co-design in terms of focusing on users, and also primarily deals with IT.

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[199] See http://www.hhc.rca.ac.uk
[200] See http://www.oxo.com/UniversalDesign.aspx

Area of design	Context of use	Key definition	Approach	Comparison to Co-design
Transformation Design (TD)	Social and economic issues (RED, 2004-6)	Proposed by the RED team at the Design Council, it was partly inspired by PD, but extended the application of design to areas in health, education etc. RED (2004-2006) defined TD as using "the design process as a means to enable a wide range of disciplines and stakeholders to collaborate… an approach that places the individual at the heart of new solutions, and builds the capacity to innovate into organisations and institutions" (Burns et al, 2006: 6).	TD applied design to tackle social and economic issues in the UK.	Very similar to co-design but TD was positioned more as a discipline and its terminology remains limited in use among the design community. RED members formed a company called Participle in 2009 who practice TD today. One outcome of their work is the establishment of social enterprises[201] showing how the definition of TD extended in practice.
Experience Based Design (EBD)	Used in healthcare	Focuses on designing user experiences in healthcare (Bate and Roberts, 2007).	EBD has "the goal of making user experiences accessible to the designers, to allow them to conceive of designing experiences rather than designing services". The approach contributes to the design of experiences in healthcare systems, pathways, and processes (Bate and Robert, 2007: 10).	EBD focuses on user experiences in healthcare. Co-design emphasises not just experience but also knowledge of issues. Co-design also involves a broad range of stakeholders, not just users.
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[201] "Delivery - At this point we review what is likely to be launched at the end of the project. This can vary, but we usually launch a new social enterprise around the new service idea. This new enterprise needs to be developed as a business, including all planning processes, financing structures, piloting and testing the service, before it is launched as a fully operational service" (Participle, 2009).

Area of design	Context of use	Key definition	Approach	Comparison to Co-design
Service Design	Public and private sector services[202]	The focus of service design is the design and development of services for public and private sector organisations.	Co-design is used in the development of services, usually in the design research and prototyping stages.	Outcomes include the design or improvement of services. Outcomes of co-design can be more varied that just the creation of services for example co-design can result in capability building of individuals and the creation of social enterprises.
Co-production	Public sector and policy	The term is used to describe what happens at the delivery stage of a service which sees users and professionals working together to create value and deliver the service (Cottam and Leadbeater, 2002; Boyle and Harris, 2009; Szebeko and Tan, 2010).	Co-design is needed before co-production happens (see Thurston in Pacey, 2010). Co-design helps service providers to feel ownership over the new service.	Emphasises what comes after co-designed outcomes.
Social Design	Social issues[203]	Very vague definitions of Social Design exist but many online networks (e.g. Socialdesignsite.org) suggest that social design is about using design for social good and social change.	Social Design is a broad term used to describe designers who use design toward a social cause.	Social design does not necessarily have to include the participation of people. For example a lot of communications designers design posters with social messages (see Randall, 2009) and this is seen as Social Design

Figure 5.9. A table of design approaches that use co-design

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[202] For example see live|work (http://www.livework.co.uk/our-work) and Engine Service Design (http://www.enginegroup.co.uk/projects).
[203] For example see thinkpublic (http://thinkpublic.com/areasofwork) and Uscreates (http://www.uscreates.com/about_uscreates).

Many different areas of design share a common practice of co-design, and on varying levels dependant on who is involved in the process and for how much of that process. The table identifies how these areas of design differ subtly, especially in the context[204] of which they are used, but they all share a common point of view that people are integral and critical part of the design process. Bate and Robert (2007) provide a more extensive overview of the design areas and vocabulary which sees the participation of people in the design process. They list these as:

> "… participatory design (PD), interactive or interaction design, empathetic design, human-centred design (and its sub-specialisation, 'human-computer interaction' (HCI), usability engineering, high interactivity design, co-design, co-creation, co-iterative interaction, co-operative design, participatory action research, people-centred design (PCD), user-based design, interactive design, user-centric/centred design (UCD), user experience design (UX or UXD), and experience (based) design (ED)" (Bate and Robert, 2007: 17-18).

Contemporary views of Co-design

Co-design has its roots in a number of different areas of design that share a common perspective of the importance of people in the process. Literature on co-design is emergent with some of the earliest design literature published by Liz Sanders (1999; 2000; 2005; 2008; 2009) founder of design company Make Tools. Sanders states that co-design is the:

> "… collective creativity as it is applied across the whole space of a design process… in a broader sense to refer to the creativity of designers and people not trained in design working together in the design development process" (Sanders, 2008: 2).

She makes the distinction between the phrases co-design and co-creation, which are often used interchangeably saying that co-creation "refers to any act of collective creativity i.e. creativity that is shared by two or more people" (Sanders, 2008: 2).

The first journal on co-design, named *CoDesign*, began publication in 2005[205]. It sees co-design as a wide repertoire of collaborative designing. As stated in the aims of the journal which focuses on:

> "… inclusive, encompassing collaborative, co-operative, concurrent, human-centred, participatory, socio-technical and community design among others. Research in any design domain concerned specifically with the nature of collaboration design is of relevance" (CoDesign, 2009).

The content of the journal was found to be helpful but its scope is very broad, encompassing any collaborations in design.

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[204] For example, Inclusive Design mostly pertains to product design, while Transformation Design applies to public service design and EBD is used in healthcare.
[205] See http://www.tandfonline.com/loi/ncdn20

In 2008 DEMOs published a report that looked at international perspectives of co-design in the public sector. They presented a working definition of co-design to be:

- The participation of people;
- A development process;
- The creation of ownership;
- Being outcomes-based (Bradwell and Marr, 2008: 17).

thinkpublic, extend the definition of co-design from a practice-based point of view, emphasising *who* is involved in co-design, how it is done and what outcomes can be expected. They explain that it is not just the users who are involved, but *all* stakeholders of the issue, for example in a health context this would include the patient (as the user), health professionals, carers, and even healthcare cleaners (thinkpublic, 2009). Their short film of co-design[206] further outlines that co-design highlights the importance of bringing together many perspectives to feed into the project process. To do so thinkpublic use creative and design-based activities and tools that allow stakeholder involvement. These activities and tools inspire action and get people working together to respond to local challenges. In practice thinkpublic create a space where people feel comfortable to shares stories and opinions (thinkpublic, 2009. Also in Burns et al, 2006: 26).

thinkpublic (2009) state that the results of co-design see an identification of existing skills and resources which can be utilised[207] and high levels of ownership for the issue and the project outcomes which encourages stakeholders to take responsibility in its delivery. Boyle and Harris also agree that involving stakeholders ensures "their continuing involvement in delivery" (Boyle and Harris, 2009: 16) due to the participation in understanding and creating the ideas which have emerged. Co-design can also be used to address a broad range of issues, such as health, crime, education, housing, local government and employment (thinkpublic, 2009) to encourage and provide a means by which stakeholders of an issue participate in the design of responses to them.

The sharing of service delivery is commonly known in the public sector as co-production (Boyle and Harris, 2009). Co-production is often used interchangeably with co-design (DesignWeek, 2009) but co-design and co-production are different stages of a process (Thurston in Pacey, 2010). Thurston states:

> "Co-production is a product of the co-design process, at the end of which you hand over a service that has been designed in partnership with end-users to those users and professionals who deliver the service" (Thurston in Pacey, 2010).

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[206] See *The Story of Co-Design by thinkpublic:* http://www.youtube.com/user/thinkpublic#p/u/4/HWgJlwTDIRQ
[207] This is identified as a key practice in *Chapter 9: Move Me The Designer as Social Entrepreneur* (p 215) where social entrepreneurs "mobilise the resources of others to achieve their entrepreneurial objective." (Dees, 1998: 3)

The importance of *who* is involved in the process is the key to co-design. This is where co-design differs most from User-centred design. User-centred design is designing done "from the point of view of the individual" (Burns et al, 2006) and places the user at the centre of product and service development. Its focus on users does not does not necessarily involve the collaboration of other stakeholders[208] in the process. Sanders further distinguishes between User-centred Design and co-design in terms of the research designers do, stating that the former sees the "user as subject" and the latter sees the "user as partner" (Sanders, 2008).

Finally, the *Copenhagen Co-creation: Designing for Change* conference[209] which took place in 2009 explored co-design advocating the shift of "designing FOR people to design WITH" them (DDA, 2009). The conference concluded that this approach was neither tool nor methodology but a mindset that:

> "… engag[ed] people in the development of products and services thus creating new meaningful and profitable solutions and powerful organisations adaptable for change" (DDA, 2009).

The practice of co-design finds its roots in the 1950s, 60s and 70s in various disciplines that include International Development, architecture and planning, workplace design, technology and product design. Papanek's (1971/1985) manifesto called for more social and moral responsibilities of designers. His work fell by the wayside as industrial society celebrated the designer as stylist and celebrity and as the Design Methods Movement advocated that the design process could serve any need on its own. Some 40 years later a renaissance of Papanek's (1971/1985) ideas is occurring. The UK and Canada led the field through a series of high profile design demonstrations[210] where design was used to address a number of societal challenges. The practices of co-design have been central to many of these demonstrations and since then, a number of design areas, with different names and contexts of use, have used co-design to create a positive impact in the public sector, governments and society.

Key practices of the Designer as Co-creator in Alzheimer100

The literature review shows that three key practices of the designer as co-creator are discernible, that is where designers:

- Involve many stakeholders throughout the entire design process[211];
- Create the conditions for co-design to happen[212]; and
- Co-create a range of outputs which result in different outcomes[213].

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[208] User-centred design projects I have been engaged with did not seek creative collaborations with users. These user-centred design projects saw users as research subjects. The aim was to understand the user's point of view to begin the design development process from these insights.
[209] For more conference content see: http://copenhagencocreation.com
[210] Such as *Massive Change*[210] in Canada and RED[210] in the UK.
[211] Such as Sanders (2008: 2); DAA (2009); thinkpublic (2009)
[212] Such as in Burns et al (2006); thinkpublic (2009)

Involving many stakeholders throughout the entire design process

Designers in Alzheimer100 shared the belief that involving people in the project produced better outcomes. They asserted these beliefs anecdotally and also in practice. The designers recognised they didn't "hold all the answers" themselves stating that for complex social issues such as dementia "it's impossible" (Designer 1, 2008: 27) to design without input from multiple stakeholders. They also critiqued orthodox policy development processes as too top-down articulating this approach as:

> "…not going [in] and saying 'right, the government's saying [you] need this and this, so we need to do this and this.' It's about 'right, what's affecting you the most, what do you feel in the best position to fix, what's going on in your community?'" (Designer 2, 2008: 12).

A key benefit of involving people throughout the project is also to allow them "to make those sorts of decisions about what needs to be changed [and by doing so] take ownership" for how it will change (Designer 2, 2008: 12). Ownership was critical to the project as the designers saw the potential for the Alzheimer100 project to develop into a social enterprise, or something similar such as a "volunteering group, a not-for-profit… just something that could continue to live" (Designer 1, 2008: 7). Ownership by the community would be needed for implementation, or co-production, of new ideas. Designers saw by inviting people into the process they:

> "… tend to step up to it [and say] 'Oh right, my voice will be listened to, I can actually change this.' So they stop criticising and start to contribute" (Designer 2, 2008: 15).

These shared beliefs of the designers directed their practice toward designing *with* rather than only *for*: "very core to what we do [is] not about designing for people it's getting them to do it themselves" (Designer 1, 2008: 14).

In the early stages of the project, thinkpublic invited a broad range of stakeholders such as researchers, academics, professional carers, people with dementia and informal carers to a Stakeholder Meeting. This event invited the participation of people to help set the direction of the project. thinkpublic used a number of communication platforms to invite participation such as the Alzheimer100 pamphlets and website. These allowed people to get in touch in a number of ways via emailing, mail and phone. thinkpublic state that at this stage they "really trying to focus on having the right people [in the room]" as they were concerned:

> "…about duplicating research [and] tried to approach it [by bringing] the people in that position, who have done the research into the room so that they can voice that, rather than us duplicating all the work and trying to replicate the knowledge ourselves" (Designer 2, 2008: 13-14).

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[213] Such as in Bradwell and Marr (2008: 17); thinkpublic (2009)

This broad range of stakeholders also helped address the scale of the brief in Alzheimer100, which was to work across the NE region of England with thirteen branches of the Alzheimer's Society. While the designers described this as "enormous" they wanted to "make [the project] representative in some way" (Designer 2, 2008: 15). The designers established a project structure that would see multiple stakeholders work in decentralised co-design teams. These teams were organised thematically around dementia issues, and were formed where individuals chose issues that were personally most important to them[214]. The teams would work together to design and test new services or products and be overseen by an advisory group, a Steering Group and an Alzheimer Society advisory group (Figure 5.10).
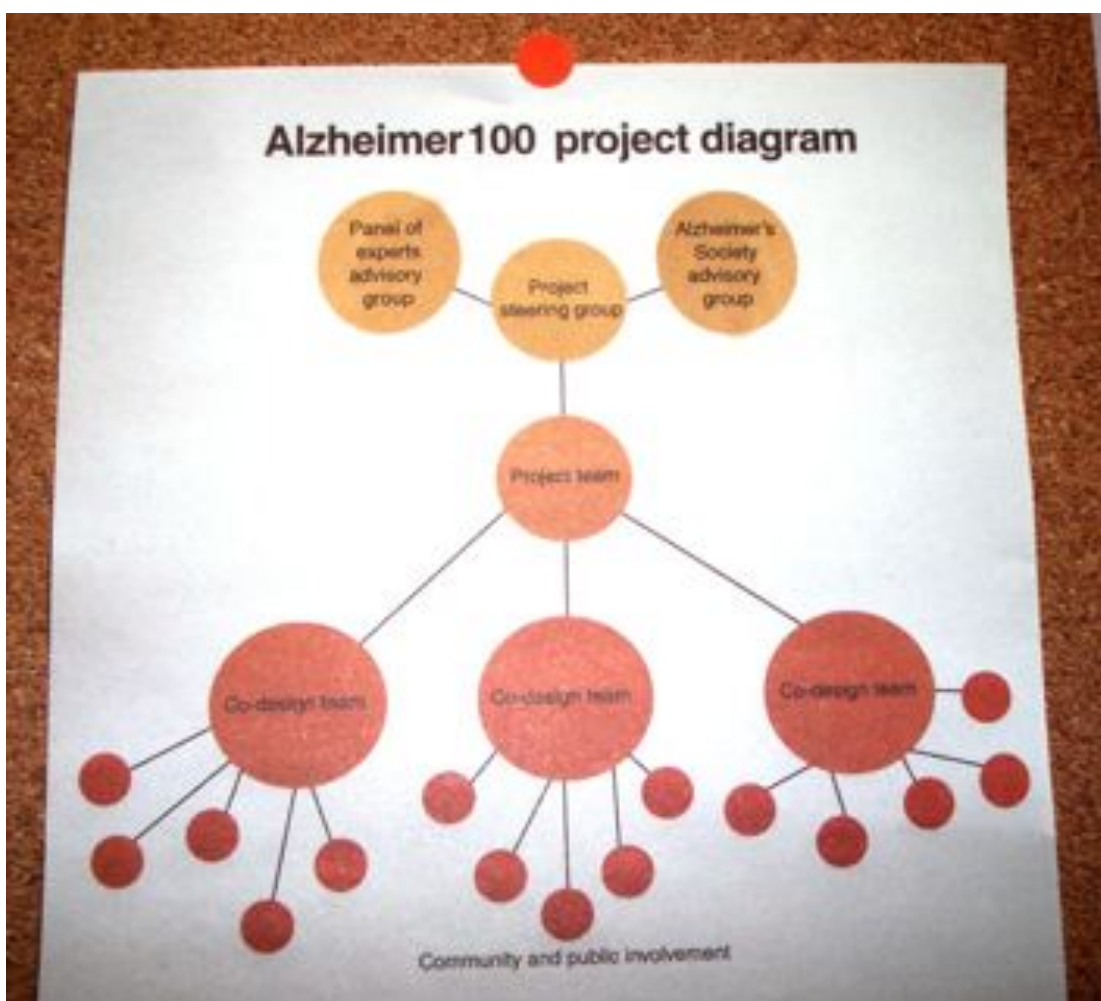
Figure 5.10. Alzheimer100 project diagram mapping the different stakeholder groups and how they work together. Image supplied by thinkpublic

A number of activities in Alzheimer100 demonstrates the involvement of many stakeholders throughout the project. In particular the early Stakeholder Meeting, the Skills Share Day and the

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[214] This organisation occurred at the Co-Design Day and through the balloon voting.

Co-Design Event. The Stakeholder Meeting at the start of the project invited the dementia community to be involved in key-decision making and influencing the direction of the project. This was an early demonstration of how the designers shared ownership of the project with the community. The Skills Share Day involved building capability by opening up the design process and its methods to those not professionally trained in design. These stakeholders would use design to harness their collective creativity to address complex dementia challenges. The Co-Design Day continued to share design methodologies for both creativity and collaboration.

Creating the conditions for Co-design to happen

To involve many stakeholders in a project the designer as co-creator invites the participation of people using various communication platforms and considers who participates in the process, defining how they will work and what their key roles will be. The stakeholder involvement would no longer see the community:

> "… on the receiving end of services. Instead they will be vital to the design and delivery of services, working with professionals and front line staff to devise effective solutions" (Cottam and Leadbeater, 2006: 2).

Stakeholders are usually people not professionally trained in design (Burns et al, 2006: 20). To have them participate in the project the designer as co-creator must enable project stakeholders to use the design process and its methods by creating the right conditions for this to happen. These conditions include the tools and space for co-designing.

Sanders states that; "Designers in the future will make the tools for non-designers to use to express themselves creatively" (Sanders, 2008: 12). The Skills Share Day was a key event which demonstrated how designers create tools to enable stakeholders to participate in the design process. thinkpublic simply explain that the Skills Share Day was where they "trained people on how to story capture" (Designer 1, 2009: 12) and this included using film technology and interviewing techniques. As one Project Stakeholders retells:

> "I had never used cameras and [the designers] were very patient […] they had done a Fool's Guide, we got the printed booklets of everything" (Project Stakeholder 3, 2008: 22).

Story capture in the early stages of the design process is often a practice designers undertake with stakeholders as their research subjects, rather than as a partner in the process[215] (Sanders, 2008). But in Alzheimer100 thinkpublic saw the project stakeholders as partners in the process by encouraging them to work behind the camera as well as in front of it. This would capture more open and honest accounts of daily life with dementia because of the trust already shared among the dementia community. One of the Project Stakeholders spoke of the impact this had

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[215] Sanders and Stappers (2008) also who discuss the user as subject and partner in their paper.

in the filming:

> "[People] really played up or the camera. [They were] quite happy to talk about things. We even went to some people's houses to film the carers and the person, how they interacted and what it was like to be a carer. So I think people were very willing and very open to discuss their problems and be taped as well." (Project Stakeholder 4, 2008: 11)

Once the designer allows transparency to the design process and methods they must then create the space for co-designing ideas to happen. The Co-design Day aimed to bring the dementia community together to identify challenges in dementia and generate ideas and plans to address them. During the day, the designers created the conditions for people to feel comfortable, relaxed and stimulated to share their knowledge and stories, reflect on experiences and work together to generate ideas and create plans. One Project Stakeholder described:

> "We arrived at Newcastle University to go into this hall with market stalls, a massive display of coloured balloons, there were chocolates and sweeties lying about for people to help themselves to… they set up a little area as a café [where people could be] sitting with a cup of coffee and a biscuit and if you want to come and talk to me about dementia, I am relaxed here you know […] So that was the day I would say, that we felt, this is going to be good" (Project Stakeholder 3, 2008: 11).

The event involved stakeholders working together to reflect on key issues, generate ideas in response to them and devise plans for action. The designers used various tools and activities to engage and entertain the stakeholders. For example a "market place" of challenges was set up to form co-design teams thematically, which allowed for a multi-disciplinary collaboration among people who share a common concern. Collaboration is critical to co-design (Burns et al, 2006: 6; Sanders, 2008: 2; CoDesign, 2009; thinkpublic, 2009a) and essential to the Co-Design Day to bring together multiple perspectives for sharing of experiences, knowledge, skills and ideas (Burns et al, 2006; Bradwell and Marr, 2008: 17; thinkpublic, 2009a). A key part of effective collaboration at the Co-design Day was the equal contribution of all the stakeholders. thinkpublic facilitated this in an early activity of voting with balloons. In the "market place" of challenges, where a market stall represented a challenge, each person had to vote on an issue that was of key concern to them. The balloon voting aimed to "bring to life some of the issues" and make voting interesting as the designers saw it as "usually quite a dull process" (Designer 1, 2008: 13). The other important aspect of the balloon voting was involving people equally in the process. Critiques of participation identify asymmetaries in power (Cornwall, 2003) but the designers described how the balloon voting made sure:

> "… that everyone votes and that everyone has a chance to vote and it would be pretty obvious if you didn't because you'd have a big pile of balloons!" (Designer 1, 2008: 13).

The designers also provided sense-making tools to aid reflection and invention during the co-design Day. The NextDesign Leadership Institute, who facilitates discourses on design and sense making say it "is [about] creating cognitive scaffolds that accelerate and enable collective sense-making" (van Patter in Jones, 2009: 6). They emphasis visual sense-making (Humantific, 2009) which differs slightly from other uses of sense-making in information systems (see Bellotti et al, 2002) and organisations (see Weick, 1995). Throughout the Alzheimer100 project the designers identified a number of different dementia services available to the community. They discovered that the services were disparate and often inaccessible as people lacked knowledge about them. As a reflective sense-making tool, the designers mapped the landscape of services and showed how different people would use different services depending on their stage of dementia (Designer 1, 2008: 21). They created a light box to communicate how four different personas used different combinations of current dementia services. One Project Stakeholder reflected that, "[The light box] was very interesting… to see that there were loads of services out there, but how do you access them?" (Project Stakeholder 2, 2008: 13). The lightbox was the key in inspiring the Signposting Service idea.

The designer as co-creator creates the tools and space for co-design to happen. In Alzheimer100 designers hosted a series of events to involve people in the process, by designing a number of activities and tools to enable co-design. As one designer summarised:

> "We designed tools to work with people with dementia to understand their daily experience to then identify opportunities to improve those challenges" (Designer 1, 2008: 30).

Designers create "tools to visualise complex structures and systems" and tools to make "new ideas and solutions… tangible" (Cottam and Leadbeater, 2006: 29). These tools permit others to explore and express their experiences and creativity. Illich first wrote about such characteristics of tools calling them 'convivial tools':

> "Convivial tools are those which give each person who uses them the greatest opportunity to enrich the environment with the fruits of his or her vision. Industrial tools deny this possibility" (Illich, 1973: 21).

Such tools empower people to participate in the design process, co-creating responses to challenges. For example, learning the techniques of story capture enabled stakeholders to have a voice and express to a wider audience their experiences and knowledge of the challenges of dementia. Prototyping services was also a convivial tool that was used in the Alzheimer100 project, mostly through visualisations such as the supporting products of the Signposting Service (Figure 5.14). Later on, a branch of the Alzheimer's Society would adopt this prototyping approach, albeit in a different way, for developing new services that aimed to help married couples deal with dementia in daily life. This service idea had existed for awhile among

the branch and the approach of prototyping gave them a tool to put their ideas into action by exploring and developing a service in a low risk and iterative way. The branch recognised "how much design tools could be used in lots of different ways" (Project Stakeholder 3, 2008: 26) and it was the participation in the project that gave them the insight and practice of "different ways of designing a service" and showing them "skills I probably knew I had, but I had never kind of used them" (Project Stakeholder 3, 2008: 24).

Figure 5.11. Signposting Service supporting products.
Photo taken at the Dott 07 Festival, October 2007

The role of the designer as co-creator involves a broad range of stakeholders throughout the project process and creates the conditions, that is the tools and space for co-designing to happen. This way of working is recognised by RED (2004-2006) and Sanders (2008) to be at odds with more traditional practices of designers, which see the designer as an expert, sole creative in the design process and as someone who designs *for* people rather than *with* them.

Co-creating a range of outputs which results in different outcomes

In Alzheimer100, a number of outputs were co-created ranging from a film to a service proposal to a new approach to responding to the challenges of dementia that put people most affected by dementia at the heart of the process.

However co-design in the project didn't reach the potential of what the designers could see. They spoke of involving the Project Stakeholders further by getting them to help edit the film:

> "It wasn't totally as collaborative as we would have liked, because a good way of doing it [is to] go through [the film] with people and actually edit the footage. [It] can be a very nice way of not [having the designers] interpreting that data" (Designer 2, 2008: 18).

Due to time limitations on the project only the designers edited the final film. But permission to distribute the film, shows its genuine reflection of daily life with dementia:

> "The people who took part in the film have agreed that if we want to use it for training purposes, for people with dementia, that they are happy to do that" (Project Stakeholder 3, 2008: 10).

The project achieved many different outcomes on several levels. In community participation in architecture and planning, the feeling of contribution is often seen as an outcome in itself. Sanoff writes that often:

> "… the main source of user satisfaction is not the degree to which a person's needs have been met, but the feeling of having influenced the decisions" (Sanoff, 2006: 140).

The Project Stakeholders of Alzheimer100 reflected:

> "I never thought you could change things, but I really think that we have got the opportunity here from this design [project], to go forward and change things, for the better" (Project Stakeholder 3, 2008: 19)

The participation of people in Alzheimer100 also resulted in building new capability among the Alzheimers Society branches. Months after Alzheimer100 finished, the project stakeholders began adopting design approaches for their own service development.

Then a year after Alzheimer100, the UK government published the National Dementia Strategy recommending a "dementia advisor" to enable "easy access to care, support and advice following diagnosis" (Department of Health, 2009a: 40). Its implementation plan also references co-design suggesting that any "implementation should be discussed and decided in partnership with the NHS, local authorities and key stakeholders" (Department of Health, 2009b: 7).

In summation Alzheimer100 had a broad range of outputs and outcomes. The Project Stakeholders reflected positively on the project and its use of co-design saying:

> "What I think Dott did for a lot of people, like myself, and also ordinary members of society and the public, [is to] actually realise that co-design is central to the development of really effective public services" (Project Stakeholder 1, 2008: 10).

Another stated:

> "No matter what walk of life you come from, whether it was the school's project, the farming project, the sexual health project, no matter what it was, that people should be given the opportunity to speak about their experiences. They should be listened to and respected" (Project Stakeholder 3, 2008: 24).

From the designers' perspective their reflections on the project were varied. Initially at the end of the Alzheimer100 project, one of the designers sought to avoid "…talking about [the project] to others […] because I feel like we let people down and we failed" (Designer 1, 2008: 28). But another summarised their role more positively by saying:

> "We brought people together to address the challenges of dementia in the North-East and encouraged creative thinking and collaboration amongst those people… Maybe like being in a boat with loads of people and you are sort of trying to get everyone to choose where to go and work out how to get there […] to get somewhere where everyone actually does want to go" (Designer 2, 2008: 25-26).

The results of Alzheimer100 have been broad and varied and only revealing themselves six months, after the project ended. This speaks to the long-term impact of co-design that requires the learning experiences of its stakeholders to be processed, which in turn are eventually acted upon and/or shared. Alzheimer100 shows that the impact of co-design can range from capability building to the implementation of co-produced services.

Many peer review sessions[216] during the course of this research debated the role of the designer as co-creator, mostly in the way it exposes design methodology, where design methodology is commonly acknowledged as the core intellectual property of designers and design companies and co-design is seen as giving this away. Co-design changes traditional modes of designing from seeing the process of design as something done by designers themselves as experts and authors of creativity in a mystical and hidden process[217]. The designer as co-creator challenges this tradition by opening up the design process and its methods to involve people who are non-professionally trained in design, to undertake designing activity. This "flies in the face of the 'expert' mindset" (Sanders, 2008: 5) and threatens design communities because:

> "… we are exposing the principles and skills of design… There is no rocket science involved, no secret formula. To some of us this is a thrill, to share this methodology with a world that needs it so. For others, it undermines the sanctity of Designer as Artist. It takes the romance out of it to think that anyone could think and act like a designer" (Canales in Burns et al, 2006: 26)

Co-design presents both philosophical and practical challenges for designers (Burns et al, 2006). Sanders notes that co-design:

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[216] Such as a presentation given at Northumbria University 7 November 2007
(See http://www.northumbria.ac.uk/sd/central/ar/lteia/pedresdev/pastres/researchandteaching/sbp_nov06/designproj/outsidein/)
and a meeting with the Design Council and the Royal Society of the Arts (RSA) 15 October 2009 both raised this issue.
[217] See Jones (1970/1992: 46).

"… threatens the existing power structures by requiring that control be relinquished and be given to potential customers, consumers or end-users" (Sanders, 2008: 5).

It also requires the designer to have:

"…a new respect for ordinary people… based on the belief that all people are creative and can express their unmet needs and dreams when given the appropriate tools" (Sanders, 2001: 317).

Other criticisms of co-design focus on the quality of design work when non-professional designers design. This was outlined by Rawsthorne who writes:

"… not everyone wants to 'co-design,' including designers, many of whom have warned that it will replace the good work of trained professionals with a food of nasty novelties" (Rawsthorne, 2009).

In response to these debates, in particular the exposing of the designer's intellectual property, a designer of the Alzheimer100 project states:

"I seriously think that it is going to take a long time for that to happen. There is so much work out there. And I think it's exciting to think that we are trying to design ourselves out of a job because it makes you work harder" (Designer 1, 2008: 27).

The value of the Designer as Co-creator

The value of the designer as co-creator is where the designer adapts the use of the design process and tools to permit the participation of people who are not professionally trained in design. Of this a Project Stakeholder states:

"[Design gives] multiple ways of expressing [people's voices and experiences] and a fun way of doing it. A way that [people] were relaxed and comfortable with" (Project Stakeholder 3, 2008: 24).

The adaptation of the design process and tools requires designers to develop a pedagogical perspective of their craft, to enable the creation of convivial tools (Illich, 1973) to let others co-design *with* them.

As acknowledged earlier in this chapter, UK government policies have advocated the participation of the public in improving the public sector, government and society. The role of the designer as co-creator can contribute value here by helping create the conditions for this participation to happen. As one of the Alzheimer100 designers summarises:

"The key to [co-design] is to allowing people to both diagnose and solve the problem. Rather then just telling them what their small role in the problem is" (Designer 2, 2008: 16).

In the field of International Development policies that have advocated the participation of people have been attempted for many decades. In recent times, the United Nations emphasises that the "effective participation by all stakeholders, especially at local levels of government, has come to be viewed as a necessary condition for promoting good governance" (United Nations, 2008a: 1). While there are "some spectacularly successful examples of participatory governance in some parts of the world, they are far outnumbered by cases of failed and spurious participation" (United Nations, 2008a: 28). Osmani's essay outlines some of the gaps that stand in the way of the effective participation of people citing these as the capacity, incentive and power gaps (Osmani in United Nations, 2008a). It is these gaps that illustrate a number of opportunities for expanding the role of the designer as co-creator from public sector innovation to International Development:

The capacity gap – Citizens require skills to participate in the development of policy-making (Osmani in United Nations, 2008a). The designer as co-creator shows how capacity building among project stakeholders can be achieved with design methodologies to leverage the creative and collaborative skills of people.

The incentive gap – This gap refers the need for people to hold the perception that the benefits of participation will outweigh the cost of participating. In the Alzheimer100 project thinkpublic promoted the project through a number of promotional materials to attract and shape positive perceptions. Designers emphasised a focal point of the project as the sharing of experiences and stories of people with dementia and their carers to respond to the challenges of dementia. This engaged the interest of many stakeholders.

The power gap – This gap identifies the asymmetry of power in participation that is often found when "dominant groups will use participation merely as a ruse to further their own ends" (United Nations, 2008a: 31). thinkpublic (2007) say that co-design approaches seeks to create equal contributions from all project stakeholders. Both professionals and citizens contribute different but complementary knowledge. For example in Alzheimer100 professional knowledge was provided by those who worked in health services, while stories from daily life with dementia were brought by those directly affected by dementia (people with dementia and their informal carers). This complementary knowledge sees co-design support an equal partnership between all stakeholders. One Project Stakeholder attested to this by saying at the Co-design Day, "people were really made to feel equal with everybody [else]" (Project Stakeholder 3, 2008: 28). When the roles and knowledge that project stakeholders contribute are recognised and communicated, power asymmetries can be reduced.

The above are just three examples of how the designer as co-creator can help support more effective participation in the broader context of International Development. There is no doubt many more 'bridges' can be made between design, government policy and International

Development. Since the turn of the century the field of International Development sees that "there is a need to reconsider purpose, content, agency and context in a reconstituted field of development studies" (Hettner in Desai and Potter, 2002: 7) acknowledging an era of "post-development" (Desai and Potter, 2002) where "development has failed" (Thomas in Allen and Thomas, 2000: 3). Such critiques highlight an opportunity for designers, however many recognise this will be a "step up" (Gormley, 2010) from a designer's usual task. Creating the conditions for effective participation will only continue to be a very "complex task" (Osmani in United Nations, 2006: 35) and the value of the designer as co-creator is emerging in many projects and initiatives across the globe. In the USA, IDEO have been working with international development agencies such as the Acumen Fund and the Bill and Melinda Gates Foundation[218] (IDEO, 2010). Other organisations such as not-for-profit, Design Impact, partner professional designers with community organisations in India to create "life-improving solutions" (Design Impact, 2012). In the UK a number of design companies have been involved in discussing and exploring design for International Development such as at the Strategic Design and Public Policy conference[219] in 2010 and Priti Rao's (2012) PhD study *Connecting the dots: A design approach to services for the poor*. More exploration and research is needed to identify and discuss other synergies between design and International Development to expand the role of the designer as co-creator to new contexts where designers adapt the use of design methodologies to allow for the participation of people in addressing complex challenges.

Overlaps with other roles in Dott 07

The Alzheimer100 project as the first case study of the thesis is deliberate not only because it sits at the far end of the 'designing *with*' spectrum, but also because it shares practices with all of the roles identified in Dott 07. Designers in Alzheimer100 were: researchers[220] in the early stages of the project; facilitators[221] of workshops; capability builders[222] through skills sharing; social entrepreneurs[223] in considering how their ideas could be spread society-wide; provocateurs[224] in co-creating an entirely new model of dementia care; and strategists[225] in finding themselves working at the front-end of innovation when the Signposting Service informed national policy. Further discussion of these roles are found in the following chapters and a short discussion on the overlaps between the roles can be found in *Chapter 12: Conclusion* (p 289). The role of the designer in Alzheimer100 helps frame the subsequent designer roles, particularly because it represents closest the intentions for how Dott 07 wanted

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[218] The Ripple Effect project helped bring better access to safe drinking water in India. See http://www.ideo.com/work/ripple-effect-access-to-safe-drinking-water. IDEO have also developed a Human-centred design toolkit, a free innovation guide for NGOs. See http://www.ideo.com/work/human-centered-design-toolkit/
[219] For proceedings and conference details see: https://sites.google.com/site/strategicdesignandpublicpolicy/home
[220] See *Chapter 6: Design and Sexual Health (DaSH): The Designer as Researcher* (p 135
[221] See *Chapter 7: OurNewSchool: The Designer as Facilitator* (p 167)
[222] See *Chapter 8: New Work: The Designer as Capability Builder* (p 192)
[223] See *Chapter 9: Move Me: The Designer as Social Entrepreneur* (p 215)
[224] See *Chapter 10: LowCarbLane: The Designer as Provocateur* (p237)
[225] See *Chapter 11: Urban Farming: The Designer as Strategist* (p 267)

design to be used with local communities to create innovative responses to complex social issues.

Conclusion

In the Alzheimer100 project the role of the designer as co-creator applies where the designer:

- Involves many stakeholders throughout the design process – Allowing people to both diagnose and solve the problem[226];
- Creates the conditions for participation to happen – In particular the tools and space for co-creation to happen; and
- Co-creates a range of outputs that result in different outcomes – on varying levels from capability building to informing government policy.

The value of the designer as co-creator is seen in the potential use of design, where the designer's role can be expanded to address issues beyond public and social sector issues in developed countries, to global issues in International Development. Dott 07 was a regional development programme and analysis of the Alzheimer100 project suggests there is a wider role of the designer as co-creator, to address not just regional or national issues, but global ones too.

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[226] Rather then just stating their role in the problem.

Chapter 6

Design and Sexual Health (DaSH):

The Designer as Researcher

Design and Sexual Health (DaSH):
The Designer as Researcher

Case study: DaSH

In 2004 an undergraduate final year project that explored the design of patient-centred sexual health services emerged from Northumbria University. The NE of England experiences the second highest incidence of teenage pregnancies in the UK (UNICEF, 2001). Such data indicates that sexual health "needs are not being fully addressed" (Ingram in Mattinson, 2005) in the region and a project titled, *Sex Life* (Mattinson, 2005)[227] explored sexual health issues in the UK to look at ways to innovate care through creating "new locally appropriate patient-centred services" (Mattinson, 2005).

Sex Life proposed a range of innovative responses for patient-centred sexual health care which included a service strategy that would "bring sexual health into the everyday" (Mattinson, 2005) proposing clinics in accessible, but also discreet public spaces such as at the back of high street fashion stores. Mattinson's (2005) project used design to develop these service strategies. Key to the approach was developing strategies based on the needs and desires of sexual health service users (and non-users). This aligned to a UK government policy document, *National Strategy for Sexual Health and HIV* which stated the need for "shaping services around patients, their families and their carers" to create "major benefits for overall health and wellbeing" in England (Department of Health, 2004: 11). The *Sex Life* project was captured and published as a book and distributed among many public health organisations and policy decision-makers[228] in the NE including the Gateshead Primary Care Trust (PCT). As they were to develop new sexual health services for Gateshead the PCT were interested in Mattinson's approach saying:

> "She showed the book and also did a presentation about some of the innovative ways of working with service users to engage with them, for them to have an influence on service design […] Finding new ways to engage with that population was what really hooked my interest" (Project Stakeholder 4, 2008: 5-9).

At the same time Dott 07 was establishing itself in the NE to run a series of projects using design to address public and social sector innovation. Northumbria University and Dott approached Gateshead PCT to initiate a project called, Design and Sexual Health (DaSH). DaSH proved to be timely, appearing for the PCT, "at the right time when we were looking to develop something" (Project Stakeholder 6, 2008: 7). However, the PCT recognised the risks of undertaking DaSH. As they explained, "if we hadn't been involved in Dott then in some ways the service might have been up and running faster" (Project Stakeholder 4, 2008: 6). But

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[227] *Sex Life* was published under designer, Designer 4's maiden name.
[228] Including regional development agency, One North East.

"thinking in terms of public benefit [and] to ensure that the money that everybody pays in their taxes goes to provide the best possible service for people in Gateshead" DaSH was viewed as, "an invaluable opportunity" (Project Stakeholder 4, 2008: 6-8). DaSH would use design to develop innovative, patient-centred services that would align with government policy and help reduce the incidence of teenage pregnancies in the NE of England.

DaSH brought together a multi-disciplinary team of designers, sexual health experts, and healthcare professionals from Gateshead PCT. The project was led by designers from Northumbria University's Centre for Design Research (CfDR) and health experts from consultancy Options UK. They worked closely with the PCT throughout the project. The designers recognised that:

> "[The PCT] were the local experts, we were only supporting and helping them understand the issues, the problems, the area, but they were the local experts, so it had to be done in partnership" (Designer 3, 2008: 10) [229].

DaSH also established a governance structure that included a Steering Group[230] and an Advisory Board[231] to strategically guide the project and share it with a wider audience.

Gateshead saw a number of local challenges that had to do with accessing sexual health services. These mainly pertained to economic and psychological barriers. The closest sexual health clinic to Gateshead was in Newcastle. While this was less than two miles away, travel to the clinic incurred financial costs and the psychological barrier of having to cross the bridge over the Tyne River from Gateshead to get to the Newcastle clinic was very unpopular (Project Stakeholder 6, 2008: 14). These barriers often meant that young people did not seek adequate sexual health care. From these challenges, the DaSH team formed a broad aim for the project that would work toward developing a:

> "Blueprint, for a new service [by] understanding the needs of the area, the current configuration and what the issues were, and coming up with a service design that would support improved health outcomes" (Designer 3, 2008: 6).

DaSH also recognised the need "to help people conceal their use of the service" (Singleton, 2008). Many young people found it embarrassing to consult sexual health services and the PCT explained that it was crucial to make contact with young people early, to provide them with preventative care:

> "It doesn't matter how good the treatment is for treating people with STI's, unless we can talk to people about their sexual behaviour, and get them to modify their behaviour, we'll never keep up with their demand" (Project Stakeholder 4, 2008: 8).

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[229] The PCT also recognised that: "[The designers] brought the design, the pure design, [Options UK] brought the link into service […] So we all brought a little bit of knowledge and skills" (Project Stakeholder 4, 2008: 9-13).
[230] This comprised representatives from Northumbria University, Dott, the PCT and the Strategic Health Authority.
[231] This included representatives from the Department Health and the Southampton Centre for Sexual Health Research.

During the project, the DaSH team undertook extensive research with a wide range of stakeholders. These stakeholders were visualised in DaSH's *Stakeholder Map* (Figure 6.1) identifying all the people who needed to be "informed and consulted throughout the project" (DaSH, 2007).
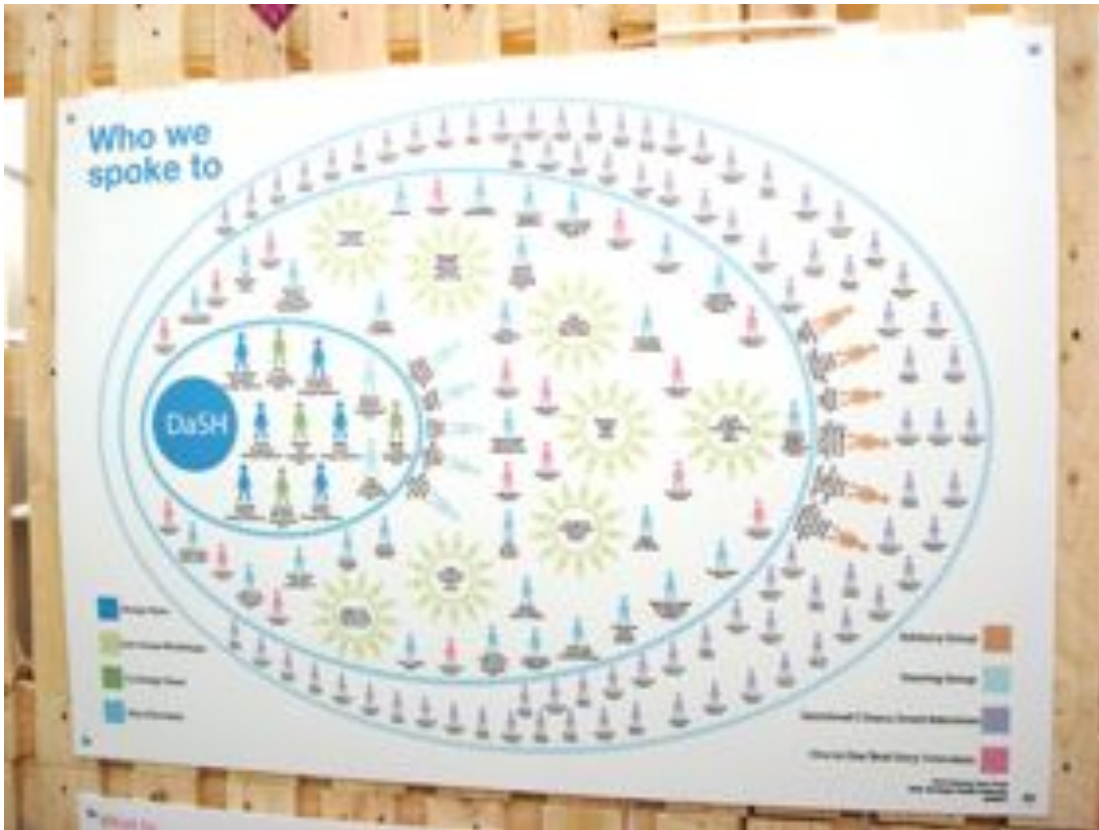
Figure 6.1. DaSH project stakeholder map presented at the Dott 07 Festival.

Photo taken at the Dott 07 Festival, October 2007

Research with stakeholders fed into the development of patient-centred sexual health services for Gateshead. Research methods used in DaSH (see Figure 6.2) drew from a number of disciplines such as anthropology, marketing as well as design, creating an evidence base for the project ideas.

Figure 6.2. A pamphlet of the DaSH methods (Options UK, 2007)

Demographic research formed a key part of the evidence base in the project. As a DaSH designer explains:

> "If you don't have the technical background or [the] demographic, then it's very difficult. It's about evidence-based care that the NHS has to deliver" (Designer 3, 2008: 14).

In addition to this design research also played a role in:

> "Helping move toward a much more concrete-based solutions-based approach… research [generally] is very good at analysing the situation and coming up with what the problems are, and it's not too good at taking it one step forward and what might you do" (Designer 3, 2008: 9).

To gather information for both evidence and ideas, DaSH used a combination of research methods as outlined in the table in Figure 6.3.

Research method	Description
Desk research	Existing research such as demographic information and policy documents helped provide the evidence base and the context of the issue
Stakeholder mapping	Identifying and then visually mapping people, who participate in the project for consultation or as research partners (Figure 6.4)
Service mapping	Identifying and then visually mapping existing local services and their relationships and connections to show the landscape of current services available
Context mapping	Capturing and visualising a picture of Gateshead using a combination of images (maps, photos and sketches) and text. This map was used with the PCT to combine their local knowledge with the visual knowledge and insight of the design team (Figure 6.5)
Observation	Visiting sites and taking notes and photos of observations in sexual health clinics where many users encounter and experience sexual health services (Figure 6.6)
Interviews	These ranged from: expert interviews with health professionals; street interviews (vox pops) with the public; and in-depth interviews with service users and non-users. Interviews aimed to understand people's experiences with sexual health services
Surveys / Questionnaires	Questionnaires were distributed to gather information from a large number of people about current service experiences
Cultural probes	A design method developed by Gaver, Dunne and Pacenti (1999). Cultural probes[232] in DaSH were packs containing items such as cameras and diaries for participants to complete. They were used to give designers insight into people's everyday lives thereby inspiring new ideas
Service User Workshops	These interactive workshops involved users and non-users of sexual health services to participate in a number of creative activities to identify user aspiration, needs and desires in sexual health care
Care Journey Cards	The Care Journey Cards (Figure 6.7) were a set of visual cards that represented options for moving through a sexual health service. In the case of a telephone service, a set of cards allowed people to "tell the story [of an ideal experience] through these cards" (Designer 4, 2008: 16-17) without having to make eye contact with someone they didn't know over a sensitive topic[233]
Personas	The personas conveyed a range of scenarios and stories of typical users of sexual health services. These were integral in synthesising the research and developing the project ideas

Figure 6.3. Summary of DaSH methods

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[232] Gaver et al emphasise that Cultural Probes aim to "provoke inspirational responses […] to stimulate our imaginations rather than define a set of problems" (Gaver et al, 1999). More discussion on Cultural Probes can be found in *Chapter 9: Move Me: The Designer as Social Entrepreneur* (p 215)

[233] In the designer's own words: "… visually [people] could choose right the way through. And also because we put them on the wall… They were like mumbling to the wall, rather than having to talk confrontationally to someone, about something quite private. So you'd be asking them questions, but they would not be giving you eye contact, they would be able to just pick off the wall. So as a process, it worked really nicely" (Designer 4, 2008: 19).

Figure 6.4. Map of existing sexual health services in Gateshead.
Image supplied by DaSH team

Figure 6.5. DaSH's Context Map with Post-it notes where the PCT added their local
knowledge. Image supplied by DaSH team

Figure 6.6. Observational research at a sexual health clinic. Image supplied by DaSH team

Figure 6.7. Care Journey Cards used to map encounters with sexual health services.

Image supplied by DaSH team

The use of a number of research methods meant that the DaSH project was able to capture a broad range of quantitative and qualitative information. The designers critiqued the use of enormous amounts of quantitative data. While the questionnaires contributed significantly by bringing quantitative evidence "…to analyse collected data meaningfully" (Strickler, 1999: 37) the designers critiqued this method saying that, "[given] the amount of money and the time they cost to do, there are better ways of doing it definitely" (Designer 4, 2008: 14).

The designers stated that the more insightful information was gained through more qualitative research methods such The Service User Workshops which were very successful in eliciting responses from people. They provided an alternative method to "doing very boring questionnaires and doing focus group stuff" (Project Stakeholder 6, 2008: 15). Hanington says that participating in research that involves:

> "… a creative activity, the response is likely to be more favorable than when faced with a request to fill out a survey or take part in an interview. Creative methods [uncover] needs and desires that may be unknown even to the user, and that are difficult to articulate when probed for using traditional methods" (Hanington, 2003: 15).

The Context Mapping was also a valuable method referenced by the designers, in particular the way in which it was used to collaborate with the PCT and draw on their technical and local knowledge. In the workshops the designers used a visual map to collaborate with the PCT:

> "We did this wall thing… it visually showed the whole of Gateshead. It was really useful as a tool to take along to the first workshop because then the staff came along and put post-it notes on saying here's a big catholic school [where education of sexual health is needed]. So it was those nuggets of information that are really important to know, because they have such an impact on a local level" (Designer 4, 2008: 14).

The Context Map allowed the PCT to add local knowledge such as "key infrastructure, health services, transport links and so on directly on the map" (DaSH, 2007). The research findings from the use of the various quantitative and qualitative methods were incorporated into six personas of sexual health users and non-users, which inspired six recommendations for patient-centred sexual health care in Gateshead.

Communicating the research and recommendations

The research findings and recommendations were brought together at the end of DaSH in two reports entitled, *The Service Experience Document* and *Blueprint*. They communicated findings and recommendations in highly visual ways to help inform the development of patient-centred sexual health services for Gateshead. The service recommendations included:

- Seven service design principles[234] to guide patient-centred service development;
- A proposal for a service provision model to better join-up sexual health services;
- Developing awareness of sexual health via a communications strategy;
- Communication gateways to enable easy and concealed access to sexual health services;
- Recommendations for a patient-centred clinic (summarised from *The Service Experience*, 2007).

At the completion of DaSH the PCT submitted a business case for a new sexual health clinic at Gateshead. The PCT used the findings and research in DaSH to help shape the business case, focusing on delivering patient-centred sexual health services. The PCT explained that it was challenging to translate the DaSH outputs into an NHS business case. This was mostly due to their differing templates and language, but the PCT stated:

> "Rather than do another whole business case, [we used] the documents the design team had produced for us … Of course, they don't look like NHS documents, so the new organisation struggled to engage with those in [a different] way than we had because we had been involved and knew all the effort and the value of it" (Project Stakeholder 4, 2008: 6-7).

At the beginning of 2008 the PCT received funding to create a new sexual health, or genitourinary medicine (GUM) clinic, within local Bensham Hospital (Figure 6.8). The PCT translated many of the service design principles and recommendations from DaSH into the new clinic. For example, the PCT saw a key principle of patient-centred sexual health services as always:

> "…Progressing through the service. You never go back to the same waiting room for instance. You never feel like you go backwards in the system, you always go forward" (Project Stakeholder 6, 2008: 11).

The clinic opened in July 2008, less than a year after DaSH finished. Since opening, evaluations have shown that patients are seen within 48-hours of making first contact with the clinic. This 48-hour target was a government benchmark set in 2006[235]. Furthermore over 50% of patients visit the clinic based on recommendations from friends[236]. Interest around the UK in the DaSH methodology has also created awareness and interest among many other PCTs, of how patient-centred health services can be developed and designed. Since DaSH, Options UK have used a similar methodology with PCTs in Wakefield and Portsmouth (Options UK, 2009).

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[234] The seven service principles were: "[1] The design of the service must give central place to the experience of the individuals who use it; [2] The service must deliver as consistent an experience as is possible through different service touchpoints, across space and over time; [3] The service must be flexible, adaptive and evolving; [4] The user's flow through the service should be 'smooth' and their care pathway clear to them at all stages; [5] The service must be visible, inclusive and accessible to everyone; [6] Access to the service must be ambiguous; [7] Design elements of the service should be developed and produced to high standards" (DaSH, 2007: 5-6).
[235] The target for patients to be seen within 48-hours of first contacting a sexual health clinic was set in, *10 high impact changes for genitourinary medicine 48 hour access* by Department of Health (2006).
[236] From unpublished report, *Dott 07 Project Update*, by Origin (2009).

Figure 6.8. The new sexual health clinic at Bensham Hospital, Gateshead.

Image supplied by the Design Council

Designers in DaSH involved[237] Gateshead PCT throughout the project, which not only leveraged their local knowledge but created a strong sense of ownership for the project and its ideas, many of which were translated into the new clinic. Furthermore many of the research outputs continued to be used by the PCT in daily practice (Project Stakeholder 4, 2008: 13). For example the personas are used consultations:

> "You are never going to get a man to stand up in a room and say 'I'm a gay man with syphilis and this is what I want from my services'. So we had to find other ways of doing that. And I think the personas were really good and we have used them since in actually telling some patient stories" (Project Stakeholder 4, 2008: 16)

Another legacy of DaSH has been the adoption of a patient-centred design mindset among the PCT. As one Project Stakeholder states:

> "I think we would really sit back and think… really think about the patient experience, that person's experience […] I don't think we'd be bringing in new services, without referring to some of the principles in [the DaSH project]" (Project Stakeholder 6, 2008: 19-20).

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[237] This could also be described as co-design, a creative ideology that supports and facilitates the involvement of a wide variety of people in the design process. For more on co-design see *Chapter 1: Alzheimer100 The Designer as Co-creator* (p 101).

With another adding:

> "We just got an email for extra money for contraception services next year. So… rather than thinking 'oh well, we'll just do something fairly surface'… I am more likely to think, 'are there different ways that I could approach this? What might that look like if we didn't have the constraints around workforce… then creating some of [those] 'what if' scenarios that the designers would have been able to come up with" (Project Stakeholder 4, 2008: 19).

The direct involvement of the PCT as collaborators in the research, and also as co-designers in patient-centred sexual health services, shows evidence of the beginning of a cultural transformation among the PCT. Their participation in the project ensured their engagement in a process of discovery of users, and non-users – their aspirations, needs and desires for sexual health services. This built "common ground and shared perspectives among people representing multiple functions" (Fulton-Suri, 2008: 55) and was captured in the service design principles realised in practice, particularly in the Bensham clinic. The PCT's involvement also allowed the development of new capabilities, in particular for the development of new and future services of the organisation.

The DaSH project illustrates how designers use research methods as both tools for finding information and inspiration, but also as vehicles for cultural transformation. Using research methods as collaborative tools, not only allows the leveraging of local and technical knowledge, but facilitates a process of learning and discovery of project stakeholders. Fulton-Suri says that:

> "… formal education placed higher value upon received knowledge than upon personal discovery… [but] direct subjective experiences… have the power to capture our imaginations and achieve new understanding" (Fulton-Suri, 2008: 57).

This is not just for the designer, but for project stakeholders who are directly involved in the design process as collaborators and co-designers.

The DaSH project used design to develop patient-centred sexual healthcare services for a town called Gateshead. It used a number of research methods to understand local people, their experiences, desires and needs to inform the development of patient-centred sexual health services. Secondary to this was the involvement of the PCT in the research and design process. This created a strong sense of ownership, leading to the integration of many DaSH recommendations into the new clinic, and the adoption of new methods and mindset within the PCT, which has transformed how they see and develop sexual health services for the future.

Discussion: The Designer as Researcher

The role of the designer as researcher is demonstrated in the DaSH project where designers used a number of research methods to explore the development of patient-centred sexual health services. The research used mostly qualitative methods drawn from the disciplines of design, anthropology and marketing. It is these disciplines which the following discussion of the designer as researcher are grounded.

A review of relevant literature for the Designer as Researcher
What is Design Research

The domain of design research is broad and its language can often be confusing[238]. Many disciplines, such as the social sciences use the phrase 'research design' to connote the planned methodology of a research task. This can be confused with 'design research' a commonly used phrase among the design industry to denote the research undertaken during the design process to understand people, the context, materials etc. related to product or service development. The same phrase can also be used within design academia to describe the research that happens on the subject matter of design within an academic institution[239].

Frayling characterises the different modes of design research as research *for*, *into* or *through* art and design[240]. DaSH used research *for* design to inform service development for sexual health care[241], as opposed to research *into* design, such as this investigation, or *through* design such as the approach of Critical Design later explored in *Chapter 10: LowCarbLane: The Designer as Provocateur* (p 255-6). This discussion of DaSH uses 'design research' to connote research done *for* design i.e. research used for the design and development of new products and services.

In practice design research has traditionally meant the kind of research performed by designers "where investigations of materials, mechanisms and function" are undertaken (Simonsen et al, 2010: 3) in "… (usually brief) literature and visual reference searches [to] learn about subjects related to a client's products and services" (Strickler, 1999: 28). More recently, design research has grown as a "jumble of approaches" with a "common goal: to drive, inspire and inform the design development process" (Sanders, 2008: 13). Design research has formed an area of design

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[238] An instance where the confusion with the use of design research was observed in the commentary in responses to a published online article, 'Spend it wisely a market research primer for designers' which was published on the design blog *Core 77* discussing design research. The author does not make distinct if she is referring to design research in an academic or practice context resulting in many antagonistic responses (See Sylver, 2009).
[239] Lunenfield states that: "There have been numerous attempts a defining what design research is and how to identify its methodologies, from Laszlo Moholy-Nagy at the Bauhaus in the 1920s, to Henry Dreyfuss's seminal study Designing for People in the 1950's, to the Royal College of Art's Sir Christopher Frayling in the 1990s" (Lunenfield in Laurel, 2003: 10).
[240] Research for art and design described research "where the end product is an artefact" while research into art and design sees art or design as the "object of study" and through describes research that happens through practicing art or design where "art or design is the vehicle of the research, and a means of communicating the results" (Frayling, 1993/4 in Newbury, 1996: 2). Recent criticisms of Frayling's (1993/4) topology can be found in Sevaldson (2010) and Jonas (in Koskinen et al, 2011: 5) but the use of Frayling's (1993/4) topology here is to make distinct the type of design research done in DaSH.
[241] This research investigation conducts research *into* design, looking at design and the designer as an "object of study" (Newbury, 1996: 2).

in its own right (See Sanders 2008) with a growing interest and awareness from businesses and governments (see Grant, 2000; Von Hippel, 2005; NHS, 2009[242]; RED, 2006; Rhea, 2009) in design's generative research methodologies and ethos for human-centred approaches to create new products and services based on the real needs and desires of customers or users. This is usually known as User-centred design (UCD)[243] a term coined by Donald Norman in 1986[244] to describe:

> "… design processes in which end-users influence how a design takes shape. It contains both a broad philosophy and variety of methods" (Norman in Abras, et al, 2004).

UCD, focuses on the needs and desires of users, placing people at the heart of the design development process to increase the desirability and usability of products and services. IDEO have contributed to more recent developments in the area of design research, known as Human Factors in their practice. Generative research is a key part of what IDEO see as radical innovation where:

> "… new offerings might influence people's future habits which presents a different challenge to research: how can you find out what is going to matter to people if it doesn't yet exist?" (Fulton-Suri, 2008: 54).

Generative design research "inspires imagination and informs intuition through a variety of methods" (Fulton-Suri, 2008: 54) and it is here that the designer leads conversations with users (Netherlands Design Institute, 1999: 87) to gain insight into their lives to make "better decisions about what and how things get designed and put into the world" (Fulton-Suri, 2008: 54-6).

Emerging fields of design such as Service Design and Social Design have expanded the spheres of concern of design research. Service Design and Social Design use co-design approaches to not just include users, but all stakeholders of an issue[245] in the process. This is because of the complexity of social issues, and the design and delivery of services, the latter which requires the co-production of value by service providers and users. Furthermore, users and stakeholders aren't just seen as research subjects, but "partners" (Sanders, 2008) in the process, taking on a role of directly influencing design decisions. Involving people in the research stages of a design process has thus grown from the ideology of seeing users as part of product and service development, to actively involving not just users, but all stakeholders, in the co-design of

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[242] The NHS Institute for Innovation and Improvement have been using the Experience-Based Design approach since 2006, where design research is a key component of the methodology to understand NHS patient and staff stories and experiences in healthcare. See:
http://www.institute.nhs.uk/quality_and_value/experienced_based_design/the_ebd_approach_%28experience_based_design%29.html

[243] For a short history of UCD and its emergence see Burns et al (2006: 9-10) which outlines that since the end of world war II, the rising complexity of machines and problems demanded different approaches that saw the involvement of users in the process to ensure ease of use in products and machines and increased probability of successful implementation of ideas.

[244] Norman used the term in his book, *Psychology of Everyday Things*, later renamed to *Design of Everyday Things*.

[245] Qin Han's (2010) PhD thesis, *Practices and Principles in Service Design: Stakeholder Knowledge and Community of Service*, explored stakeholder management by designers in service design projects.

products and service. As seen in the previous *Chapter 5: Alzheimer100: The Designer as Co-creator* (p 101) stakeholders are also involved throughout almost the entire design process.

In design research the designer is engaged in the setting up, undertaking and synthesising the research. The professional design association AIGA (American Institute of Graphic Arts) and the innovation company Cheskin, outline the role of the designer in research[246] stating that the activities of the designer include:

- Helping plan the research programme;
- Preparing the stimuli for the research;
- Participating in undertaking the research;
- Collaborating to create ideas; and
- Building a narrative around the idea for organisational buy-in (AIGA and Cheskin, 2007: 24-29).

In addition to this, Inns reflects that a role of the 21st century designer is as a 'coordinator of explorations' where designers explore "relevant technical and contextual sources to maximise creativity at the early stages of design" (Inns, 2007: 24-26). The role of planning in research is also outlined by Smith[247] (2009) who says that design researchers "are specialists at setting up and synthesising research" (Smith, 2009). To undertake this research, designers use a "variety of methods" (Abras et al, 2004) drawn from a number of disciplines (Kelley, 2005; van Veggel, 2005). It is this latter point that has contributed to many misunderstandings about design research.

The lack of articulation of the value and distinctiveness of design research has seen it often collide (van Veggel, 2005)[248] with other professions who conduct research with people as a part of their practice. The popularity of designers borrowing and adapting methods from other disciplines has further added to misunderstandings of design research for those outside the discipline. Many authors (See Winkler, 1997; Strickler, 1999; Gilmore, 2002; Hanington, 2003) have called attention to the need for designers to overcome this through better articulation of the philosophy, purpose, methods (or adaptations of methods) and value of their research practices. As Winkler notes:

> "Neither the Bauhaus nor other influential design schools have instilled… a disciplined process of research, with the ethical understanding of all necessary skills, including ownership, authorship, verifiability, and assurance of fidelity of information" (Winkler, 1997 in Strickler, 1999: 28).

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[246] In their pamphlet, *An Ethnographic Primer*.
[247] Smith is a practicing service designer.
[248] Van Veggel (2005) explored four collisions between design and ethnography in his paper, 'Where the Two Sides of Ethnography Collide'. These collisions included different language uses, research questions, purposes and perspectives of the two disciplines. While van Veggel speaks of more negative collisions between design and ethnography, he also raises that collisions can also be positive, creating a powerful dynamic between design researchers and ethnographers.

With Strickler adding:

> "Opportunities for collaborative, interdisciplinary research are growing at this time precisely because scholars from other disciplines are asking questions for which expertise does exist within ours. If designers do not begin to undertake this important work, others will, and without the benefit of a designer's perspective" (Strickler, 1999: 38).

Sanders (1998; 2005) and Gaver et al (1999) say design focuses mostly on research for inspiration, not just gathering information, making practices of research in design distinctive to other disciplines. Fulton-Suri echoes this stating that there are different types of research that range from "looking to the past and present" to the kind of research that inspires intuition to inform the invention of things and human desires that do not yet exist (Fulton-Suri, 2008). She recognises the latter as generative research, a form of research mostly undertaken by designers.

From this short literature review design research is broadly defined as an activity of planning and co-ordinating research by a designer. It seeks to involve people in the development of future products and services through generative research that identifies unarticulated human desires to shape products and services that do not exist yet. Methods in design research are commonly borrowed and adapted from other disciplines, and a lack of articulation of the value of design research by designers has caused misunderstandings about a designer's research practice, in particular how it can complement other forms of research. The most common methods designers borrow come from the fields of anthropology and marketing. This presents "one of the biggest challenges [for designers] to get across the different roles of market research and ethnography in the design process" (Gilmore, 2002: 31).

Ethnographic Research

The discipline of anthropology and its ethnographic methods have been a significant influence and "source of inspiration" in design research (Kelley, 2005). Ethnography emerged in the nineteenth-century in Western anthropology, "where an ethnography was a descriptive account of a community or culture" (Hammersley and Atkinson, 1983/2007: 1) [249]. Anthropologist Bronislaw Malinowski (1922) first "laid out the principles of ethnographic research" (van Veggel, 2005: 6) in his book, *Argonauts of the Western Pacific*. He demonstrates the key method of participant observation where a researcher is both a participant in the community or culture by "immersion of the researcher's self into the everyday rhythms and routines of the community" and also an observer "sitting-back and watching activities which unfold… as if s/he wasn't there" (Cook and Crang, 1995: 21). In ethnography, a researcher uses these methods in their fieldwork to collect data "in context, over a period of time" (O'Reilly, 2005b: 9). Fieldwork is critical to ethnography and can range from a period of six months to two years

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[249] Studies of ethnography started taking place outside the researcher's own country in an attempt to create a more objective interpretation of a community or culture.

(Hammersley and Atkinson, 1983/2007; Fetterman, 1998/2009). From fieldwork, ethnographers gain a rich understanding of people, their interactions, culture and behaviours. This type of approach is often described as "naturalist" in contrast to conducting research and gaining responses in artificial or laboratory settings (Hammersley and Atkinson, 1983/2007: 7; Fetterman, 1998/2009: 33).

The ethnographer's task is not just to undertake the research for collecting information but to also interpret and communicate this information. The resulting form of research is typically a "richly written account" (O'Reilly, 2005b: 3; Also see Schensul et al, 1999: 4) of the community or culture in the form of a report, article or book, inclusive of charts and pictures (Fetterman, 1998/2009: 2). In summary ethnography is where a researcher:

> "Participat[es] overtly or covertly, in people's daily lives for an extended period of time, watching what happens, listening to what is said and/or asking questions through informal and formal interviews, collecting documents and artifacts – in fact gathering whatever data are available to throw light on the issues that are the emerging focus of inquiry" (Hammersley and Atkinson, 1983/2007: 3).

Ethnography allows researchers to understand people, their culture, practices and the way they live, through various methods, which have been attractive and useful to a number of disciplines including sociology, geography, economics, psychology as well as design. The multi-disciplinary use of ethnography in practice means it tends to, "get swallowed up in a general, multi-disciplinary, movement promoting qualitative approaches [and] does not have a standard, well-defined meaning" (Hammersley and Atkinson, 1983/2007: 2). Designers use ethnography because its methods are:

> "… based on observing people in their natural environment rather than in a formal research setting [enabling] a deep understanding of people and how they make sense of their world" (AIGA and Cheskin, 2007: 3).

For example designers use a range of methods including interviews, ranging from informal conversations to structured interviews (Cook and Crang, 1995; Schensul et al, 1999: 128; Madison, 2005: 25), observation, contextual inquiry, field notes, photos and more recently ethnographic film[250] (Cook and Crang, 1995: 70-72; thinkpublic, 2011). By undertaking research of people, living and operating in their own context, designers understand complex situations to design more "compelling solutions" (AIGA and Cheskin, 2007: 3).

Most designers borrow (Cottam and Leadbeater, 2006: 10) or "abbreviate" ethnographic methods[251] (Plowman, in Laurel, 2003: 35) [252] to suit shorter timeframes where research is used

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[250] Otherwise known as visual anthropology.
[251] Tim Plowman (in Laurel, 2003: 35) used this phrase to describe how design practice could form an understanding of ethnographic methods in organisations to demonstrate their value. Throughout this research investigation it was observed that many designers use ethnographic methods in an abbreviated form. Ethnography research take places over a longer period of time than how designers use these methods in design practice.

as part of a larger design process to inspire ideas for new products and services that are useful, usable and desirable for people. Sanders (2002) calls this 'applied ethnography'[253] stating that it is "quicker, it is less expensive, and it can be less intrusive into the lives of those being studied" (Sanders, 2002). Designers draw inspiration from ethnography's "family of methods" (O'Reilly, 2005b: 9) adapting them to suit the time, context and people involved in the design project.

Ethnography and design differ in their end purposes. Ethnographic research aims to understand a group of people to describe and present interpretations in mostly written form. Design research also aims to understand people, but the research designers collect is used to inspire the design and development of new products and services. So while the focus and activities (methods) of each discipline are similar, the use of the research, its methodologies and what it aims to find differs, and thus the outputs differ. As research often forms one part of the project process[254] designers tend to have less time to conduct ethnographic studies, which leads to their abbreviation (Plowman in Laurel, 2003: 35). Designers also appropriate ethnographic methods, doing so for various reasons whether these are due to time constraints and/or to involve stakeholders in the project process. While the appropriation of methods does occur within ethnography[255] too (See Fetterman, 1998/2009:34) designers use their own creative license and contexts to adapt and use the methods.

In this discussion, ethnography is understood as an approach to research that seeks to understand a group of people in their local context over an extended period of time and commonly results in written text (Fetterman, 1998/2009: 1) to convey what is discovered.

Market Research

Another influential discipline in design research is marketing. Market research is defined as "the systematic design, collection, analysis and reporting of data relevant to a specific marketing situation facing an organisation" (Kotler et al, 1996/2008: 333). As early as 1970 the United States census began "questioning consumers about their lives and choices […] to determine voting demographics" (Millman and Bainbridge, 2008). In the 1920s Procter and Gamble began knocking on the doors of American housewives "for their opinions on new products and packaging" and this involvement of users is said to have started "the modern age of market research" (Millman and Bainbridge, 2008). A decade later "A.C. Neilson and George Gallup started quantitative testing and surveying" (Millman and Bainbridge, 2008), which proved a powerful way of collecting customer information to identify the size of markets, profitable

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[252] Hanington also stated that "methods that are borrowed often must be adapted to better suit the needs of design" (Hanington, 2003).
[253] Fulton Suri and Howard also notes 'corporate ethnography' or 'ethnographic-style research' as types of ethnographic research that is "in deference to the formal discipline of ethnography as traditionally practiced by anthropologists" (Fulton Suri and Howard, 2006: 246). Hanington also states "… adapted methods serve to condense the extraordinary time devoted by formal ethnographers into more manageable and ultimately more relevant samples of information for the design researcher" (Hanington, 2003: 14).
[254] Though some design projects undertaken by designers tend to be solely research projects by nature.
[255] Fetterman says, "Method and techniques objectify and standardise the researcher's perceptions… The ethnographer must adapt each one of the methods and techniques… to the local environment" (Fetterman, 1998/2009:34).

customer groups, forecasting sales etc. in order to help business decision-making[256]. Since then, the marketing discipline has largely used quantitative research in its research efforts.

Many designers "have long criticised what they call the rigidity of marketing" (Holm and Johansson, 2009. Also see Gilmore, 2002; Hanington, 2003; Rhea, 2009; Kaasgard, 2010) and often critique market research methods as less useful for identifying actual needs of people (Gilmore, 2002)[257] and generating innovative ideas (Hanington, 2003; Designer 4, 2008: 11)[258]. A few authors have gone to great lengths to elaborate on the differences between design and market research. Gilmore states that:

> "… market research is concerned with validating a list of needs and sizing the market associated with each, whereas designers need to understand how the product or service is going to fit in someone's life. Thus even when similar research methods are used, it is often the case that a report generated from market research is insufficient for design" (Gilmore, 2002: 31).

Adding that:

> "… market research is primarily concerned with making business decisions and forecasting sales and quantifying business models. Design research is concerned with enabling design decisions that are rooted in a true understanding of the needs of users rather than in someone's intuition about what users might need" (Gilmore, 2002: 31-2).

Where both design and marketing undertake research to discover something about people, and where design borrows and adapts market research methods, many designers find themselves compared to market research professionals[259]. However, the value of design research has been increasingly recognised in recent years as being distinctive (see Grant, 2000; Rhea, 2009) especially with the interest in "consumer-led design and innovation" (Rhea, 2009. Also see von Hippel, 2005) from large organisations e.g. Procter and Gamble (see Martin, 2009), Whirlpool, Intel and Motorola (see Fulton-Suri, 2008: 55). Furthermore, since the turn of the century, critiques from within the marketing discipline have surfaced. In 2000 John Grant proposed the idea of 'New Marketing'[260] where he outlines twelve new rules for "a more creative style of marketing" (Grant, 2000) with the first two rules urging marketers to "get up close and personal" with customers and "tap basic human needs" (Grant, 2000). Both of which the design discipline has long attempted to forge as their point of difference, commonly known as User-centred or Human-centred Design. Another critique comes from Christensen et al who publish

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[256] Market research "methods tend to be better at confirming known entities" (Hanington, 2003: 13).
[257] Gilmore states "Designers need to be inspired by a rich, textured understanding of user needs, whereas market research provides a list of needs, without much depth or texture" (Gilmore, 2002: 31).
[258] Hanington says that market research is "open to criticism, particularly for their reliance on what people say to be true, often subject to the influence of self-report bias" (Hanington, 2003: 13).
[259] This has been experienced in both my own practice as a designer and in conversation with many other designers throughout this research investigation. Also see Quarry Integrated Communications who profile, 'Marketing versus Design Personas', http://personas.quarry.com/docs/QuarryPersonaChapterExcerpts.pdf
[260] In his book, *The New Marketing Manifesto*.

in Harvard Business Review[261]:

> "Thirty thousand new consumer products are launched each year. But over 90% of them fail – and that's after marketing professionals have spent massive amounts of money trying to understand what their customers want…. We believe... that some fundamental paradigms of marketing – the methods that most of us learned to segment markets, build brand, and understand customers – are broken" (Christensen et al, 2005: 74).

Christensen et al state that marketing managers "solve the wrong problems, improving their products in ways that are irrelevant to their customer's needs" (Christensen et al, 2005: 76). They use Theodore Levitt's, Harvard marketing professor, lesson: "people don't want to buy a quarter-inch drill. They want a quarter-inch hole!" to show that marketing uses methods such as segmentation inappropriately to segment "markets based on type of drill and by price point" in place of "what jobs consumers need to get done" (Christensen et al, 2005).

While several critiques of marketing have emerged, market research is important in that it can "provide an underlying rationale for the creative process and to provide an evidence base with which to evaluate the final design output" (Biriotti, 2006). Furthermore:

> "… surveys, interviews, questionnaires, and focus groups-the traditional purview
> of market research-provide an efficient means to reach large numbers of people"
> (Hanington, 2003: 13).

Market research can both identify markets and evaluate products and services of design once they are delivered or implemented. Market research is thus a very powerful means for collecting important historical information that creates a basis for decision-making.

Holm and Johannson (2005) argue that marketers and designers should work together to stimulate innovation in an organisation. In their research they found an antagonistic relationship between marketing and design where both functions exist in an organisation (Gilmore, 2002; Holm and Johansson, 2005; Rhea, 2009). Many argue that the reason for this is that marketing and design are similar in terms of researching the same thing – current and potential customers, but there is little recognition of the disciplines' "different purposes, guided by completely different philosophies" (Gilmore, 2002: 31). Further confusion arises when designers use methods from market research, such as personas. While personas are generally presented in similar ways, their content[262] differs due to the different processes undertaken in the research phases by marketers and designers[263] to form them.

Holm and Johannson's (2005) study on the relationship between designers, engineers and marketers found that while designers and engineers established good working relationships, this

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[261] In their article 'Marketing Malpractice: The Cause and the Cure'
[262] That is stories of the personas
[263] This is a reflection on use of personas in my own practice where our design team faced this issue.

was not the case between designers and marketers in the same organisation. Holm and Johansson cite:

> "Poor communication [and] lack of knowledge of the other's processes and ways of doing [that would] often hinder the working relationship between marketing and design" (Holm and Johansson, 2005).

They advocate that marketing and design should work together to foster mutual learning and innovation in the organisation stating that:

> "Marketing needs to learn from design without asking marketers to become designers or vice versa. There is a need to support the differences between the disciplines if we are to make development dynamic. After all, if we all think the same, there is no innovation!" (Holm and Johansson, 2005).

Methods in market research are valuable and attractive for collecting large quantities of mostly quantitative data. Similar to design, market research aims to discover something about people. However market research collects historical data to "provide an evidence base" for "evaluate the final design output" (Biriotti, 2006) making it a powerful tool for decision-making. This is a key difference to design where design research is used to inspire the development of future products and services.

Comparing research in Marketing, Anthropology and Design

Research in marketing and anthropology are easily seen as similar to that of research in design. All disciplines use research to discover something new about people. Gilmore (2002: 30) suggests that one way to overcome the collision of the disciplines is to emphasise that the goals of the research efforts in each are different. Sanders distinguishes between these forms of research by saying that:

- Anthropology seeks to find out what people do;
- Marketing informs organisations about what people buy; and
- Design research discovers what people will find desirable (Sanders, 2001).

Designers as researchers help create future products and services that do not exist yet through generative research (Fulton-Suri, 2008) that focuses on research for inspiration (Gaver et al, 1999; Sanders, 2005) rather than only information, the latter which characterises most research in ethnography and marketing (Sanders, 2005). However, to create new products and services, the designer as researcher must draw upon all types of research to help recognise and synthesise patterns and spot opportunities for creating compelling solutions that meet people's unmet and unarticulated needs and desires. The final activity of any researcher, including the designer as researcher, is to communicate or translate these findings and opportunities, to make them useful to others.

Key practices of the Designer as Researcher in DaSH

The literature reviews show that a researcher plans research, uses many methods to gain information and inspiration and communicates and translates this research so it is useful for others. Smith summaries that design researchers "plan the research, design effective research activities, and synthesise insights systematically and meaningfully to create value" (Smith, 2009). The designer as researcher in DaSH is therefore characterised where the a designer:

- Coordinates the research exploration, including planning the research, developing research tools and undertaking research in the field;
- Uses a number of different research methods drawn from a number of disciplines;
- Communicates and synthesises research findings.

Coordinating explorations

The designer's role in planning and coordination is not new according to Valtonen who states that since the 1960s "designers had in various degrees seen themselves as coordinators between professionals from various fields" (Valtonen, 2005). Inns who identifies the designer as a coordinator of explorations who:

> "… play[s] a lead role in planning future outputs […] to coordinate the exploration of relevant technical and contextual sources to maximise creativity in early stages of design" (Inns, 2007/2009: 26).

In DaSH the designers coordinated explorations by planning the research, developing research tools with the PCT and undertaking the research in the field.

In planning the DaSH research, designers brought together up a multi-disciplinary team comprising of designers, demographers, social workers, sexual healthcare workers and people at a management level in sexual healthcare. In projects where designers must:

> "… determine what consumers will find useful, usable, and desirable… this is a complex problem, one that clearly requires the convergence of multiple research perspectives" (Sanders, 1992: 51).

The multi-disciplinary team in DaSH leveraged existing local and technical knowledge through various research activities for example, Context Mapping that required the skills of designers to observe, capture and visualise Gateshead. They involved the PCT by asking them to note directly onto the map their local knowledge. The output was a rich visual map of local observations and knowledge.

The involvement of the PCT continued in DaSH with the development of research methods. The PCT contributed technical knowledge to help appropriate research methods. For example

the PCT helped develop the Care Journey Cards used in the Service User Workshops. The PCTs technical knowledge was critical to the content of the cards in particular outlining the process of a user through a telephone service and clinic experience. The cards were used to stimulate discussion with workshop participants, helping them communicate what they desire of such services.

Collaboratively developing the research methods in DaSH was not always a smooth process. As one designer recounts:

> "We had a few run-ins… differences of approach… that was really when we were doing the design of the approach and the methods. How were we going to do it and what worked" (Designer 3, 2008: 9).

Many of the methods, such as Cultural Probes, were unfamiliar to the PCT and the designer's spoke of how the team worked together to educate one another:

> "We spent lots of time talking to each other and working, literally working through the methods and what we were going to do. You know, we just sort of discussed it and then we would go away and pull together different models and you know, it was an iterative process" (Designer 3, 2008: 10).

Later on the PCT would experience first hand the methods in use, for example helping both create and complete Cultural Probes[264]. This saw the PCT become "very involved [in the research] as a fieldworker" (Project Stakeholder 6, 2008: 16).

The PCT were also involved in the research by recruiting people as research participants. The PCT used their networks to access people for the research. The ethnography literature, recognises that accessing groups of people isn't always easy. Often a gatekeeper is required to give access to the right people. Hammersley and Atikson state:

> "… access may need to be secured through gatekeepers, but it will also have to be negotiated and renegotiated with the people being studied" (Hammersley and Atikson, 1983/2007: 4).

The DaSH designers spoke of the PCT as the 'gatekeepers' who gave them access:

> "[The PCT] had already spent a considerable amount of time building up strong links with vulnerable and other high priority groups, so we worked with them" (Designer 3, 2008: 12-13).

Designers are known for undertaking research in context and with people whom they are designing for (See Alben, 1997; Kelley, 2005: 19; Burns et al, 2006). Designers recognise that "the sources of invention and new design knowledge are not in the design cookbooks and menus, but out in the vegetable patch" (Stumpf in Alben, 1997: 9). Alben continues by saying

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[264] "… where [the PCT] felt they wouldn't be comfortable… we trained them to use the probes as well" (Designer 3, 2008: 12-13).

that designers going out into the field are able to stay " grounded in the real world… to design in appropriate and sometimes compelling ways" (Alben, 1997: 9). In DaSH the designers at the very beginning of the project "went right the way around Gateshead and [took photos] of some of the graffiti on the wall and all the paraphernalia" (Project Stakeholder 5, 2008: 13). They observed, documented and then captured these findings though visualising the physical traces of Gateshead allowing them to:

> "Begin to infer how an environment got to be the way it is, what decisions its designers and builders made about the place, how people actually use it, how they feel toward their surroundings, and generally how that particular environment meets the needs of its users" (Zeisel, 1981/1993: 89).

Ethnographic approaches can "make a significant development of the ordinary modes of making sense of the social world that we all use in our mundane lives" (Hammersley and Atkinson, 1983/2007: 4). In DaSH, the designers helped healthcare professionals understand "the really close up, local level kind of needs" (Designer 4, 2008: 24) by going out into the field to undertake the research and then visualising their findings to communicate and share them with a wider audience.

In DaSH, the role of the designer as researcher plays an active part in coordinating the research for the project. This coordination saw the:

- Development of a multi-disciplinary team to leverage different knowledge and expertise;
- The development of the research methods with the PCT; and
- Undertaking the research in the field.

Borrowing and adapting research methods from a number of disciplines

In DaSH, the role of the designer as researcher used different research methods from different disciplines to understand local people in Gateshead and inform the development of patient-centred sexual health services. The methods aimed to engage and enable both the PCT and users to participate in the process and contribute to the development of ideas. Designers used many different methods from various disciplines for both finding information and for inspiration (Sanders, 1998; 2005. Also see Gaver et al, 1999). In DaSH designers drew methods from the disciplines of anthropology, marketing and design. The following table (Figure 6.9) lists the research methods used in DaSH and their disciplines.

Research method	Discipline[265]
Visual Mapping	Design, though this method is also used in Human Geography
Visualisation	Design
Cultural Probes	Art and Design
Service User Workshops	Service Design
Care Journey Mapping (or Service Blueprinting)	Marketing (see Shostack, 1982)[266]
Interviews (one-on-one, street interviews)	Marketing
Questionnaires	Marketing
Vox Pops	Marketing, but adapted from broadcasting
Personas	Marketing, though this method was pioneered initially in the computer software industry (see Cooper, 1998; 2003)
Observational Research	Anthropology
Context mapping	Design and Anthropology (a similar ethnographic method is called Contextual Inquiry)

Figure 6.9. Research methods in DaSH and the disciplines of which they emerged or are commonly used

The designers saw a key distinction between design research and market research as being the search for qualitative versus quantitative information. The market research methods were was able to gather demographic information, which the team saw as "complementary" to design research where:

> "Design methods can [get] information from groups that we might not have normally have done so easily […] it improved our ability to access certain groups, made it interesting, found things out about people that are very difficult to get through some of the more traditional methods" (Designer 3, 2008: 8).

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[265] The method's corresponding discipline(s) where the methods either emerged or are most commonly used.
[266] The Care Journey Mapping was inspired by Service Blueprinting which maps the process by showing encounters between the user and provider (Shostack, 1982). More discussion on this in *Chapter 10: LowCarbLane: The Designer as Provocateur* (p 242-3)

While designers draw research methods from many other disciplines, they seldom offer clear articulations of design research's philosophy, purpose and methods, which has led to design research being misunderstood, or pigeonholed as market research. For example a designer explains:

> "I know from experience that you can sit in a meeting and say 'we can be really different and innovative and approach it in a completely different way than you have ever seen before. We're going to do X, Y and Z' and [they say] 'Uh like what? The marketing company that just pitched before you?'" (Designer 4, 2008: 10).

The same designer elaborates that the difference between design and other disciplines is the emphasis on quantitative rather than qualitative research:

> "But what we do differently to what a market research company does is that we try and mix getting quantitative data, which the PCT wants for ticking boxes… mixed with qualitative data, which is like more interesting and useful to us as designers to actually make decisions about how the service should work… on the qualitative [side it] was like why people say what they say, because that kind of helped tailor the recommendations" (Designer 4, 2008: 11).

In other words, market research methods emphasise a purpose for finding information. The purpose of design research is for inspiration (Gaver et al, 1999; Sanders, 2005).

In DaSH tensions among the team arose around the lack of clarity between design and market research. The following table (Figure 6.10) characterises the distinctions between design and market research to help future multi-disciplinary teams better understand each other and work effectively together.

	Design Research (DR)	Market Research (MR)
What it does	• Informs and inspires the design process	• Identifies and validates the current market e.g. what people are buying/using • This information can then be used to forecast sales etc.
Focus	• Qualitative and subjective	• Largely quantitative but also qualitative and objective
Aims	• Interpretative and intuitive e.g. helps explain why people buy in order to connect with their emotions, desires and unarticulated needs • Design research aims to understand how a product or service can fit into someone's life	• Objective e.g. explains what people buy/use • Market research aims to understand how a product or service might fit in relation to a market (customer segment and also positioning in relation to competitors)
Use	• Seeks inspiration for the creation of a product of design. E.g. object, service, system etc. • Can develop new and innovative practices among project stakeholders by involving them in the research process • Useful for discovering and generating rich detail about real people in real contexts	• Decision-making and decision-validating on how to encourage the market to buy a product or service • Useful for deriving a normative understanding of a market context
How research is done	• With people in context e.g. often uses "abbreviated"[267] ethnographic tools • Draws upon a smaller sample of people to understand in depth complexities, behaviour, interactions and experiences with products of design • Includes hard-to-reach groups i.e. research with 'extreme' users usually means a broader range of people can use the product of design	• With people out of their context e.g. Offsite focus groups • Relies on people to self-report on their own purchase decisions and behaviours etc. • Captures a large sample size • Looks for norms and consistencies across a broad market
Time	• Thought to be less time-consuming as researching with a smaller sample	• Researching with a large sample size is time-consuming and resource-heavy
Perception of rigour	• DR adapts research methods to people and the context. Often seen as less rigorous only because research tools may not be replicated in exactly the same way in the next project • Adaptation of methods requires skills and experience of the designer with methods	• MR is seen as more rigorous only because many tools can be replicated
Results	• Conveys research in visuals and stories to capture detail, insights, behaviours, complexities and experiences • Visuals can simplify the complex and articulate small but significant details	• Conveys numerical and statistical data. Might also convey stories e.g. Personas but these articulate norms of the market • Reports data in forms such as graphs, tables etc.
Perceived value in organisations	• Has a long way to go in proving that organisations can make better decisions based on DR • Design is often seen as a cost • Difficulty in evaluating design means only loosely linked to financial value	• Generate results that are numerical. Organisations are used to making decisions based on this objectivity • Brand, a concept of marketing, is considered a current and future financial asset. The difference between cost-to-make and what the customer pays, is linked to brand

Figure 6.10. Key distinctions between Design Research and Market Research.

(This table first appeared in a co-authored unpublished paper[268] with the designers of DaSH)

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[267] Tim Plowman used "abbreviated ethnographic methods" in his paper, 'Ethnography and critical design practice' in *Design Research: Methods and perspectives* (in Laurel, 2006).
[268] The paper was titled, 'Design and sexual health (DaSH): Using design and market research methodologies.' (See Tan et al, 2009)

The analogous literature views provide valuable insight into the different philosophies, purposes and methods of research in ethnography, marketing and design. If designers were more informed with multi-disciplinary knowledge, they would be better placed to argue the distinctiveness of design research and their value as design researchers.

Communicating and synthesising research findings

Strickler notes that while a lot is written about collecting qualitative data, "less has been written about methods of analysing qualitative data" (Strickler, 1999: 37). Cross articulates how designers go from research findings to an idea, describing this moment as a 'creative leap' where a designer "… shift[s] to a new part of the solution space, and the 'finding' there of an appropriate concept" (Cross, 1997: 427-8). The difficulty in making explicit the 'creative leap' was seen when the designers spoke of making sense of the research together after they completed the interviews[269]:

> "There are usually so many professional interviews that we can't all kind of sit and listen to all of them, so yeah, we shared the notes […] you have to kind of share the information bit, to get your head around what they are saying" (Designer 4, 2008: 18)[270].

In terms of moving from research findings to ideas, designers described this as "just working as a team to kind of synthesise everything and then bat around if we should we recommend that" (Designer 4, 2008: 18). One result of their synthesis was a set of six personas. The team used personas as a way to capture and synthesise research findings. In design, personas are "visual and textual descriptions [based on] the results of studying real people" (Ireland in Laurel, 2003: 28) and in DaSH the personas built scenarios for how people come to need and use sexual health services (DaSH, 2007). The DaSH personas were developed collaboratively between the designers and the PCT, leveraging the team's collective knowledge, especially the local knowledge of the PCT[271].

Designers in Dott 07 visualised a number of research findings. Inns identifies that the designer is a "visualiser of the intangible" visualising "systems, relationship, emotions and networks" (Inns, 2007: 25). In DaSH designers provided many examples of visualisations of systems, relationships, stories and networks. They produced many visual maps including: maps of Gateshead (systems, relationships, stories and networks); existing sexual health services (networks); stakeholders of the project (relationships); and Care Journeys (stories). These maps were used to explore and discuss past experiences when encountering sexual health services and

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[269] Often called 'debriefing'.

[270] Hanington also writes that "research results commonly are presented in a team forum, in which they are discussed at length to extract fundamental meanings" (Hanington, 2003: 16)

[271] As this project stakeholder explained, "As a co-design team, we sat down and were able to flesh out some of the personas to be local" (Project Stakeholder 4, 2008: 16).

also inspired new ideas.

Visualisation of research findings can provide "cognitive scaffolds [for] collective sense-making" (van Patter in Jones, 2009: 6). Taylor and Van Every write that sense making "is a way station on the road to a consensually constructed, coordinated system of action" (Taylor and Van Every in Weick et al, 2005: 409). In practice Weick et al (2005) explain that sense-making is a process that turns a flow of circumstances into something explicit that can be read, conversed and edited by an organisation. Weick (2005) speaks of a sense-making product as words, whereas designers use their visualisation skills to develop memorable pictures and images. The Context Map became a sense-making tool to stimulate reflection and discussion among the DaSH team. The PCT relayed their reaction to seeing the Gateshead Context Map:

> "You know that it happens… but actually seeing it, that it was actually in Gateshead [was about] making all that stuff real" (Project Stakeholder 5, 2008: 13).

The mapping activity also helped establish collaborative relationships between the designers and the PCT, forming a common basis for action.

Visualisation is also used by the designer as researcher in communicating new ideas that are a result of the research. Designers presented two reports at the end of the DaSH project. In ethnography and also marketing, communicating research is a vital final step of a researcher. Reports are common and typical formats to present findings. The designer as researcher in DaSH presented highly visual and engaging reports capturing a number of visual examples of ideas, such as clinic experiences and stories (or personas) of typical service users. The reports were memorable and tangible outputs from the project and during the interviews for DaSH, the project stakeholders talked, referred to and showed me the documents constantly, explaining that their involvement in the project led to them feel ownership over them (Project Stakeholder 6, 2008: 21) [272] and their content, which was most shown in the incorporation of the service design principles in the Bensham clinic.

The development of the research methods, and the undertaking of research fostered a "shared perspective" of the project that mobilised the team (Fulton-Suri, 2008: 55). This is well reflected in the service design principles that emerged from the project and in the legacy of the project where the PCT began adopting patient-centred approaches to health service development in other areas of their work.

The value of the Designer as Researcher

Reflections on the case study and discussion of DaSH, sees that the value of the designer as

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[272] As Project Stakeholder 6 stated: "I feel like I own this and am kind of proud of it as much as them as designers" (Project Stakeholder 6, 2008: 21).

researcher is two-fold. Firstly, the designer as researcher uses research for the inspiration (Sanders, 1998; 2005; Gaver et al, 1999) of new ideas and opportunities to address social challenges. Secondly, the designer as researcher develops research methods with partners and clients where the methods become a platform for organisational learning and transformation. In the interviews, the PCT spoke of a new understanding of the different approaches to developing health care services that placed people at the centre of their development:

> "I would think of myself as someone who knows how to consult young people, that's part of my job. But [the designers] came up with some really interesting ideas [like] cultural probes […] We never came across any of those tools before. We are probably much more used to doing very boring questionnaires and doing focus group stuff" (Project Stakeholder 6, 2008: 15).

The PCT's participation in DaSH was less about them mechanically replicating methods such as the cultural probes, rather demonstrating an attitudinal shift that adopts a patient-centred perspective in the development of future health services:

> "The team now think differently, they consider [the] user perspective and are questioning every detail in terms of necessity and impact on user experience. This is entirely down to the [heightened] understanding of a people-centred design led process, which they gained through being on the DASH co-design team" (Design Council, 2010a). [273]

In DaSH, new service principles were developed through experiencing design research in the project. Fulton Suri discusses the different approach design research brings to organisations. She says:

> "Design research often means changing the way work gets done. It means getting out of the office, being where customers are, becoming aware of and sensitive to social trends and the broad ecology of stakeholders, rolling up our sleeves to try out unfamiliar things first hand" (Fulton Suri, 2006: 55).

Fulton Suri adds that the nature of design research being:

> "… largely qualitative and interpretive … demands that everyone involved be prepared to grapple diligently with ambiguity and nuance [leading to] creating common ground and shared perspectives among people" (Fulton Suri, 2006: 55).

In DaSH, the experience of undertaking the research meant the PCT had the opportunity to learn, discover and shape "meaningful frameworks, principles, goals, criteria, and priorities together" (Fulton-Suri, 2008: 55). In doing so the PCT engaged in a process of "personal discovery" rather than being a consumer of "received knowledge" (Fulton-Suri, 2006: 57).

The value of the designer as researcher is where a designer undertakes research for inspiration rather than just information (Sanders, 1998; 2005; Gaver et al, 1999). They do this in order to

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[273] From http://www.designcouncil.org.uk/Case-studies/DaSH/The-response

inform "creative design decision[s]" (Hanington, 2003: 17) and often requires traditional research methods to be adapted to achieve "direct engagement with users forg[ing] a sense of empathy between designer and user" (Hanington, 2003: 17). The value of the designer as researcher can also help organisations better understand their users and build design capability by actively involving stakeholders in the research as partners or collaborators. This expands the role of the designer as researcher to one of guiding organisations on a journey of personal and professional discovery

Currently, the most important role for the designer as researcher is to provide clarity on the philosophy, purpose and methods of design research to other disciplines and stakeholders of design (see Strickler, 1999; Gilmore, 2002; Hanington, 2003; Fulton Suri, 2008). In other words being able to articulate the distinctiveness of design research and how this complements not collides, with other forms of research. Designers must recognise that "many other people [are] involved in bringing products to the market" (van Veggal, 2005: 15) and if the practices of design and their value are not more clearly articulated at the inception of projects, then the role of the designer as researcher has little chance of participating and collaborating with other disciplines to solve complex problems faced by governments, business and society.

Overlaps with other roles in Dott 07

The designers of DaSH assumed a number of roles that are identified in Dott 07. This includes:

- Co-creator[274] – Actively involving the PCT in undertaking and synthesising the research;
- Facilitator[275] – This was observed in two main ways. Firstly by being the translator, or bridge, between the user and the organisation, bringing user insight into the project process. And secondly, "facilitat[ing] people's expressions of creativity" (Sanders, 2008: 11) where designers designed creative activities and tools to allow the participation of people in the development of products and services;
- Capability Builder[276] – in supporting cultural transformation of the PCT, in particular building design capacity and a patient-centred mindset;
- Strategist[277] – In devising plans for implementation and connecting people to the service strategies of the PCT.

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[274] See *Chapter 5: Alzheimer100: The Designer as Co-creator* (p 101)
[275] Sanders also recognises the designer in research who "takes on the role of a facilitator" Sanders (2008: 11). For further discussion on this designer role see *Chapter 7: OurNewSchool: The Designer as Facilitator* (p 167)
[276] See *Chapter 8: New Work: The Designer as Capability Builder* (p 192)
[277] See *Chapter 11: Urban Farming: The Designer as Strategist* (p 267)

Conclusion

The extensive use of research methods from design, ethnography and marketing in DaSH demonstrates the designer's role as researcher. Integrating design, ethnographic and marketing research in DaSH has shown how a combination of research methods can generate research for information and inspiration, leading to the creation of patient-centred sexual health services. While market research looks more at what people buy and ethnographic research identifies what people do (Sanders, 2002), design research complements other forms of research by being generative (Fulton-Suri, 2008) to discover what people will find desirable in the future and inform the development of what kinds of new products and services could exist. The designer as researcher uses methods from all three disciplines to coordinate explorations for service development in the design of patient-centred health care. The PCT's involvement in the project brought local and technical knowledge and designers used research methods to facilitate this participation and collaboration. The PCT's direct involvement in DaSH also resulted in new skills and share perspectives among their practice, helping their daily roles and in the implementation of a new sexual health care service at the Bensham Hospital. In DaSH the designer as researcher has a pluralistic role, one of creating new products and services inspired by design research but also using design research to support organisational transformation through a "personal and organisation mind-shift" (Fulton Suri, 2006: 57). The designer as researcher shows the potential for research methods of design, and illustrates how research methods "are themselves 'products' that need to be designed for different audiences, purposes and contexts" (Dishman in Laurel, 2003: 48).

Chapter 7

OurNewSchool:
The Designer as Facilitator

OurNewSchool: The Designer as Facilitator

Case study: OurNewSchool

In 1997 the UK Labour government made education one of its top priorities[278]stating that, "many of our children will be educated for the 21st century in classrooms built in the 19th century" (Chancellor of Exchequer, 1997 in House of Commons, 2007: 10). This launched a series of government capital investment programmes including: the removal of outside toilets at 600 schools; the replacement or improvement of inefficient heating systems; and the provision of extra classrooms (House of Commons, 2007: 10). However no government investment programme in education would be bigger and more ambitious than Building Schools for the Future (BSF) programme[279] (Blair, 2004; House of Commons, 2007: 12). Launched in 2004 by then-Prime Minister, Tony Blair, BSF was not just to "simply upgrade existing schools, but to improve radically the pattern and quality of provision across the entire secondary education estate" to transform education and learning (Blair, 2004. Also in DfES, 2005). The programme would see fifteen 'waves' of school renewals across England (PricewaterhouseCoopers, 2007; Teachernet, 2008) and capital investment by the end of the programme would total £45 billion (House of Commons, 2007).

Walker Technology College[280] (Walker) is a secondary school located in Newcastle upon Tyne. Founded in 1932 it has 1200 students and 200 staff and specialises in technology and the visual arts. The school resides in the suburb of Walker, an area of high unemployment and poor local facilities which has led the school to see itself as an:

> "… enabler for everyone in our community, providing the best life chances for all through excellent education, wide-ranging learning opportunities" (Walker Technology College, 2009).

In 2006, Walker embarked on the BSF process to procure new learning facilities as part of the first 'wave' of BSF schools. Dott 07 identified the school as a community interested to explore different approaches[281], to transform learning through understanding its student experiences. This aligned with service design company, Engine's approach that creates "opportunities for users and front line providers of a service to work together to redesign and innovate the services they use" (Engine, 2008). The Dott 07 project was called OurNewSchool and design would be

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[278] Globally, education is a key issues among all governments. Ducatel and Gavigan stated: "Education is universally perceived to be key to national competitiveness. Government's everywhere are looking for ways to give us more of it and to make it better" (Ducatel and Gavigan in Thackara, 2006: 136).

[279] The House of Commons (2007) say of BSF: "there is no project like it anywhere in the world. Not since the huge Victorian and post-war building waves has there been investment in our school capital stock on this scale" (House of Commons, 2007: 12).

[280] The school was designated as a Technology College in 2000 by the Department for Education and Employment (DfEE). This has seen technological investments at the school such as the building of a technology centre and facilities for sixth form students (Walker Technology College, 2009).

[281] The school expressed their position as "if you always do what you always did, you always get what you always got" (Project Stakeholder 7, 2007: 14).

used to help the school determine how it would best use a £30 million investment from government for new learning facilities.

OurNewSchool viewed BSF as an opportunity for Walker to create both a sustainable school building[282] (Designer 5, 2008) and transform learning, the latter reflecting the government's agenda. Designers established OurNewSchool as a project that would involve the school community in designing their own future for learning. To do this, designers identified several groups in the school community who would participate in the project. This included:

- The school's Senior Leadership Team;
- A Student Council (of both teachers and students); and
- A Design Action Team, who were a "range of students from different abilities [and] different ages" (Designer 6, 2008: 9).

Of the three groups, Engine focused most on the Senior Leadership Team, seeing the students as "research subjects, rather than collaborators" (Designer 5, 2008: 10). Engine's focus on the Senior Leadership Team, whom they adopted as "the client" (Designer 5, 2008: 8) as well as collaborator, was due to the need to better understand the complex "assembly of people and things" (Designer 5, 2008: 21) within the school. This would identify key issues and ensure sustainable design solutions responded to these issues and were fit for purpose for the school.

To further participation from the wider school community, the designers established an OurNewSchool website and blog (Figure 7.1). It would capture the project process and provide a platform for ideas and feedback from anyone in the school community[283]. The designers explained that the aim of the website was to provide an:

> "Accessible touch-point, where students, parents, people in the community, and teachers, could all see where we were up to all the way through, so we were very open about what it was that we were doing and we were very welcoming, if anyone wanted to get involved" (Designer 6, 2008: 16).

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[282] The Design Team stated that BSF could have easily slipped into, "the need to procure buildings rather than thinking about them" (Designer 5, 2008). Sustainable does not only pertain to environmental sustainability, but a sustainable design which would continue it relevance in future years. Designs that were going to be future-proofing, that weren't going to be a new-old school, but were going to reflect government agendas for now in national trends in education and employment" (Project Stakeholder 7, 2008).
[283] Many other Dott 07 projects used websites and blog platforms for similar reasons e.g. Alzheimer100 and New Work shared project processes and experiences via websites and blogs. Some of these are archived sites today forming part of the Dott 07 legacy and serving as a reference point for the project stakeholders, their organisations and wider audiences.

Figure 7.1. Screengrab of the OurNewSchool website and blog.
From http://www.ournewschool.org
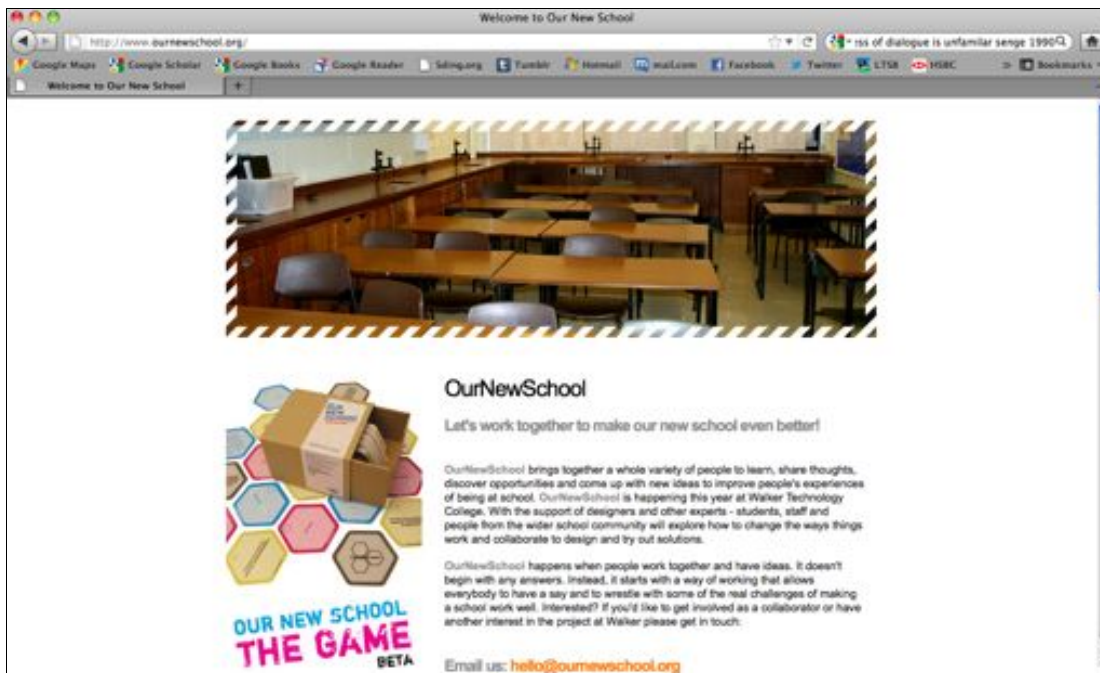
In their early desk research designers identified that a key challenge of BSF was the quality of school designs already completed. In 2006 the Commission for Architecture and the Built Environment (CABE) reviewed fifty-two completed BSF schools designs rating 50% of them as "mediocre" or "poor" (CABE, 2006: 4). CABE reported: low ratings on environmental sustainability; poor building quality of the school designs; and poor linkages between education and construction for innovation (CABE, 2006: 27). The OurNewSchool designers hypothesised that BSF lacked a process that drew on the knowledge of school communities, of the issues they faced, their needs and aspirations. These were critical to identify and communicate if new buildings were to be sustainable for the school and achieve the government's transformational education vision (as seen in Schaeper, 2007; CABE, 2006).

Participant observation, an ethnographic approach, was used early in the project as a way to understand the school. The designers saw that, "ideally, you would immerse yourself…in a situation to design around it" (Designer 6, 2008: 18). In participant observation designers "literally liv[ed] in the school for sometime" (Schaeper, 2007) understanding how it operated, its challenges and needs. In their research, designers observed how the school comprised of a complex system[284] of many different stakeholders with many different priorities (Designer 6, 2008: 17). This led designers to identify a lack of clarity in the school's vision for their future. The designers believed that the school's vision would "position [them] as a more active consumer of BSF" (Designer 5, 2008: 8) as without a vision, the school would not be able to

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[284] The school's position among the local community for providing local facilities, as well as education to students, made it a "portal for other public services" (Designer 5, 2008: 10) increasing the complexity of its operations.

specify to architects what they wanted to accomplish through a new-build. The Project Stakeholders acknowledged the designers' diagnosis saying: "…we weren't really clear of what the vision was, or the vision for the project, or the vision for the building" (Project Stakeholder 7, 2008: 7). The participant observation at Walker led designers to identify "what we could do with the subject of education and school and design" (Schaeper, 2007). These observations, and the identification of a lacking vision, saw a series of design workshops and activities[285] led by designers to involve the school community in a process of reflection to invention to create their future.

To address the lack of vision, designers began by getting the school to reflect on their current position. This would allow key decisions and ideas to be grounded in the school's current context but also help mobilise the community for action and collaboration[286]. In participant observation the "piecemeal construction of the school… [the] patchwork of different extensions and new buildings" was observed (Designer 6, 2008: 18) which had a significant impact on the student and staff experience. It was this that led designers to emphasise the school as a social system, not just a site comprised of buildings (Schaeper, 2007; Designer 6, 2008). Relationship Mapping was used to help the school reflect on its current situation. Engine describe Relationship Mapping as a method of visualising that helps people understand:

> "… a system made of people and their relationships [and] is a great starting point… to identify what changes need to be made, it also gives the community a 'way-in' to redefin[e] those relationships, roles and responsibilities" (Engine, 2008).

The activity involved Project Stakeholders in mapping the school, to show:

> "What actually happens there, who are the people there, who are their peers, who do they tend to talk to, the teachers and how they interact with each other and the students, how a school can be the focal point of the community and how it can sustain and be sustainable in that community" (Designer 6, 2008: 7).

The result was a Relationship Onion (Figure 7.2) that made visible the many layers and links between the staff, students, teachers, governors and senior staff at the school. The school's participation in the mapping helped initiate "big picture thinking" for the Project Stakeholders who relayed how they were able to "get all the layers of this together [so] we'd have a good clarity about where we were going" (Project Stakeholder 7, 2008: 5-10).

In another activity, this time done with students, the designers led an offsite workshop to bring a different perspective to how the school community viewed their school, its space and their

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[285] Engine developed a 'design lab' to host the OurNewSchool project. Limited space at the school did not permit a physical lab so Engine framed it as a "period of focused thought" (Designer 5, 2008).
[286] Shostack (1984) also writes about a similar kind of mapping called service blueprinting, as being a tool to achieve this mobilisation. Mapping can produce visualisations that can be used by a number of people in a number of teams to have everyone on the same page (Shostack, 1984: 136).

learning experience. The students visited performing arts centre, Dance City, to observe the centre and then deconstruct their school and think about it in a different way[287]:

> "We talked about what things were going on [at Dance City] what type of people were there… at different times […] And how the space changed, with those different users and what things were there for them" (Designer 6, 2008: 9).

It allowed the students to reflect more objectively on their school producing:

> "A much more fertile group of statements [than] if we had just did it in school. [If we had done it at school] we would have just gotten a list of what lessons they have and what places there are in the school" (Designer 6, 2008: 10).

Figure 7.2. The Relationship Onion. Image supplied by Engine

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[287] "The thing is that it is interesting for adults and children alike. The kind of stuff that we do was usually a breath of fresh air to them. It's usually a very new way of looking at the things, the way they do their daily jobs, that they had never thought of before. And similarly for students it's exciting to get out of the classroom to get out and do something interesting" (Designer 6, 2008: 11).

A number of other activities were led by designers to then encourage brainstorming in response to the school's current situation. One of these activities included capturing ideas through sketching, or what Engine call, "Graphic Facilitation" (Engine, 2008). On a visit to the site for the new-build the Project Stakeholders discussed issues and ideas for a new learning facility and designers sketched ideas simultaneously (Figure 7.3). The Project Stakeholders found this an effective way of working, describing the method as:

> "[The designer] was listening to us with a clipboard in his hand and a sketchpad…
> he sketched some of those drawings, insitu, with our discussions relative to what
> had happened in the conference room as well" (Project Stakeholder 7, 2008: 10).

Figure 7.3. Some of the graphic facilitation output by Engine.
Image from 'Dear Architect' (Engine, 2007)

Visualisation is a method used by designers occurring through various means such as sketching and model-making[288]. Graphic Facilitation captures a synthesis of conversations that leave the community or organisation with a record of the session or meeting.

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[288] On model making see Gehry in Boland and Collopy, 2004.
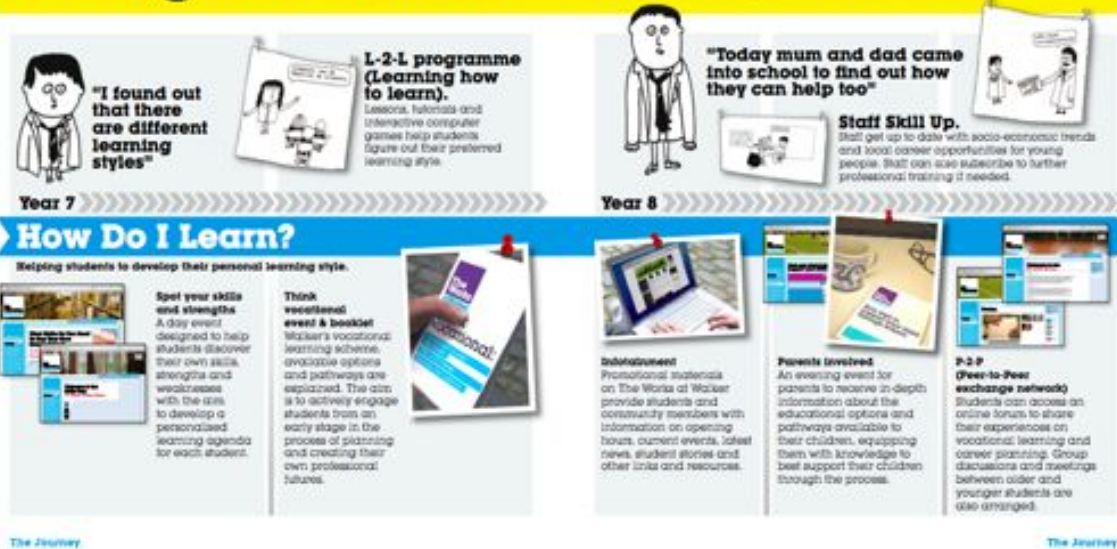
Figure 7.4. Part of the student learning journey.

Image from 'Dear Architect' (Engine, 2007)

Visualisation was also used in the development of a typical seven-year journey of a secondary school student at Walker (Figure 7.4). Engine call this Journey Mapping, a visualisation activity that identifies and "plot[s] touch points, service interactions and the gestures of users who have experienced a service" (Engine, 2008). In collaboration with the project stakeholders, designers mapped the Walker student learning journey, identifying peaks and troughs in their experiences (Designer 5, 2008: 17). The map was used as both a reflective, but also, inventive tool where the designers and the school identified key points where support could be given to students in decision-making, and how the context influences and impacts the learning journey. The exercise encouraged the school to reflect on their students' experiences and think about the future of learning, the new-build's impact on learning and how a quality experience could be supported. The Project Stakeholders found the journey mapping of immense value reflecting:

> "[The Journey Mapping] really helped me to think of the change of curriculum over the next 20-30 years… it really helped me to focus a lot better, to sit down as a personal challenge and think. That exercise alone, had a huge impact on what the need would be in [the new-build]" (Project Stakeholder 8, 2008: 7).

Shostack says that one can "do much at the drawing board" (Shostack, 1984: 137) with mapping services and experiences. Visualisation and mapping allows the testing of assumptions on paper and the ability to "thoroughly work out the bugs" (Shostack, 1984: 137) that may hamper a user's journey in a low risk and low cost way before the commitment of significant resources. Other modes of mapping have existed for many decades, such as PERT and GANTT charts (Shostack, 1984: 134) and these references to production and quality control tend to overlook

the relationship and interactions experienced by people[289] (Shostack, 1984: 134). With Journey Mapping, the designers were able to bring such layers into school planning.

From undertaking a journey of reflection to invention, the OurNewSchool project resulted in a number of outputs. The key output was the vision document titled, *Dear Architect* (Figure 7.5). It outlined the school's needs, priorities and aspirations related to the new-build and was delivered to the school architects. The document was bound in full-colour, containing photos and anecdotes to bring the school to life conveying:

- Walker's vision as a school;
- Their current work toward that vision;
- The stakeholders of the school community;
- Ideas that the school had for their new-build; and
- A typical 7-year learning journey of a high school student at Walker (from *Dear Architect*, 2007).

Figure 7.5. 'Dear Architect' Cover. Photo from the Dott 07 Festival, October 2007

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[289] Shostack writes about blueprinting services and states that tools like PERT and GANTT charts influenced by the work of W. Edwards Deming during World War II, focused on efficiency and control and do not convey "the consumer's relationship to, and interaction with, services" (Shostack, 1984: 134).

Dear Architect demonstrated a level of "clarity and completeness" of Walker's vision (Project Stakeholder 7, 2008: 3) of which the Project Stakeholders stated:

> "What they came [up with], with the limited resources and time that they had from us, was an amazing understanding of the school, its systems and priorities. They had a clearer vision than many people who worked in the school" (Project Stakeholder 8, 2008: 9).

Other project outputs included an OurNewSchool methodology (Figure 7.6) and a facilitation tool in the form of a board game (Figure 7.7). The OurNewSchool methodology was articulated as the same four steps of the DIEC[290] model:

- Discovery
- Generation
- Synthesis; and
- Enterprise. (DIEC, 2006).
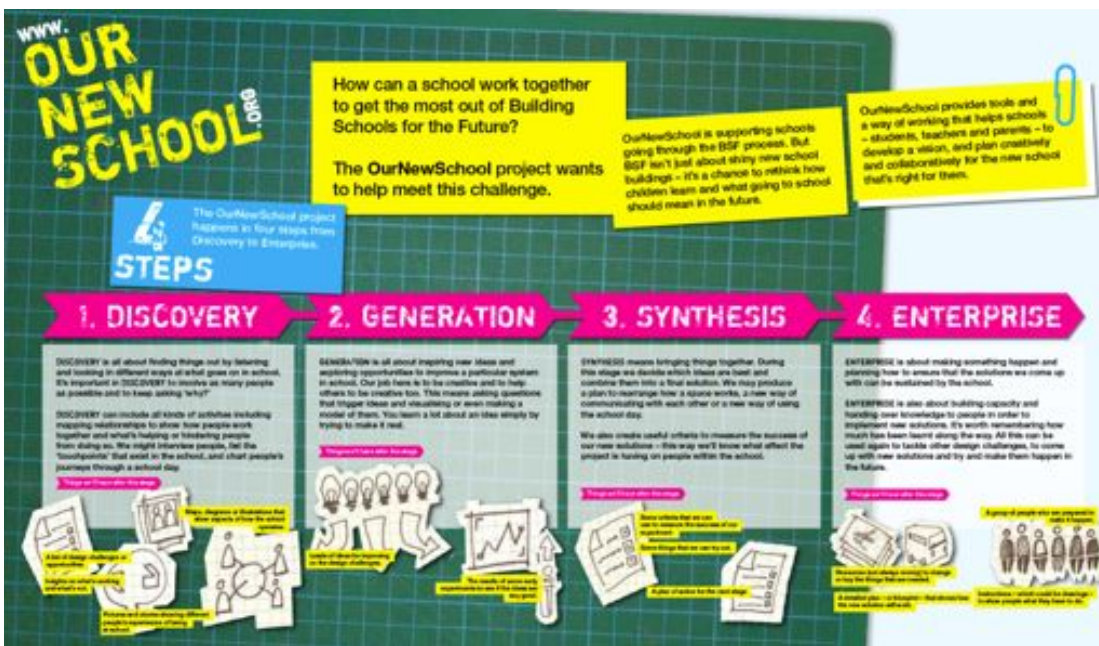
Figure 7.6. The OurNewSchool project process.
Photo from the Dott 07 Festival, October 2007

The model provided a simplified process for how OurNewSchool worked, and its codification aimed to provide other schools with a guide to "work together to get the most out of Building Schools for the Future" (Engine, 2007). The board game aimed to assist in an early part of the process by stimulating dialogue among BSF school communities, with or without a designer.

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[290] Design Innovation Education Centre

The board game worked by:

> "Map[ping] out across a table, very quickly, what the nature of the problem is and also have some really good suggestions to potentially show how design could help to solve it" (Designer 6, 2008: 15).

Figure 7.7. The OurNewSchool board game. Image from <u>http://www.ournewschool.org</u>

Engine and Walker were keen to share OurNewSchool with other BSF schools in the region[291]. But scaling the OurNewSchool methodology and board game encountered a number of challenges. The centralised structure of government meant that Engine found it difficult to initiate projects with other BSF schools The production and distribution of copies of *Dear Architect* helped raise awareness and interest, but lack of funding and investment for the procurement stages of BSF meant that schools could not be a buyer of Engine's services (Designer 5, 2008: 13-16). But despite these challenges OurNewSchool stirred interest with many stakeholders in education such as the Special Schools Trust, the National Collection of School Leadership and the Department for Innovation (Project Stakeholder 7, 2008).

Since the project ended, OurNewSchool has produced a number of outcomes. The school has continued to reference, *Dear Architect*, to help articulate its vision to others. For example in the school's successful bid for Specialist School status, which sees it as a 'specialist' in a particular area of curricula. After a number of attempts at this bid a Project Stakeholder explained:

> "This was a [bid] we had put together for 3 consecutive years and failed in our application on the 3 consecutive years and on the 4th time of asking we managed to put together a vision that had the completeness and clarity about it that the government was looking for [to enable us to] achieve specialist school status" (Project Stakeholder 7, 2008: 5).

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[291] A project stakeholder spoke of this saying, "In Newcastle, given there are 16 schools in BSF and in the country, of course there is a massive government initiative. So we were keen to produce something that would facilitate this further, and that's how the board game evolved. And the board game was a really coming together of the methods that we had used in the process and putting it in a user-friendly format more than anything" (Project Stakeholder 7, 2008: 6-7).

OurNewSchool has also shown to be a valuable project in demonstrating the importance of the student experience in decision-making. The School Leadership Team expressed their intent to continue to involve students in key decision-making by adopting the methods used in the workshops:

> "I think we are at a stage now where we need to use the same kind of facilitation…
> for other spaces within the school... so for example, the proposal to do three brand
> new pastoral bases" (Project Stakeholder 7, 2008: 11-12)

Evidence of the school's commitment to the student experience was in their including of the students in the consultation rounds of the architect's plans for the school.

In 2008 construction of Walker's new-build began. The school documented the construction of the new-build on their school website[292]. In September 2011, in time for the new school year, the new-build on Waverdale Avenue was opened.

Walker were one of the 180 fortunate schools to receive BSF funding. In 2010 the new Coalition government scrapped the BSF programme, citing it as "dysfunctional" and "unnecessarily bureaucratic" (Grove in Richardson, 2001). BSF was also responsible for "about one third of all the [education] department's capital spending" (Grove in Richardson, 2001) and was subject to the Coalition's austerity measures.

OurNewSchool used design to help a local secondary school develop its vision for the transformation of learning and education, responding to UK government policy and the BSF capital investment programme. Designers from Engine worked with Walker Technology College to outline its issues, needs and aspirations producing a vision document to inform the school architects of how new buildings could help them achieve their vision. OurNewSchool resulted in a vision document, a methodology and a number of tools that could help schools navigate BSF. Through the OurNewSchool journey the Walker community were able to participate in the development of brand new facilities for the Walker Technology College of today and in the future.

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[292] A live web cam was set up on the school's website to capture the site every 2 minutes: http://www.walker.newcastle.sch.uk

Discussion: The Designer as Facilitator

In the OurNewSchool project the dominant role of the designer is seen as facilitator where designers brought the school stakeholders together to collaborate creatively in a process of reflection to invention.

A review of relevant literature for the Designer as Facilitator

Facilitation in design

The role of a professional facilitator emerged within industrial organisations three decades ago (Berry, 1993 in McFadden and Nelson, 1998). The increasing complexity, rate of change and available information, which required that organisations work more effectively together, gave rise to this role that helps:

> "People in organisations… become aware of the need for participation to develop creative solutions to difficult problems, to align employees around common action, to facilitate shared understanding, or to provide access to information that is required for effective organisational action" (Pierce et al, 2000: 25).

The discipline of design has not avoided such situations, seen where designers have increasingly taken on more complex projects for example moving from being a stylist at the end of the product development process to someone who works at the front end of innovation (Myerson, 2008). Such projects demand designers engage a wide group of stakeholders in their projects to address complex issues. Thackara summarises this changing role of the designer:

> "Complex systems are shaped by all the people who use them and in this new era of collaborative innovation, designers are having to evolve from being the individual authors of objects, or buildings, to being the facilitators of change among large groups of people" (Thackara, 2006: 7).

The designer as facilitator is a role that is widely recognised in the design literature (Burns et al, 2006; Morelli, 2007; Lee, 2008; Manzini, 2009; Body et al, 2010). Some of the earliest acknowledgements in the literature can be traced back to the 1990s (see Hayes, 1990) and since then many others have recognised this role but without much elaboration[293] (see Borja de Mozota, 2003; Sanders, 2005; Burns et al, 2006; Julier, 2007; Merloz, 2007; Morelli, 2007; Thackara, 2006; Lee, 2008; Sanders and Stappers, 2008; Wahl and Baxter, 2008; Manzini, 2009a; Inns, 2007/2009; Parker, 2009; Thorpe, 2009a; 2009b). For example Wahl and Baxter (2008) introduce the role of the designer as facilitator but not their practices. It has also been noted the many instances where this role has been recognised at conferences and live debates[294] again with little elaboration. A recent paper by Body et al (2010) provides one of the most

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[293] Body et al (2010) are the exception.
[294] Such as *ISDn (International Service Design Northumbria) Conference* 2006; NextD, 2007: 31; Kingston University's *Design for Development Debate*, 2009; *Icsid World Design Congress*, 2009; *Interdisciplinary Discovery through Design Workshop*, 2009; *Copenhagen Co'creation Summit*, 2009.

comprehensive descriptions of the practices of what they call the 'design facilitator.' Body et al ascertain the design facilitator's role includes:

- The establishment of a clear and shared intent;
- The assembly of the right people to address the challenge;
- Being able to determine the best process and techniques;
- Managing events e.g. workshops;
- Focusing on design thinking; and
- Ensuring the design outputs get closer to addressing the challenge (summarised from Body et al, 2010: 64).

In an online interview, McMullin (in Merholz, 2007) maintains that the facilitator role has always been inherent in designers because the success of design projects usually rests in, "how our clients and the different stakeholders on a project work together" (McMullin in Merholz, 2007). Designers adopt a facilitative role to ensure this effective collaboration doing this by "working with internal teams to overcome that set of competing viewpoints and get[ting] people moving in the same direction" (McMullin in Merholz, 2007). Designers apply existing practices of design such as "empathy, listening, observation, synthesis, creating tangible artifacts that people can reference and discuss" in addition to taking "a user-centred perspective" which creates a focal point to bring different people and perspectives into play around a central theme (McMullin in Merholz, 2007). Julier suggests that this role in the future will be:

"… to locate and build on [people's] potential, to open up possibilities, to challenge the collective imagination and to help in the fashioning of new dispositions. In doing so it reconnects people, practices and place" (Julier, 2007: 208).

Much of the remaining literature only introduces the role of the designer as facilitator, recognising that designer roles have changed, in particular from being the sole creator of ideas to the facilitator of them (Thackara, 2006).

In the field of design, the role of the designer as facilitator is commonly acknowledged but the limitations of the design literature are that they do not elaborate on this role, nor explore its practices. An absence of an articulation of the distinctiveness of the designer is also critical. This is because the role of the facilitator exists across many professional fields such as business, teaching, planning and International Development (See Peel, 2000; Robinson, 2002). To better understand the role of the designer as facilitator, literature from the field of facilitation is drawn upon. Theory about facilitation has generally emerged from the field of organisational development (Kaner et al, 2007) but facilitation is also used in other fields such as teaching, planning and International Development. Such literature helps to ground the discussion of the designer as facilitator in OurNewSchool.

What is a Facilitator

To facilitate means, "to make easy" (Jones, 2002)[295]. In the last three decades, facilitation has become popular in industrial organisations (Berry, 1993 in McFadzean and Nelson, 1998) and in many other contexts such as, "in large and small organisations, neighbourhoods, communities and networks" (Rasmussen, 2003: 317). Pioneering studies of group dynamics in the 1940s by psychologist Kurt Lewin identified that "the most effective change in people occurs in group interaction rather than in individuals" (Lewin in Keltner, 1989: 32). The industrialisation and information societies have demanded that people work together more effectively (Weaver and Farrell, 1997; Kaner et al, 2007) to deal with the quantity and complexity of information and issues (Pierce et al, 2000) and this saw facilitation as an "alternative to the constricting format of parliamentary procedure"[296] (Kaner et al, 2007). The facilitation of group meetings became a formal process in organisations in the late 1960s and by the 1980s facilitation was seen as a tool "to assist people to become architects of their own future" (Kaner et al, 2007).

Facilitation allows for, "all members [to] share in decision making and responsibility… [and] groups perform more effectively by soliciting the leadership skills and potential of all members" (Auvine et al, 2002: 53). More recently facilitation has become a key part of fostering learning organisations, that is organisations which support environments where people continually learn[297] (Senge, 1990b) allowing organisations to constantly transform and reinvent themselves. Facilitation in learning organisations mostly supports a process of dialogue because dialogue is important to "move the process forward towards a common imagination and reflection of desirable futures as well as how to implement these futures" (Rusmussen, 2002: 313). Facilitation of dialogue is important because:

> "The process of dialogue is unfamiliar; because it can bring up difficult emotions and misunderstandings; and… skilled facilitators know how to anticipate and help people through the 'crises'" (Senge et al, 1994: 356).

Many have described a facilitator, for example Kaner et al say a facilitator is "an individual who enables groups and organisations to work more effectively to collaborate and achieve synergy" (Kaner et al, 2007). Facilitators are also commonly referred to as content neutral (Jones, 2002; Kaner et al, 2007) that is, "not taking a position on the issues at hand; not having a position or a stake in the outcome" (Kaner et al, 2007). In doing so facilitators encourage fair, open and inclusive procedures to accomplish the group's work. A facilitator does this by leading the, "process through which a person helps others complete their work and improve the way they work together" (Weaver and Farrell, 1997: 3) giving people, "frameworks and tools to make the

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[295] The word derives from the Latin word facilis which means 'easy.'
[296] Kaner et al (2007) make reference to *Robert's Rules of Order* showing that they mean "parliamentary procedure" to be where an authority defines the rules for how situations are conducted and what outcome is to be achieved.
[297] Senge says learning organisations are ones where "…people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together" (Senge, 1990b: 3).

groups they worked and lived with much more effective, powerful and productive" (Kaner et al, 2007). In summary Weaver and Farrell state that:

> "… facilitators help others get their work done. They provide methods that support both accomplishing tasks and helping individuals work together" (Weaver and Farrell, 1997: 3).

The focus and concerns of facilitators are therefore to do with the "quality of the process" rather than "technical or organisational influence" (Jones, 2002. Also see Rasmussen, 2002: 310). In doing so, facilitators are generalists who address a wide range of complex issues (Jones, 2002).

Much of the facilitation literature identifies typical facilitation processes (see McFadzean and Nelson, 2998; Body et al, 2010: 67). McFadzean and Nelson (1998) provide a broad framework for facilitation methodology with the stages of: Pre-planning session; Group session; Post-session report; and Post-session Review (see Figure 7.8).

A conceptual model for facilitating a group problem-solving session

Pre-Planning Session	**Group Session**	**Post-Session Report**	**Post-Session Review**
Knowledge of problem solving process/techniques	State and agree agenda, objectives and timetable	The post-session report should contain:	The following should be reviewed after the session:
Communication skills/interaction with clients regarding agenda	Experience and knowledge of process and techniques	• Output obtained from the session. The results will depend on the meeting objectives stated in the pre-planning session.	• The session output • The problem solving process • The timetable • The goals • The people involved
State clear meeting objectives with client	Introduction/warm-up session - encourages commitment to work with each other	• Aims and objectives - the report should state what should be undertaken next e.g. the next meeting, implementation plans, timetable etc.	
Structure agenda/look at whole picture	Guidance and support		
Focus on initial problem definition	Flexibility	• The people involved in the session and any future instructions that may be required of them.	
Knowledge of group dynamics and environments	Neutral intervention		
Choose group members and discuss political issues	Encourage participation by all group members		
State session ground rules	Feedback on meeting		
Develop terms-of-reference	Maintain momentum		
Understanding of business environment	Presentation skills		
	Knowledge of group dynamics		

Figure 7.8. A conceptual model for facilitating a group problem-solving session
(McFadzean and Nelson, 1998)

Methods are also discussed (See McFadzean and Nelson, 1998; Sibbet, 2010) and "there are a number of different methods and techniques that can be used to facilitate the task" (McFadzean and Nelson, 1998: 9). Many pertain to methods for analysis such as SWOT, Venn Diagrams and

matrices (Robinson, 2002) with a few supporting reflection and imagination[298]. Facilitators use these methods in flexible ways rather than using prescribed methods "schematically" (Rasmussen, 2003: 315). Thus another practice of facilitators is to create and support a process of methods, to achieve effective group work. Facilitators have a toolkit (of methods) to draw upon and populate throughout the process. This is a key craft of the facilitator (such as in Rasmussen, 2003; Golsby-Smith, 2007).

The process and methods in facilitation require a facilitator to tap into the synergy of a group of people where the "total effect is greater than the sum of the effects taken independently" (Webster, 1996 in Rasmussen, 2003: 308). To create such synergy, the facilitator must not only lead a process and use a number of methods they must shape the conditions for this synergy to take place. This is done where the facilitator espouses values and considers the physical environment for which group work takes place.

Rasmussen says that the values needed in creative cooperation include, "power sharing, open dialogue, personal responsibility and curiosity" (Rasmussen, 2003: 308). Auvine et al provide another comprehensive list of common values a facilitator should activate and also foster including:

- Democracy[299]
- Responsibility[300]
- Cooperation[301]
- Honesty[302]
- Egalitarianism [303](Auvine et al, 2002: 53-54).

These values create the conditions for which groups can work effectively together. However Rasmussen (2003) and McFadden and Nelson (1998) speak of the facilitator's practice of considering the physical environment, including the need to reduce internal and external distractions to hold the attention of the group in the sessions. This expands the role of the facilitator of not only espousing appropriate values for groups, but to also consider the environment in which groups work.

Key practices of the Designer as Facilitator in OurNewSchool

A facilitator is someone who enables groups to work more effectively together. Facilitators use a process and a number of methods to do this, while fostering values and considering the

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[298] Such as the methods in David Sibbet's (2010) book, *How Graphics, Sticky Notes and Idea Mapping Can Transform Group Productivity*.
[299] Giving people the opportunity to participate.
[300] Both in terms of the facilitator taking responsibility for the process of the workshops session and also encouraging an increasing sense of responsibility for the participants.
[301] Fostering the cooperation of people toward a common goal.
[302] An expectation of everyone in the sessions to being honest in what they share.
[303] Giving everyone in the group an opportunity to contribute.

physical environment in which group work takes place. Rasmussen states that the literature on facilitation can be 'scarring' "because it seems to be almost impossible to acquire so many different skills" (Rasmussen, 2003: 310). Many descriptions of facilitators suggest what they should aim to achieve and what skills facilitators should have (such as Zimmerman and Evans 1993 in Jones, 2002). Lists of skills (See Jones, 2002) and tables of competencies (See Pierce et al, 2000) provide helpful information of what a facilitator should be, but they give little insight into the practice. However, the following discussion outlines the key practices of the designer as facilitator in OurNewSchool, grounding these in the facilitation literature that refers to facilitation practice. The designer as facilitator is therefore involved in:

- Leading the process;
- Populating the process with flexible use of methods; and
- Espousing values and considering the environment.

Leading the process

There are many different 'models' of the role of the facilitator: from being an individual who guides a group through a process (Keltner, 2006: 37), to a trainer who develops skills or brings new ones to the group (Jones, 2002; Keltner, 2006). In OurNewSchool, designers demonstrate capacity in both these models, with leading the process as a primary role. Designers of OurNewSchool recognised their expertise in the process:

> "The process is the most important thing about design… It's the journey of all the different stakeholders, the community, the students, the teachers, the designers. It's how we figured things out, why we figured things out" (Designer 6, 2008: 8).

The lack of experience and familiarity the Project Stakeholders had with the design process made it critical for the designers to lead the process. This lack of familiarity was illustrated where the Project Stakeholders' initial expectations were that the project produce finished building designs:

> "… because we knew they were all very good with images, and design… we were actually hoping for a pack of designs... We almost wanted them to do the design that we were then later having the architects do. I think our expectations were, that they were to come up with some plans" (Project Stakeholder 8, 2008: 10-11).

At the start of leading the process the designers aimed to create a common starting point or what Body et al (2010) call a shared intent. The Relationship Mapping activity formed a common starting point early in the project. Body et al state this is a "critical determinant of the success of the design project" (Body et al, 2010: 64). In OurNewSchool a common starting point was critical because within the School Leadership Team there were a number of "potentially different visions" and the Relationship Mapping formed a common ground to give them "good

clarity about where we were going" (Project Stakeholder 7, 2008: 5). Of the Relationship Mapping the Project Stakeholders reflected that it was a helpful "way of starting off your big picture thinking" (Project Stakeholder 7, 2008: 5).

The importance of the designer as facilitator in leading the process is because project stakeholders can be hesitant, due to the unfamiliarity with the design process and its activities[304]. The OurNewSchool Project Stakeholders openly discussed their hesitancy with design. They discussed the challenges when: "we were asked to do some of the things that we did [and] couldn't see the purpose of it" (Project Stakeholder 8, 2008: 17). While others found the methods "a bit uncomfortable at times [because] I don't know what's coming" (Project Stakeholder 7, 2008: 13). This was despite the designers making the process explicit, outlining four phases of the project as: Discovery; Generation; Synthesise; and Enterprise (DIEC, 2006; Engine, 2008)[305]. While similar to Engine's[306] design process[307], the model in OurNewSchool was inherited from Dott 07 who encouraged the use of the DIEC marketing-design fusion model. While the designers articulated this process well, unfamiliarity with design methodology led the Project Stakeholders to be unsure of it in the early phases of the project. To address this the designers endeavoured to establish a good working relationship with the school that included: demonstrating credibility, keeping the school informed of the journey, being clear about each other's roles and creating positive experiences of working together (Designer 5, 2008: 13).

The designer as facilitator leads the project process. An important part of this is establishing a shared intent, that is building a common starting point. The importance of the designer as facilitator in leading the process is because project stakeholders may be unfamiliar with the design methodology. Making the process explicit can help in providing clarity and managing expectations, but OurNewSchool showed that even with an explicit process, Project Stakeholders still require reassurance and guidance, and a good relationship is a key part of this. The Project Stakeholders of OurNewSchool reflected after the project that without a facilitator leading the process "it would have taken us a lot longer for us to get to the end game" (Project Stakeholder 8, 2007: 8)[308]. Another summarised the outcomes of the designer as facilitator as helping them achieve:

> "… clarity and completeness in the vision of the project, whereas prior to this, we had an amalgamation of views that didn't really marry together and [were] dependent on the strength of personality in the discussion" (Project Stakeholder 7, 2008: 3).

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[304] Much like Senge et al (1994) describes the process of dialogue in organisations is unfamiliar, thus requiring a facilitator.
[305] For the project, Engine developed a design lab to host the OurNewSchool project. Limited space at the school did not permit a physical lab so Engine framed it as a "period of focused thought" (Designer 5, 2008).
[306] For more on this see: http://www.enginegroup.co.uk/service_design/v_page/our_process
[307] The designers notes that the process is valuable for them to "stop [us] wondering off into nowhere" (Designer 5, 2008: 21).
[308] This was mostly because the project stakeholders recognised that they had many differing perspectives within the school.

Populating the process with flexible use of methods

In the facilitation literature many authors discuss the importance of facilitators to have a toolkit of different methods (McFadden and Nelson, 1998; Peel, 2000; Jones, 2002) and to allow for a flexible use of them throughout the process (Rasmussen, 2003: 315). Engine are well-known for their public methods bank on the company's website[309] stating that a project is not only about the methods:

> "We believe that what we do is more about people than it is about tools. It's absolutely about tools, but it's more about people, skills and ability" (Designer 5, 2008: 21)

This view is shared by other Dott 07 designers who suspend ownership of the methods they use, acknowledging that most are borrowed and abbreviated[310] from other disciplines, such as anthropology and marketing[311]. When drawing upon a variety of methods from a number of disciplines, designers state their ability to use methods in "different combinations" (Designer 6, 2008: 9) and make decisions about the methods during the process of "what discipline, or what disciplines, to employ" (Designer 6, 2008: 5). Julier maintains that the designer as facilitator uses methods, not by "prescribing a particular creative platform in response to situations; rather, whichever is most appropriate to address a context and issues" (Julier, 2007: 207). In OurNewSchool, designers used a variety of methods to populate the process to move it forward, engage and entertain the Project Stakeholders, and "to help get to the unexpected" (Designer 5, 2008: 21), by simulating imagination to generate ideas for the future.

Body et al (2010) posit three types of methods used by a design facilitator: exploratory, innovative and evaluative. Exploratory methods are those used to gain insight into the current situation. For example in OurNewSchool the designers led the Relationship Mapping to discover the social system of people and relationships, leading to a shared view of the current situation. Innovation methods enable people to design future states (Body et al, 2010). For example in OurNewSchool the graphic facilitation combined drawing by the designer with simultaneous discussion by the Project Stakeholders. This saw the emergence of what the building and its spaces could look like. Finally evaluative methods are those that provide evaluative information about a product or service (Body et al, 2010: 67). For example the offsite activity at Dance City which encouraged reflection on the school environment to evaluate it by comparing and contrasting another learning space. Body et al maintain that most evaluative methods, such as consultation by email, are the least effective and result in tokenism[312]; that is "ticking the box that a consultation process has been undertaken" (Body et al, 2010: 67). The

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[309] See http://www.enginegroup.co.uk/service_design/methods/
[310] Plowman stated that designers "abbreviated" methods (Plowman in Laurel, 2003: 35).
[311] For further discussion on this see *Chapter 6: Design and Sexual Health (DaSH): The Designer as Researcher* (p 158-9).
[312] Lee (2008) discusses tokenism in her paper, 'Design participation tactics: the challenges and new roles for designers in the co-design process'

evaluative methods in OurNewSchool encouraged reflection and evaluation, but also produced valuable knowledge because through the activity at Dance City came "a lot of brainstorming" (Designer 6, 2008: 10). Thus a blurry distinction exists between defining types of facilitation methods when they are put into practice. The designers went on to say that the offsite activity not only allowed Project Stakeholders to think about school issues more clearly but it also enabled them to engage and entertain school students, to maintain their interest and participation in the process.

The broad range of ages in the school community demanded that the designers used methods that engaged and entertained the Project Stakeholders. In the offsite activity the designers explained how they kept things "a bit more interesting" (Designer 6, 2008: 10), by taking the students out of the classroom. They also appropriated some of the methods and activities for younger groups making them shorter, more visual, more active and mixing things up a bit by pulling out a "wild card" to change activities when momentum and enthusiasm was wavering (Designer 6, 2008: 10-13). Designers also used methods to engage school staff. The designers described that the staff would arrive at workshops "absolutely exhausted… sitting in a meeting asleep and that's the point where they have to come together to plan the future of the school" (Designer 5, 2007: 10). Designers used different strategies to overcome this challenge[313] and "revitalise and re-energise this process of planning" (Designer 5, 2007: 10). Designers adapted their ways of working to suit the school context:

> "We had workshop sessions where people said, 'I have to go to a maths lesson' and there is nothing you can do about that… in the end the 3 of us just carried on working, and then people came long… [to] do stuff with postcards and they were off again. But it was a better way of doing it… so the whole thing about designing an agenda and a workshop on the train on the way up, we just stopped bothering" (Designer 5, 2008: 26).

The designer as facilitator has a toolbox of a variety of methods. Methods for use are chosen in terms of what is appropriate to the stage of the process, the project context and the Project Stakeholders especially when they are participants in the process. Designers in OurNewSchool also endeavoured to use methods that engaged and entertained the Project Stakeholders to encourage their involvement in the project and provide them with:

> "A breath of fresh air… a very new way of looking at the things, the way they do their daily jobs, that they had never thought of before. And similarly for students… to get out of the classroom… do something interesting" (Designer 6, 2008: 11).

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[313] Such as frequent interruptions of the workshops: "We have 1117 students out there and anything can happen at anytime, so throughout the whole facilitation there were times where we would just leave without warning because there was a mission critical out in the wider school" (Project Stakeholder 7, 2008: 13).

Methods used by the designer as facilitator populate the project process and are appropriated in their use. This means that facilitation methods of the designer can appeal to a broad age group and are highly engaging and entertaining in reflection and invention.

Espousing values and considering the environment for group work

In OurNewSchool the designers demonstrated how they imbue key values similar to those found in the facilitation literature, in particular providing people with the opportunity to participate (democracy) and also contribute (egalitarian) (Auvine et al, 2002: 53-4; Rasmussen, 2003: 308). The OurNewSchool website and blog demonstrated both these values, inviting participation and allowing people to contribute. It was an open and accessible platform to communicate the project process and allow anyone in the community to share ideas and feedback. As one designer explained:

> "The OurNewSchool website [was a] very accessible touch point, where students, parents, and teachers as well, could all see where we were up to all the way through, so we were very open about what it was that we were doing. And we were very welcoming, if anyone wanted to get involved" (Designer 6, 2008: 16).

The Project Stakeholders responded positively to the website and blog saying it was an effective platform for open communication and dialogue:

> "We communicated regularly through the electronic forum that we set up for this, which was good for keeping in touch in terms of the project" (Project Stakeholder 7, 2008: 13).

The Project Stakeholders also recognised how appropriate it was for students saying that the students were comfortable in interacting with electronic forums and technology (Project Stakeholder 7, 2008: 19).

The designer as facilitator shares a very similar practice to the design as co-creator who creates the conditions for co-design to happen (Burns et al, 2006: 26; thinkpublic, 2009). The physical environment is a key consideration for the designer as facilitator. For example Rasmussen suggests the use of workshop rooms away from normal work areas and near breakout spaces for "walks, collective plays and other forms of energy creating activities". (Rasmussen, 2003: 311). But physical space at the school was limited and the designers described their main workspace as "a desk in a shared office and a filing cupboard" (Designer 5, 2008: 19). They hosted workshops in classrooms after school hours and the project became best known "in terms of a presence" at the school (Designer 5, 2008: 8). While OurNewSchool had no physical 'home' within the school the designers saw it as "a structured period of focused thought" (Designer 5,

2007: 19)[314]. This presented a few challenges during the project and led the designers to adapt their ways of working to allow for disruptions. In the facilitation literature, McFazdean and Nelson (1998) state that the attention of people is not "an unlimited resource" and that both internal and external forces can distract team members for effective group work. They suggest that:

> "… the facilitator's job [is] to ensure that the group's attention is focused on the appropriate tasks and to reduce or negate both internal and external distractions" (McFazdean and Nelson, 1998: 6-7).

While the designers seemed satisfied with the ad hoc workshops, the Project Stakeholders suggested in hindsight, the use of "twilight sessions" (Project Stakeholder 8, 2008) and intensive periods of group working:

> "I think if we were doing this again, we'd do it out of school... Even if that meant doing weekends, I would have been quite happy to do that, but doing it within school time when you have got a day job to run as well and your mind is 80% on what you are talking about and 20% on the things that might be happening whilst you aren't there. It was difficult, in every sense for us and difficult for them as well" (Project Stakeholder 7, 2008: 13).

From the OurNewSchool project, the designer as facilitator espouses a set of appropriate values and also considers and adapts the environments where group work takes place.

The value of the Designer as Facilitator

The designer as facilitator differs from a general facilitator, emphasising more the creation of futures rather than the analysis of history or a situation. The designer as facilitator uses methods to not only analsye the current situation, but for stimulating imagination and creativity. Most writing about facilitation methods emphasis analytical tools such as SWOT[315] analysis, venn diagrams and matrices (see Robinson, 2002). The designer as facilitator brings innovation methods (Body et al, 2010), such as the Graphic Facilitation and Journey Mapping, to the facilitation toolbox. These methods engage and entertain project stakeholders in thinking and creating their futures.

Strategy and innovation company 2nd Road, who use many practices of design in facilitation with large organisations, state the need for more invention rather than analysis tools, saying that most organisations "are far better equipped with the tools for operational management and defining the *status quo* than they are for inventing and shaping new futures" (Golsby-Smith, 2007: 22).

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[314] Observations during the project stakeholder interviews noted the awkward layout of school rooms and offices and the considerable limitations of space.
[315] SWOT stands for strengths, weaknesses, opportunities and threats.

Body et al add that design facilitation is focused on "designing and making" and "creating a picture of a future state that doesn't yet exist and one which is better from the perspective of multiple stakeholders and points of view" (Body et al, 2010: 64-5). The Project Stakeholders spoke of how the journey mapping encouraged them to think 20-30 years into the future:

> "[One of the designers] asked me to help her map out a student starting school in year seven, when they come from the primary, and to map out the journey right the way to sixth form... And that, I think was the most useful exercise I did because it really helped me to think of the change of curriculum over the next 20-30 years and of how it needed to be" (Project Stakeholder 8, 2007: 6-7).

Traditional facilitation methods focus on analysis of the status quo. This is important at the start of facilitating a vision because it establishes a shared intent (Body et al, 2010) among multiple stakeholders enabling a common starting point to begin their "big picture thinking" (Project Stakeholder 7, 2007: 5). The designer as facilitator expands the facilitator's toolbox by bringing in methods that facilitate the invention of futures and visions, engaging and encouraging the participation of stakeholders to do so. Designers "bring design skills and methodology; the group brings the design problem and the design instincts" (Golsby-Smith, 2007: 29). Facilitation and design have a lot to contribute to each other and "proves a golden partnership" (Golsby-Smith, 2007: 29).

Overlaps with other roles in Dott 07

In OurNewSchool, designers also adopted other roles including:

- Co-creator[316] – Working with the school to co-create a vision for the future of learning;
- Researcher[317] – For the insight gathering early in the project to shape the project direction;
- Social Entrepreneur[318] – By their efforts to scale the project, to help other schools navigate the BSF procurement process; and
- Capability Builder[319] – Where designers develop individual and organisational effectiveness by encouraging uses of design among project stakeholders to identify and then address their challenges. Of the capability builder role in facilitation, Keltner writes that facilitators are "group *process trainers...* who help a group diagnose and solve process problems" (Keltner, 2006: 36). Designers in OurNewSchool recognise that "as soon as you run a workshop with smart people, they are going to do it themselves" (Designer 5, 2008: 21) and the Project Stakeholders spoke of their intention to adopt the facilitation methods post-project for the development and decision-making of other spaces around the school (Project Stakeholder 7, 2007: 11).

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[316] See *Chapter 5: Alzheimer100: The Designer as Co-creator* (p 101)
[317] See *Chapter 6: Design and Sexual Health (DaSH): The Designer as Researcher* (p 135)
[318] See *Chapter 9: Move Me: The Designer as Social Entrepreneur* (p 215)
[319] See *Chapter 8: New Work: The Designer as Capability Builder* (p 192)

Conclusion

There are currently no formalised accreditation schemes to be a facilitator, so anyone can assume such a role (Auvine, 2002: 55). Designers can adopt a facilitation role as process experts to lead sessions where a design methodology is appropriate, especially in the generation of visions and futures through engaging project stakeholders on a journey of reflection to invention. The importance of the designer leading the process is because design can be an unfamiliar and ambiguous process to many partners, project stakeholders and clients. Designers must also lead in the use of methods and the project stakeholders' participation in using these methods. This expands the role of the designer as facilitator as being a trainer-facilitator, embedding new skills among the community. This trajectory of the project stakeholder shows the impact of the designer as facilitator role – one that guides and shapes journeys of personal and professional discovery[320]. In OurNewSchool, the Project Stakeholders expressed their initial hesitancy with design methodology but then transformed through the journey of the project to now adopt and advocate them in their daily practice. This is a fascinating role of the designer as facilitator, and there is no doubt that more research into this role can help strengthen, identify and develop our knowledge and practice further[321], and encourage future designers to take on a role that can create a positive impact in helping groups and communities work more effectively toward their social goals.

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[320] This has resonance with the use of research methods in DaSH. See *Chapter 6: Design and Sexual Health (DaSH): The Designer as Researcher* (p 164-5).
[321] PhD researcher Vanja Misic is currently researching this area at Swinburne University of Technology, Australia.

Chapter 8

New Work:

The Designer as Capability Builder

New Work: The Designer as Capability Builder

Case study: New Work

In the UK, micro-businesses are crucial to the national economy. Usually defined as a business employing up to ten people (Stanworth and Gray, 1991; Storey, 1994; Devins et al, 2001), micro-businesses account for 95% of all businesses in the UK, 25% of all employment and generates £464bn turnover for the economy (Devins et al, 2001). In the NE of England where Dott 07 took place, over 90% of businesses fall into the catergory of being a micro-business employing up to ten people (Lantra, 2007) so attention to the growth and development of micro-businesses is important to the regional economy.

The Dott 07 project, New Work, aimed to "improve the day-to-day experiences of people who are self-employed or have a micro business" (Thackara, 2007b: 38) by developing different models of small business support. Devins et al, state that the kind of support offered to micro-businesses is "often adapted from the large firm context [and] offered to smaller businesses" (Devins et al, 2001: 28). Support services thus become "largely irrelevant" to the specific needs of micro-businesses (Devins et al, 2001: 8) as one micro business says of current support services:

> " [They] don't bring a customer into the door, it doesn't build up your business acumen... I don't mean to knock it too much, but sometimes what a business needs is access to other entrepreneurs, to talk about your problems" (Project Stakeholder 10, 2008: 3-4).

The New Work project aimed to look at "better ways of serving the needs of micro-businesses" (Designer 7, 2008: 7) and was led by business consultancy, Enabling Concepts, and service design company, live|work. New Work explored alternative models of small business support involving a number of micro-businesses to do so. The idea for New Work was to prototype a model where micro-businesses work together to support and overcome their specific challenges. In doing so, micro-businesses could create their own sustainable support services and "develop and maintain services for themselves" (Designer 8, 2008: 6).

The project worked with six diverse micro-businesses from various sectors including osteopathy, software development, garden design, retail, consulting and public relations (PR) (Design Council, 2009a). Design was used to help the micro-businesses identify and prioritise their key issues, generate ideas in response to them and prototype these ideas to see how and if they would work and fit into the daily life and operations of a micro-business.

New Work began by establishing a website and blog. This would document and capture the project process and be a key reference point during the project to keep the Project Stakeholders

informed of the process. It ensured the micro-businesses were:

> "… able to go back to what happened in the workshop and [see] how has this informed this stage and what do I need to do now…. there were occasions were people missed the workshop or the meeting because [they have their] own commitments to the issues and challenges we were trying to address" (Designer 8, 2008: 18).

The next step of the designers was to conduct Insights Interviews[322]. They interviewed the micro-businesses in order to create a better:

> "… understanding [of] what they did day to day, what their aspirations for the future where, what their challenges were with getting there and just introducing them to the project and what might be happening over the next few months and should they choose to get involved, and what benefits they would seek to being involved" (Designer 8, 2008: 6).

From the interviews the designers identified several common issues even though the micro-business came from very different sectors. These issues were presented back to the micro-businesses at a workshop to validate the findings, but also allowed the Project Stakeholders to continue to the next phase of the project from a common ground[323]. The six common challenges were:

- Finding and keeping the right staff;
- Finding help to sell products and services;
- Delegating responsibility to others;
- Maintaining high standards of delivery when expanding;
- Finding financial support; and
- Managing time effectively (Thackara, 2007b: 39; Design Council, 2009a).

The workshop also asked the micro-businesses to explore their needs, opportunities and actions around these six issues (Designer 8, 2008: 9). Project Stakeholders were provided with templates (Figure 8.1) to guide thinking and record their ideas.

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[322] Insights Interviews is the name given by live|work to interviews in the research phase with users and staff. For more see: http://www.livework.co.uk/what-we-do

[323] Much like a key practice of the designer as facilitator who leads the process by establishing a shared intent (Body et al, 2010) (See p 184-6)

Figure 8.1. Post-it note templates for the project participants to map their needs, opportunities and actions. Photo from New Work interview

In the Idea Generation[324] phases the needs, opportunities and actions templates were used to brainstorm ideas. Brainstorming "is a great way to generate a lot of ideas in a short space of time" (Design Council, 2009a) and designers emphasised that a key principle in the workshop was to:

> "… encourage as many wacky ideas as possible [because] although an idea can be out of this world and bonkers and never happen, from that idea can come others" (Designer 8, 2008: 11).

The Project Stakeholders sketched out their ideas on another template provided by designers (Figure 2). This template asked them to draw their ideas and give their idea a name and short description. The design team explained that moving ideas from statements to sketches enabled the exploration of how ideas would work:

> "Getting people to sketch makes them put more detail into an idea… they do kind of work through the idea more in their head rather than just [make a statement]" (Designer 8, 2008: 11).

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[324] Idea Generation is the name given by live|work for this the phase of the project whereby the designers, "…use creative methods and design to solve problems. Based on real customer needs and insights, we make solutions come to life by visualising them early" For more see: http://www.livework.co.uk/what-we-do

Figure 8.2. A template for Idea Generation which got project stakeholders to sketch and think through their ideas. Photo from New Work interview

The Project Stakeholders stated their hesitancy with brainstorming and sketching. With brainstorming, they described having to be patient with the process:

> "It was interesting at parts, boring at parts, incredibly frustrating at parts. We all knew we had to come out with a couple of ways… to help small businesses. And that was the challenging and interesting part. The boring and frustrating part was when… we had to expand upon crap ideas. And I understand expanding upon crap ideas… but if you do spend, half an hour on a crap idea, there could be a nugget of gold in there" (Project Stakeholder 10, 2008: 12).

Designers' relayed challenges of getting the Project Stakeholders to sketch ideas saying that, the activity didn't receive a good response initially as they were "a bit scared of putting pen to paper" (Designer 8, 2008: 17). To help overcome this, the designers demonstrated the sketching of ideas themselves stating:

> "… maybe seeing how crap we are at sketching as well, they don't have to worry about it. Just because we are designers doesn't mean [we are a] really good sketcher" (Designer 8, 2008: 17).

Despite the Project Stakeholders' hesitancy the brainstorm and sketching was very successful resulting in no less than fifty-five ideas (Figure 8.3). The designers observed how "in an hour time difference, [the Project Stakeholders went] from being frozen up [to] generating all these different ideas" (Designer 8, 2008: 17).

Figure 8.3. Around 55 ideas were generated among the group. Image supplied by live|work

The ideas were presented among the group and voting took place to take the best ideas forward (Figure 8.4). By the end of the workshop, six ideas were decided upon and these were:

- Get it Done – A 'To Do' list using physical objects to represent tasks. This avoided the loss of notes on paper and emails;
- Working Back at School – Getting the micro-businesses engaged with the local community by speaking to school students about running a business;
- Pimp My Presentation – Helping each other develop presentation skills;
- Sharing a member of staff – Reducing the cost of support staff via a shared staff member among a number of businesses on a part-time basis;
- A farmers market for finance – Where banks and lenders come together to pitch their best offers to micro-businesses[325]; and
- An online mentoring forum – Where micro-businesses can share support and advice[326].

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[325] The designers and project stakeholders described this as an inversion of the model for attaining finance.
[326] As presented at the Dott 07 Festival, 2007.

Figure 8.4. Voting on the best ideas with Post-it notes. Image supplied by live|work

Each micro-business volunteered to take one idea forward to prototype. Prototyping develops, tests and improves an idea at an early stage of the process before committing a lot of resources for implementation (NESTA and thinkpublic, 2011). Representations of the idea are made in a range of forms from sketches to models (Buchenau and Fulton Suri, 2000) and these are used in context to "test out the reactions of potential clients and providers" (Murray et al, 2010). In New Work designers provided support to help the Project Stakeholders test and develop the ideas via another workshop. They showed how prototyping ideas could be done, prototyping one idea themselves outlining the prototype as a:

- Description of the idea;
- List of features;
- List of benefits;
- Note of what needs it meets;
- List of tasks that will need doing in order to prototype it; and
- List of measures that will mean that it has been a success[327].

By this stage the Dott 07 projects were nearing completion and prototyping ideas progressed variably among Project Stakeholders:

> "We worked… to bring those ideas into prototypes. Some of the ideas never went further than prototypes. Some of them did. Some of them went past it" (Project Stakeholder 10, 2008: 8).

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[327] From the New Work website and blog which no longer exists online.

The New Work outcomes were less concrete than other Dott 07 projects, however a number of less visible and also unanticipated outcomes emerged. Through participating in workshops, Project Stakeholders described how their discussions led them to realise the difference between working *in* versus working *on* the business. Working *in* their business day-to-day meant they had little time to think about "how to build [their businesses] further" (Project Stakeholder 10, 2008: 9). The Project Stakeholders discussed seeking out mentors as a way to help focus their attention to working *on* their business. Mentors would provide one-on-one advice and support, and during the New Work project one of the micro-businesses:

> "… did go out and get [a mentor] and they actually did get a very, very good mentor… without Dott, the reality is we would have never have thought about it" (Project Stakeholder 10, 2008: 10).

Furthermore, Project Stakeholders began forming their own social network. This centred around a social networking website, a space to "get in touch with each other and share experiences and work together on projects" (Project Stakeholder 10, 2008: 26).

The results of the New Work project don't seem immediately clear, but the project approach demonstrates was how design can be used to help micro-business entrepreneurs reflect on their businesses, identify their common challenges and create responses to them. The project itself is also a prototype for a micro-business support service, that is maintained by its users through sharing support, ideas and opportunities with each other. This alternative model of business support relies less on receiving support from agencies as the design team summarises:

> "There are now six businesses in the NE that are better informed… about how to address challenges that they are all facing together and individually and sustain their businesses through thick and thin." (Designer 8, 2008: 19).

While there is no known continuation of the project, designers described the potential for New Work to be positioned as research and insight for micro-business providers such as accountants and solicitors. This would help them "modify their approach in servicing the needs of micro-businesses" (Designer 7, 2008: 7). The Project Stakeholders expressed an enthusiasm to see a continuation of the project in this way:

> "A lot of courses set up for entrepreneurs are set up by academics, who haven't a clue about problems businesses have. Or they are set up by people who are incentivised to give you something like a subsidy for a laptop. It would be very unfortunate if someone didn't take this [forward] I think it will be very likely that someone will take this further into some sort of training course" (Project Stakeholder 10, 2008: 20).

From the designer's side, New Work provided a testing ground for the development of a new service offer to build design capability for live|work's clients. As a designer explains:

"Since New Work, we have used a number of different methods and what we call *Service Design Capability*™, which is a product we offer" (Designer 8, 2008: 15).

A longitudinal evaluation (not within the scope of this research investigation) would further identify New Work's impact and value it has had for the practices of both micro-businesses and design practice.

Discussion: The Designer as Capability Builder

Design's contribution to business and organisational life is not new. The traditional role of the designer has expanded from making products attractive and desirable, to having a more strategic role where design is seen "as a means of innovation […] looking at things with a creative mind and finding new solutions" (Valtonen, 2005: 1-5). In New Work the designer demonstrates a dominant role of capability builder among business organisations. Designers here helped build design capability among six micro businesses helping them identify their key challenges and create responses to address them.

As this role is not largely discussed in the design literature, discussions of the designer as capability builder are grounded in literature from the field of Organisational Development (OD), where developing individual and organsiational effectiveness is well defined and discussed. However literature from design is also reviewed, because an abundance of research and writing discusses the contributions of design to business, which correlates with the designing that occurred in New Work[328].

A relevant literature review for the Designer as Capability Builder
The value of design to business

Since the turn of the 21st century the relationship between design and business has been explored through the contributions design brings to business. Heskett notes that as early as the 1960s American designers Richard Latham and Jay Doblin were pioneering strategic uses of design in business organisations through developing a "range of methodologies to transform how major corporations can use design strategically in every aspect of their operations" (Heskett, 2001: 25). This paved the way for a new breed of design companies that "became competitive with management consulting firms[329] in certain areas of work" (Buchanan, 2008: 3) such as design and innovation companies IDEO[330] and radarstation[331] . Buchanan notes:

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[328] It is interesting to note that reviewing literature from the fields of design and business was challenging because it was difficult to reconcile both disciplines in a single discussion. This was mostly due to the different vocabularies used where the design literature was about stating the contributions of design (not the designer) while OD was more explicit about its practices making discussions of the designer as capability builder easier to confer.
[329] *The Designing for Services* project conducted by Lucy Kimbell and Victor Siedel (2008) at Oxford University's Said Business School observed this issue of differentiation between service design innovation and management consulting firms.
[330] http://www.ideo.com
[331] http://www.radarstation.co.uk

"The traditional disciplines of design have tended to focus on a specific and concrete set of design products—graphics, artifacts, interiors and buildings without adapting the design process to actions and pathways of organisational life" (Buchanan in Boland and Collopy, 2004: 61).

Many authors discuss such contributions of design in an organisational context (See Lorenz, 1994; Buchanan, 1995, 2008; Liedtka, 2000, 2006; Seidel, 2000; Kelley, 2001; Boland and Collopy, 2004; Martin, 2004, 2005; Borja de Motzoa, 2006; Dubhthaigh and Barter, 2006; Michlewski, 2006; Brown, 2005, 2008; Jenkins, 2008; van Zyl, 2008; Ward and Dekker, 2009). These discussions encompass a broad range of areas where design is found to be applicable in organisational life. Buchanan lists these as:

"Strategy, communication, information, decision-making, new product development, interaction and service design, vision creation thorough 'strategic conversations' and other interventions in the life of organizations" (Buchanan, 2008: 3).

As reflected in his list, Buchanan (1992) advocates that designers have the potential to move beyond the discipline's traditional spheres. To frame this Buchanan uses a topology of the four orders of design[332] to describe:

"…broad areas in which design is explored throughout the world by professional designers and by many others who may not regard themselves as designers" (Buchanan, 1992:4).

The orders are described briefly below as:

- First order design: The design of symbolic and visual communication;
- Second order design: The design of material objects;
- Third order design: The design of activities and organised services; and
- Fourth order design: The design of complex systems or environments for living, working, playing and learning (Buchanan, 1992: 5).

In the New Work project designers operated in all the orders. For example in the First order the designers set up a digital touchpoint that communicated the project process and progress via a website. In the Second order designers created paper prototypes of the ideas. Third order refers to the new sustainable model of micro business support that New Work attempted to develop and demonstrate, and Fourth order speaks to the pedagogical approach of the designers to build capabilities in Design Thinking, the design process and its methods among the micro-businesses. It is this Fourth order which refers to the role of the designer as capability builder.

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[332] Other such as Jones (1971/1992) and, Young, Cooper and Blair (2001) also proposed a similar topologies. Young, Cooper and Blair (2001) recognise three levels of design activity - D1, D2 and D3 which correspond with where design is concerned with form and detail; systems; and ideology. Of this the authors state, "Currently, the design profession focuses on the tangible elements of design, disregarding their role within the wider social context, i.e., D1 and D2 rather than D3. The new challenge for design will be in integrating the material aspects of designing within the immaterial challenges of context and beyond - to redesign the context itself" (Young, Cooper and Blair, 2001: 13).

Buchanan's framework is helpful in understanding *what* design and designers can contribute, and many other authors such as Borja de Mozota[333] (2006) argue the 'what' of design in business, without much elaboration on *how*. Seidel (2000) gives more insight on the *how*. Seidel's (2000) research has been previously cited in earlier chapters[334] where he observed four roles of product design consultancies in strategic planning. He observed these four roles as strategy visualisers, core competence prospectors, market exploiters and design process providers[335] (Seidel, 2000). Of these roles, design process providers and core competence prospectors are most relevant to New Work. Seidel maintains that a designer can be a design process provider providing the design process and tools for use in the organisation (Seidel, 2000: 38-39). Ward and Dekker also discuss the designer's ability to help SMEs improve processes by:

> "…mak[ing] things in better ways: cheaper and faster manufacturing processes, added value from new material choices, and environmental and cost benefits from more efficient systems" (Ward and Dekker, 2009: 50).

In New Work designers led the project process. They also identified the opportunity and capability of micro businesses to work together, touching upon Seidel's other role, the designer as core competence prospector. This role helps identify "dormant capabilities" as designers work with various parts of client organisations permitting "a unique perspective on what is capable in the firm" (Seidel, 2000: 38). Due to this wide involvement across organisation, the designer's role sometimes extended to "help[ing] set the 'philosophy and spirit' of the company" (Seidel, 2000: 39). This gave rise to seeing designers as being able to help organisations develop more innovative cultures that adapt and respond to challenges and increase competitiveness. This 'philosophy and spirit' is frequently discussed in the design literature under the concepts of Design Thinking (Buchanan, 1995; Brown, 2008), design attitude (Boland and Collopy, 2004) and/or design cultures (Michlewski, 2006; Julier, 2007).

Design Thinking in organisations is widely advocated by IDEO. IDEO first used the phrase in 2003 to liberate design from its sole association with tangible products (or artefacts), presenting the value of design as its process and principles, in particular the espousing of a human-centred ethos that leads a "full spectrum of innovation activities" (Brown, 2008). Tim Brown, present CEO of IDEO, writes that the activities of Design Thinking fall into "a system of spaces" that include inspiration, ideation and implementation in search of "finding the best ideas and ultimate solutions" to create value and market opportunities for organisations (Brown, 2008).

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[333] Borja de Mozota proposes four "powers" for which design can "create value in management" These being design as differentiator, integrator, transformer and design as good business (Borja de Mozota, 2006: 45).
[334] See *Chapter 2: Literature Review* (p 48).
[335] In the role of strategy visualiser the designer "provides physical and visual prototypes" to illustrate and develop future products and strategies (Seidel, 2000: 37). As market exploiters designers "provide valuable marketing insight" (Seidel, 2000: 38).

Many other authors and researchers have since looked into the unique characteristics of design and designers and what they can contribute to business. In 2004, Boland and Collopy advocated that business managers adopt a design attitude, over a decision attitude in management. They describe the decision attitude, commonly found in management, as a manager "facing a set of alternative courses of action from which a choice must be made" (Boland and Collopy, 2004: 4). In contrast, a design attitude "views each project as an opportunity for invention that includes a questioning of basic assumptions and a resolve to leave the world a better place than we found it" (Boland and Collopy, 2004: 8). The authors summarise "exotic methods of financial analysis do not create value. Only inventing and delivering new products, processes, and service that serve human needs can do that" (Boland and Collopy, 2004: 7. Also Golsby-Smith, 2007). The New Work designers demonstrate both Design Thinking and a design attitude seeing challenges as opportunities for micro-businesses, and providing a process to identify and respond to these challenges contributing to business growth.

To further develop Boland and Collopy's (2004) idea of a design attitude, Michlewski's (2006) doctoral research studied the "professional design cultures embedded in successful design-based organisations" (Michlewski, 2008). Michlewski's (2006) elaboration on the design attitude identified a 'design culture' comprising of five interrelated dimensions that could translate into an organisational context. These being:

- Consolidating multidimensional meanings;
- Creating, bringing to life;
- Embracing discontinuity and open-endedness;
- Engaging polysensorial aesthetics; and
- Engaging personal and commercial empathy (Michlewski, 2006).

In other research and literature, a fascinating proposition made by Buchanan states that design can contribute to business because:

> "… organisations are products of design [but the] explicit concept of design emerged only slowly in this area, and in isolation from the development of design in other applications" (Buchanan, 2008: 2).

The view of the organisation as a product of design is further elaborated upon by Junginger[336] who "explores how product development might be a way to think about internal organisational change" (Junginger, 2008: 26. Also see Junginger, 2006). Jenkins also notes that transforming an organisational culture to be "design-friendly" a design leader must "take on the organisation itself as the object of design, not just a particular product or process" (Jenkins, 2009). New Work saw the micro businesses as products of design, showing that design could be applicable

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[336] Junginger's PhD (2006), *Change in the Making: Organizational Change Through Human-Centered Product Development,* explored this concept. But a more recent journal paper, 'Product Development as a Vehicle for Organizational Change' speaks more directly to this idea.

in the re-design of models for business for growth. The designer here is not the consultant for the business, but a facilitator for this transformation.

In addition to the design literature, many professional design organisations and institutions (such as the Design Council; Design Management Institute; Stanford D School; Better by Design etc) and design commentators[337] also advocate design in business. Since 2006, the Design Council have been actively demonstrating how design adds value to business through their design mentoring programme, Designing Demand[338]. Designing Demand pairs designers (or Design Associates) with SMEs to "stimulate design-led innovation among the [UK's] smaller businesses" (Ward and Dekker, 2009: 47). Design Associates help "give managers the skills to exploit design" via "hands on support and learning" (Design Council, 2010b). Key contributions of design to businesses observed in Designing Demand have included:

- Helping explore and articulate business strategy and vision;
- Developing better processes in product and service development;
- Reviewing and reviving brands;
- Championing the user experience; and
- Encouraging innovative cultures[339] (Ward and Dekker, 2009).

It can be conferred that New Work hosted a similar mentoring scheme, allowing micro-businesses to encounter design methodology – its thinking (e.g. brainstorming), process (e.g. moving ideas to prototypes) and methods (e.g. visualisation) for business development and growth.

Design literature, research, companies and programmes present a strong view that design and designers contribute to business organisations in many areas[340] and in various ways. It is important to note that the literature on the area is much broader than those discussed above and only a brief summation is provided to recognise the research, literature and work that has preceded or occurred around the time of New Work.

Over the course of time designers have expanded their role as product consultants to being custodians of strategic uses of design, such as Design Thinking, to transform organisations. Despite this, most literature discusses design, rather than the designer, thus the purpose of this continuing discussion is to recognise the contributions of designers by identifying their key practices when they make valuable contributions to business. To gain further insight into the

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[337] Such as Bruce Nussbaum's (2008) 'Design and Innovation' blog on *BusinessWeek* and Fast Company's (2011) design segment on their online journal.

[338] The programme was a response to the government commissioned, *Cox Review of Creativity in Business*, presented in 2005 by Sir George Cox to "exploit the nation's creative skills more fully" (Cox, 2005: 1) ensuring the UK remained at the forefront of competitiveness in business globally. The review recommended that awareness and understanding of creativity and business be made available to UK SMEs (Cox, 2005: 4) and Designing Demand aimed to give SMEs design support to improve areas of innovation, competitiveness and profitability.

[339] Since it was established Designing Demand has worked with over 1,800 firms and has a forecasted impact of £9.9 GVA for every £1 spent on support (Temple, 2010: 24).

[340] Such as strategy, culture, product differentiation, organizational processes etc.

role of the designer as capability builder the next section reviews literature from the field of Organisational Development (OD) that closely aligns to the aspirations of design and designers in this area which is to improve individual and organisation effectiveness.

What is Organisational Development?

In the field of OD the most commonly cited definition is by Richard Beckhard who first coined the phrase in the late 1960s. Beckhard defines OD as:

> "An effort (1) *planned*, (2) *organisation-wide*, and (3) *managed* from the *top*, to (4) increase *organisational effectiveness* and *health* through (5) *planned interventions* in the organisation's 'processes'" (Beckhard, 1969 in Anderson, 1971/2010: 2).

OD is concerned with both organisational and individual effectiveness as OD focuses on the:

> "… improvement in the organisation's ability to perform…. [and] improvement in the development of the organisation's members- that is, in their psychological well-being, their level of self-actualisation or realisation, and their capabilities" (Porras and Roberts, 1992: 722).

The OD effort is guided by "a *change agent*, *change team*, or *line management* whose primary role is that of facilitator, teacher, and coach rather than subject matter expert" (McLean, 2006: 13). OD practitioners can be either internal or external to the organisation (Anderson, 1971/2010; Brown and Harvey, 2006; McLean, 2006; Gallos, 2006) and they have a broad knowledge base that draws from a number of disciplines such as "business, industrial/organisational psychology, human resource management, communication, sociology, and many other[s]" (Anderson, 1971/2010: 2). For example the field of psychology heavily influenced the field of OD with the workplace studies led by psychologist Kurt Lewin (1947). Lewin's research demonstrated the value of employee participation in the change process showing that:

> "… workers were encouraged to experiment with different methods, discuss them among themselves, and choose those that they agreed were most effective… the workers increased their quotas" (Gallos, 2006: 57).

Lewin's work saw change processes involve the client and it is generally seen these were "far superior to an expert-centred approach" (Gallos, 2006: 57). Thus the role of the OD practitioner works on the basic assumption that clients:

> "… *learn to identify problems, participate in the diagnosis, and be actively involved in problem solution*[341]. The practitioner recognises that the client either has useful skills and resources but does not know how to use them effectively or does not have the requisite skills but has the capacity to develop them. As a result, the client solves its own problem with the practitioner 'helping to share the

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[341] Italicised for emphasis.

diagnosis and in providing alternative remedies which may not have occurred to the client'" (Brown and Harvey, 2006: 105).

This is a key distinction of OD from other forms of consulting such as management consulting. As Anderson states:

> "… OD consultants are hired as experts in process consulting and human systems rather than in specific content areas" (Anderson, 1971/2010: 87).

Schein describes process consulting as:

> "… help[ing] the organisation to solve its own problems by making it *aware of organisational processes*... The process consultant helps the organisations to learn from self-diagnosis and self-intervention. The ultimate concern of the process consultant is the organisation's capacity to do for itself" (Schein, 1969: 135).

OD consultants therefore *lead* clients through the process of diagnosis and intervention, encouraging responsibility and ownership during the change process. Diagnosis is a key function of OD and Schein speaks of "joint diagnosis" where the consultant and the client undergo the process together:

> "… because of the underlying assumption that most organisations could probably be more effective than they are if they could identify what processes (work flow, interpersonal relations communication, intergroup relations etc.) need improvement" (Schein, 1969: 5).

As the diagnosis is "joint" the client has the opportunity to become a diagnostician themselves (Schein: 1969: 6).

This approach of client involvement in the process also carries into developing the interventions (Schein, 1969: 7) for positive change. An intervention "refers to a coming between or among members of groups of an organisation for the purpose of effecting change" (Brown and Harvey, 2006: 103) and an OD consultant uses many methods to do so, such as survey research, job design, total quality management (TQM) and team building activities etc. (see Schein, 1969; Brown and Harvey, 2006) with many of these interventions developed from the behavioral sciences. These methods do not conform to "a standardised set of procedures or tools" rather requiring a process of "flexible problem solving" (Anderson, 1971/2010: 10). A by-product of the client involvement in OD is the transferring of skills to the client (McLean, 2006: 18) so they are equipped to continue developing themselves and their organisations.

While many have listed the skill sets of OD practitioners, fewer outline the OD process. This is because OD practitioners "have a variety of styles, philosophies, and approaches" (Brown and

Harvey, 2006: 103) generally performing a set of functions[342] which comprise of:

> "(1) helping the client determine its current level or state (data-gathering), (2) assisting in a collaborative analysis or problem areas and planning strategies of change (diagnosis), and (3) intervening and facilitating change from the current level to some ideal or desired level" (Brown and Harvey, 2006: 103).

The field of OD aims to create more effective organisations and individuals. In order to do this, an OD practitioner must engage with organisations and individuals to help them diagnose problems and develop a programme of planned interventions by actively involving the client in the process where the transfer of skills in diagnosis and interventions occurs.

Key practices of the Designer as Capability Builder in New Work

Reflections on the case study New Work identifies the dominant role of the designer as capability builder, using OD as a field to ground explorations and bring new insight into how designers contribute to business organisations. This is seen through a number of key practices which include:

- Developing organisational and individual effectiveness;
- Joint diagnosis of defining the business issues
- Involving the client in planning for action; and
- Using (design) interventions to achieve intent.

Developing organisational and individual effectiveness

In Porras and Roberts (1992: 722) they state that there are two main purposes of OD – The first being to improve the organisation's ability to perform, and the second being to develop the organisation's members. The conventional model of business support in the NE was to provide grants. While helpful support for micro-businesses, little is offered to develop the capabilities of individuals and their companies for growth. As a Project Stakeholder explains:

> "… sometimes it's not the money… the reason why you don't have the money is because you are crap at doing presentations" (Project Stakeholder 10, 2008: 5).

The New Work designers spoke of "looking at better ways" (Designer 7, 2008: 4) to service micro-business needs. The project explored a model of business support that would enable the micro-businesses to support and help each other, while also maintaining the service themselves. The designers saw this as a way to not only create bespoke support for the unique challenges of micro-businesses but also as a way to sustain "good business" (Designer 8, 2008: 6) because the

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[342] Interestingly, Brown (2008) also describes design-thinking methodology as a set of functions. This shows that design and OD processes are not linear and while the field of OD largely accepts this, literature and research on design methodology has not in emphasising (often linear) process models of design that reflect the idea of a one-best-way approach. A more full critique of design methodology as design process models can be found in *Chapter 2: Literature Review* (p 24).

micro-businesses would benefit from networking, helping each other and sharing best practice. In terms of developing individual effectiveness the involvement of the micro-businesses in the New Work process saw them gain new skills in Design Thinking and methodology, developing individual effectiveness. For example with one Project Stakeholder who owned a software development company, Design Thinking led him to take a different approach to projects by taking "everything apart and re-constructing it" into something the client wants (Project Stakeholder 10, 2008: 23). In other words, rather than responding to briefs, generating ideas that expand and go beyond the client brief:

> "Most of the time you just give them what they ask for because that is what they pay for. And I'm not saying you don't think about it, you just don't put a lot of effort into it. If a client says they want this, and you get paid. It would be very rare, in fact it would be unheard of before the Dott project for me to turn around to the client and say, 'No, you do not want that, you want something completely different, this is what you want'" (Project Stakeholder 10, 2008: 22-3).

As a result, this has led him to:

> "…turn a 2 month project into a 2 year project. To turn something they perhaps expected to spend 20-50 thousand Euro on to perhaps paying nearly a million Euro on" (Project Stakeholder 10, 2008: 18).

Brown states that Design Thinking can lead to "new forms of value" (Brown, 2008) and in the case of this Project Stakeholder, his involvement throughout the New Work process saw how design capability can be transferred and adapted in business practice.

Joint diagnosis

In the field of OD the consultant initiates "joint diagnosis" (Schein, 1969) to identify issues *with* the client. Brown and Harvey state that the diagnostic phase is:

> "An important activity providing the organisation and the practitioner with a better understanding of client system problems… to determine the exact problem that needs solution, to identify the forces causing the situation, and to provide a basis for selecting effective change strategies and techniques" (Brown and Harvey, 2006: 16).

In New Work the design team began with Insights Interviews to help them understand each micro-business and their key challenges. The designers analysed the interview data and presented their analysis back to the micro-businesses, forming a common starting point and understanding for the businesses to develop ideas and build plans of action together. This is similar to OD practice that surveys employees, and then managers and consultants discuss the results with the employees (McLean, 2006: 21).

In this diagnosis phase of the project, New Work designers could have extended their practice to equip the micro-businesses for self-diagnosis. This would have allowed a continuation of reflection and identification of future challenges which pose barriers to business growth. Tools for reflection, such as the OurNewSchool board game in the previous chapter[343], which did not require a designer as a facilitator but provided communities with a tool to facilitate their own discussions, could have also been explored in New Work to create a process that was self-sustaining from the outset. Nevertheless the New Work designers undertook joint diagnosis with the micro-businesses by involving them in the research and validation of their common issues.

Involving the client in planning for action

The OD literature highlights the importance of the OD practitioner undertaking the diagnosis and the generation and development of strategies, with the client. A result of this is that:

> "… activities that ordinarily occur with the assistance of a consultant… typically become absorbed by the client system as the process unfolds" (French et al, 2005: 153).

In New Work designers led a process that involved micro-businesses in generating and testing ideas to address their issues. This process was also done *with* the Project Stakeholders rather than *for* them by involving the businesses first in interviews for diagnosis and then in a series of design interventions. The designers led a number of workshops and activities to do this. For example the Idea Generation workshop that asked micro-businesses to expand on their challenges and respond to them. In these workshops a number of activities were run such as brainstorming and sketching.

Designers further involved the Project Stakeholders by supporting them to test their ideas through prototyping. This helped explore if ideas are possible (Manzini in van der Meer, 2009) and the designers demonstrated prototyping by providing a framework to guide the Project Stakeholders through this phase. Due to time limitations, the ideas varied in their progress with a number of ideas not reaching the prototyping stage in the project timescale.

Using (design) interventions for positive change

In the field of OD, interventions are a, "range of planned, programmatic activities that clients and consultants participate in during the course of an organisational development program" (French et al, 2005: 153). Intervention strategies can include behavioural, structural and technological strategies (Brown and Harvey, 2006: 201) and are used depending on the nature of the problem. The New Work project methods align to behavioural strategies, where changes

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[343] See *Chapter 7: OurNewSchool: The Designer as Facilitator* (p 167)

in attitudes and behaviours toward models of business support were evident. Or as Brown and Harvey outline in the field of OD:

> "Behavioral strategies emphasise the use of human resources. In the past, managers concentrated on fully analysing an organisation's technological and mechanical capabilities, but often neglected its vast untapped resources: its human assets" (Brown and Harvey, 2006: 218).

Designers used various methods and approaches of design to encourage Project Stakeholders to take a more proactive approach to identifying and addressing specific micro-business issues. These included:

- Workshops: That brought people together to work collaboratively to share issues and ideas to support the growth and development of their businesses;
- Brainstorming sessions: Which were structured sessions led by designers that encouraged Project Stakeholders to generate ideas specific to their needs;
- Idea Generation sessions: To encourage the Project Stakeholders to develop and explore their ideas using pictures and words; and
- Prototyping: To quickly develop and test ideas before implementation.

These interventions used a learn-by-doing[344] (Designer 8: 2008: 13) approach with designers facilitating the use of design methods to harness the creative and thinking skills among Project Stakeholders to achieve positive change.

While designers brought design methodologies to the project to develop the micro-businesses and the individuals who owned them, they also benefited from the experience in developing their own offer[345] (Designer 8, 2008: 15). Learnings and experiences from New Work fed into the development of a new live|work service offer called, *Service Design Capability™* (Designer 8, 2008: 15; live|work, 2008b). This "equips people with the foundation skills to create new services and improve existing ones" (live|work, 2008). New Work provided a mutual learning experience for both Project Stakeholders and designers. The OD literature states that:

> "The purpose of process interventions is to help the work group become more aware of the way it operates… the work group uses this knowledge to develop its own problem-solving ability. Process interventions then, aim at helping the work group to become more aware of its own processes, including the way it operates, and to use this knowledge to solve its own problems" (Brown and Harvey, 2006: 187).

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[344] Designer 8 spoke of a learn-by-doing approach they took with the micro-businesses in the project, in particular in the areas of brainstorming and prototyping.
[345] In conversation with live|work later in the course of the research investigation they informed me that they had developed a service offering called, *Service Design Capability™*, which had a similar approach to the New Work project in developing organisations and their individuals in utilsiing design thinking, process and methods.

In New Work, designers led a process using design methods rather than techniques from the behavioural sciences. They discovered that using design methods engaged the Project Stakeholders in the project, as they observed:

> "When you are bringing design methods to non-creatives who have never seen it like this before, it really excites them. It can generate a whole new way of thinking and from that, really exciting and fresh ideas" (Designer 8, 2008: 15).

The value of the Designer as Capability Builder

The designer as capability builder introduces to business the design process and its methods. Some call this Design Thinking (Brown, 2008) which focuses on the process and principles of design; or design attitude (Boland and Collopy, 2004) which is about a different approach to business problems; or design cultures (Michlewski 2006; Julier, 2007) which is perhaps the broadest encapsulation of design recognising its "constructs and themes that emerge at the heart of [the] professional culture" (Michlewski 2006:14). Michlewski further elaborates that design cultures are the deeply entrenched "values, beliefs and behaviours" that shape the way designers work, all of which are brought to business organisations by designers (Michlewski, 2006: 224). Julier maintains that parts of the design culture are already present in non-design professionals and it is engaging with design that activates them:

> "A concept of design culture embraces the networks and interaction that configure production and consumption of the artificial world, both material and immaterial. It lies at the interface between object and individual used, but also extends into more complex systems of exchange. It describes the normative actions, values, resources and languages available to designers, design managers and policy-makers as well as the wider public that engage with design" (Julier, 2007: xii).

New Work was a small-scale project that demonstrates how design could be used to explore and understand business problems and create and test responses to address them. New Work shows how the ingenuity of design, its process, methods and mindset can address micro-business challenges. It would be fascinating to consider how design, in similar use but at bigger scale, might more deeply impact business organisations and their individuals. New Work was a small and local project that explored a new model of small business support, encouraging a group of micro-businesses to help each other reflect on their common issues, collaboratively brainstorm ideas, develop them through visualisation and then prototype and test them in the context of daily business life. The participation of the micro businesses entrepreneurs in the project process allowed them to experience and use design, with some continuing to apply this experience in their own business practice. The designer as capability builder prompts a similarity to be drawn with OD whose practitioners aim to increase organisational and individual effectiveness (Porras and Roberts, 1992: 722). The designer as capability builder is distinct from an OD practitioners in that they bring a different toolkit of methods, processes,

thinking and styles from design, for the participation and learning among individuals and organisations.

Overlaps with other roles in Dott 07

The capability builder role is not the only role demonstrated by designers of New Work. The designers also adopted the role of co-creator and facilitator. In New Work designers were:

- Co-creators[346] – in involving project stakeholders throughout the entire project process. They designed both *with* and *for* project stakeholders;
- Researchers[347] – in an early stage of the project to gather insights from the micro businesses; and
- Facilitators[348] – in bringing together a group of micro-businesses to work together to address their specific business challenges.

The roles of co-creator and facilitator should be of no surprise seeing as many OD practitioners take a facilitative approach involving their clients in the process and seeing them as co-creators (Gallos, 2006: 57). The designer as capability builder in New Work is an early exploration of how practices of design can add value in a micro-business context. Much of the design literature advocates for the role of design in organisational life (Buchanan, 1995) and the New Work project was a demonstration of how design used in this context, can happen in practice.

Conclusion

The field of design has seen designers come a long way from their traditional role of being primarily concerned with the aesthetics and configuration of products and artefacts. Brown reflects on the journey of the discipline in recent years saying:

> "…it's no accident that designers can now be found in the boardrooms of some of the world's most progressive companies" (Brown, 2009: 7).

But the discipline still faces challenges around translating its language in the business context (Boland and Collopy, 2004; Michlewski, 2006; 2008), to shift the traditional pre-conceptions and associations that business has of it (Buchanan in Boland and Collopy, 2004; Brown, 2008) and find an entry point in organisations that permits designers to work at a level of influence to effect the strategic change required across many areas. While the idea of design for business has been recognised for many years, it is sill unclear how designers enter the organisation at a level of influence. Designers have not traditionally entered organisations at levels that broadly influence the organisation, as Lorenz maintains:

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[346] See *Chapter 5: Alzheimer100: The Designer as Co-creator* (p 101)
[347] See *Chapter 6: Design and Sexual Health: The Designer as Researcher* (p 135)
[348] See *Chapter 7: OurNewSchool: The Designer as Facilitator* (p 167)

> "…Design's traditional position within the corporate hierarchy is at a junior function, buried deep under marketing or engineering" (Lorenz, 1994: 74).

In servicing any organisation the challenge of convincing them that an investment in design up-front will see a return on investment (ROI) still poses a challenge. This is mostly because design's impact cannot always be directly linked to the bottom line, nor is it commonly seen as an approach for the development and growth of a business. In New Work, Dott 07 provided seed funding to enable designers to work with micro-businesses in this way, but in the commercial world, design has a long way to go to cement its value to business in this context.

Another challenge includes overcoming the perception of design and designers, whereby their conventional role is to provide design services in the areas of product design, communication design and brand. As Buchanan explains::

> " [The] popular understanding of design [is seen as] a self-expressive artistic activity associated with the appearance of graphic communications, industrial products, interior spaces and buildings" (Buchanan, in Boland and Collopy, 2004: 54).

Michlewski also raises an awareness to the fact that, "various professions will have a different appreciation of the notion of 'design.'" (Michlewski, 2008: 285). For example in the business field, Mintzberg's 'design school' in strategy formulation saw design as counter to how the design discipline sees itself in driving innovation. Mintzberg's 'design school' saw that design as "pre-planned, predetermined mode with no space for emergent ideas" (Michlewski, 2009: 385; also see Liedtka in Hitt et al., 2001). This is despite the fact that Mintzberg (1987b) advocates that strategy formulation use the analogy of "crafting strategy" much like a clay potter crafts a pot at her wheel. The craft analogy has strong ties to design where design has its roots in crafts-based activity[349]. However to understand that designers can contribute in contexts such as organisational development, requires a change in the conventional understanding and perception of design, which may go deeper than initially thought[350]. This was reflected in the New Work project where introducing other professionals to uses of design in business was not always easy. Designers spoke of the different expectations the Project Stakeholders had of design in the project:

> "… sometimes they were thinking, 'great, we've got this design team in and they are going to solve all our issues… [but then they realised] 'hang on a minute, we're going to do it ourselves!'" (Designer 8, 2008: 16).

New Work was a project that involved designers and six micro-businesses working together to explore and demonstrate how design could be used to improve their businesses. The project

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[349] This is discussed further in *Chapter 11: Urban Farming: The Designer as Strategist* (p 277-8)
[350] An extension and in depth discussion of design's association with craft can be found in Benedict Singleton's (2012) thesis, *Chapter 5: Working with Mercury: Towards Post-Service Design Practices*.

demonstrates the designer as capability builder, where designers use design to develop both individual and organisational effectiveness. They engaged Project Stakeholders in a "joint diagnosis" to identify their common challenges and guided them through generating solutions to address them. New Work shows the potential contribution of design in the business and Buchanan neatly captures this idea by saying:

> "The idea of managing an organisation by design thinking is both provocative and puzzling. It is provocative because the popular understanding of design tends to reduce design to a self-expressive artistic activity associated with the appearance of graphic communications, industrial products, interior spaces, and buildings. The prospect of bringing this kind of design into the business of managing organisational life seems at best metaphoric and at worst frivolous. However, the popular understanding of design is not the understanding of design held by many leading designers. They regard design not merely as an artistic activity but as a deeply humanistic and intellectual activity that focuses on the creation of practical, effective products that serve human beings in all aspects of their lives […] Design provides a discipline in finding and solving problems in practical life through the creation of products that have intellectual integrity as well as emotional and aesthetic satisfaction" (Buchanan in Boland and Collopy, 2004: 54).

Chapter 9

Move Me:

The Designer as Social Entrepreneur

Move Me: The Designer as Social Entrepreneur

Case study: Move Me

Rural transport is a complex issue. Rowe outlines several drivers of change that demand innovation in rural transport including:

- Demographic change – Where an ageing population increasingly needs access to transport to access services;
- Declining numbers of young people in rural areas – Where lack of access to transport does little to attract and retain them;
- The growth of car ownership of low income households for mobility despite the financial strain; and
- Climate change – Where new transport service provisions must now meet "new global and social imperatives" (summarised from Rowe in Mahroum et al, 2007: 77-79).

A small village called Scremerston was chosen to be part of the Dott 07 project, Move Me, which explored uses of design for innovation in rural transport. Located in the NE of England Scremerston has "no shop, no community hall… and a lot of families on low incomes" (Project Stakeholder 12, 2008: 7). The closest town, Berwick upon Tweed, is just three miles away but mobility is challenging for the community who find it expensive to get there by taxi, inconvenient with bus schedules and very difficult to walk, as the journey includes a "very exposed and windy hill" (Project Stakeholder 12, 2008: 7).

The Newcastle upon Tyne office of service design company live|work led the project using design to help tackle Scremerston's mobility issues[351]. Move Me aimed to increase the mobility of Scremerston's rural community "without having more cars, buildings and roads" (Designer 9, 2008: 7). Designers recognised early that the problem was "not a lack of transport… but how we open up current transport and give people access to it" (Designer 10, 2008: 9). A central hub for the local community was Scremerston First School who had previously participated in a regional transport project called RAMP[352] (Rural Access and Mobility Project) (Thackara, 2007b: 19). The school would be the main site where the Move Me project would take place.

The project began with desk research and an 'Insights'[353] gathering phase, where designers immersed themselves in the daily life of the local community. In their desk research designers identified an existing online car-pooling service in the area known as liftshare.org. It enabled users to sign up online and input their journey needs. The system would then search and match

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[351] live|work's head office, based in London, led the LowCarbLane project in Dott 07.
[352] RAMP looked at issues in access to healthcare and its findings were incorporated into Move Me (Thackara, 2007: 19)
[353] live|work call the research activities in their design projects 'Insights'. See http://www.livework.co.uk/what-we-do

their needs to local transport. The scheme was "a really smart little system" but in their research the designers discovered that "in practice no one was signing up" (Designer 10, 2008: 17-18). No research had been done as to why this was the case, but the designers hypothesised that "a lot of people just didn't know that it existed" and they also noted that "the geography of Northumberland [is] quite big [and liftshare.org] was not built around a specific event or specific organisation" (Designer 10, 2008: 18) and therefore did not give members a common ground or interest to self-organise.

As well as desk research, the Insights phase used a number of methods from design research, such as: cultural probes; shadowing; surveys; observational research; and interviews, to gain a deeper understanding of mobility issues among the local Scremerston community. A key method used was shadowing. Shadowing is a qualitative research method[354] whereby a researcher follows an individual for a period of time to gain a:

> "Rich, dense and comprehensive data set which gives a detailed, first-hand and multidimensional picture of the role, approach, philosophy and tasks of the person being studied" (McDonald, 2005: 457).

For example designers spent time with a school parent following her on her daily journey that involved walking miles along the highway to see her mother. This allowed designers to understand local mobility experiences because the designers said of their shadowing experience (Figure 9.1): "It was wet and it was cold… And we got splashed with mud. It was horrible" (Designer 10, 2008: 12). Shadowing is an effective method for understanding the context of people's lives and many designers use it to help identify opportunities. In shadowing the Move Me designers also found research subjects to be "more relaxed as you are off with them on a day and they aren't being put on the spot [like in interviews]" (Designer 10, 2008: 12).

Figure 9.1. A photo from live|work's Insights gathering shadowing a school parent.
Image from Dott 07 website

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[354] Shadowing is widely used in the disciplines of management, education, social work, information studies and nursing (McDonald, 2005: 406).

In addition to the Insights work, designers also integrated quantitative research, such as surveys with the school community. At the time of the Move Me project, all UK schools were required to submit a school Travel Plan to the government. The Plans were part of the government's aim to:

> "…bring about a step change in home to school travel patterns to cut congestion and pollution, but also to allow many more pupils to take regular exercise" (DfES, 2003: 1).

A survey was integrated into the cultural probes tool, used by designers to gather information even though cultural probes are usually "designed to provoke inspirational responses […] to stimulate our imagination rather than define a set of problems" (Gaver et al, 1999). In the project, cultural probes were activity packs distributed to the school children to "build a picture of how and why they travelled the way they did" (Thackara, 2007b: 20). The cultural probes included seven short tasks and tools such as a camera to document daily travel experiences to and from school, and interview templates for the students to interview their parents on mobility issues. The packs also contained notebooks and crayons for the students to use and were:

> "… really successful [because] it was a really good way to get the school community involved in the project. We used some interesting things like the cameras for the kids and it was an exciting thing for them to do. It really encouraged them to do it" (Designer 10, 2008: 11).

The school's Head Teacher also found the cultural probes "beneficial for the children" (Project Stakeholder 12, 2008: 12) and gave positive feedback on how it fit with the school curriculum:

> "[The children] actively participated in the research. They were given cameras to take photographs of their journey to the school, they had these wonderful notebooks and packs of crayons and they had to do interviews... it really supported the whole school curriculum because they were looking at transport, they were looking at maps, they were asking parents questions, they were working with people from the world of work. They had to use their imagination to develop ways of solving the problem, so it was fantastic because it gave a real reason for the children to be using these skills. It wasn't a contrived situation. It was real. It was great" (Project Stakeholder 12, 2008: 7-8).

The pack's survey information fed into the project and the school's Travel Plan. It showed that:

- Most pupils get driven to school, this was either because the bus routes don't go past their area or they live too far away;
- 72% of parents believed the school should encourage less use of cars for school journeys;
- 57% of parents never take the children of other families to school; and
- 69% of parents who never take children from other families to school, would consider it. (Thackara, 2007b: 20)

The survey identified current problem areas such as the:

> "… the infrequency of buses, the limited service of the current school bus run, the expense of taxis, unfair fares and confusing public transport timetables" (Thackara, 2007b: 20).

The cultural probe packs helped involve school children and their parents in the research. The school stated that without the probes, they would not have:

> "… been able to engage with the communities as much. So we wouldn't have had a clear picture of what the community's need were. We'd probably look more at the school's needs. It just gave us a much clearer picture because the detail that they went into was more than we could really have managed…. You have to do a lot of research with the travel plan […] Basically the research had been done and the data interpreted, so that was very helpful" (Project Stakeholder 12, 2008: 12).

With the Insights work done, the designers organised a number of workshops to review the situation and co-design solutions with the school community. In one workshop with the school children, designers created 'pros and cons' boards that identified problems and provided the inspiration for imaginative solutions (Figure 9.2).

Figure 9.2. Pros and cons board at a workshop. Image from Dott 07 website

The designers also created tools to enable co-designing, for example they designed cards for the children to explore ideas (Figure 9.3).

Figure 9.3. Visualising ideas and the card templates. Image from Dott 07 website

The designers led the co-design workshops, conscious not to lead and push ideas onto the community. Of this one designer said:

> "You've got to be quite diplomatic and open-minded and not go in with an agenda. Even if you have an idea in the back of your mind, you've got to hold that in reserve if you genuinely want to collaborate with people and help them come up with solutions" (Designer 9, 2008: 11).

The workshops resulted in a number of ideas which were turned into prototypes[355] to test and improve them. Prototypes were given to people in the community to use and provide feedback for improvement and refinement. The designers said prototypes helped move the project forward at a faster pace engaging people in developing the ideas. For example, designers got parents using and providing feedback for the personal timetables. Templates were provided for people to fill in their own times for travel, based on the standard bus timetables. From these prototypes, parents "made suggestions about the use of colour-coding for the different types of buses" (Project Stakeholder 12, 2007: 24). The designers improved the personalised timetables based on this feedback before implementation. From their experience of working with communities, the designers knew about the problems of "consultation fatigue" (Designer 9, 2008: 16) but saw the advantages prototyping which:

> "…makes things look or feel quite real and they can be used immediately. I think once people started to see things happen, they got more engaged… If you can visualise things and make things seem kind of real and possible it just accelerates what probably would have happened, over a much longer period of time " (Designer 10, 2008: 8).

From the Insights research, co-design workshops and prototyping, the designers created the LiftExchange toolkit. The toolkit comprised of different elements, working together to create a

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[355] Prototyping is discussed in *Chapter 8: New Work: The Designer as Capability Builder* (p 198).

mobility service that brought greater access to transport among a community. These elements included:

- 'Get / Give a lift' cards that people fill out based on where they would be going to give a lift, or outlining where they needed to go to get a lift (Figure 9.4);
- Personalised bus timetables;
- Activity templates to promote events and also connect lift sharing (Figure 9.5);
- A notice board or Information Point where lifts and activities are promoted (Figure 9.6);
- A guide to explain how the scheme and toolkit works together. Designers visualised the toolkit to help replicate and scale it across other communities (Figure 9.7).

Figure 9.4. 'Get / Give a lift' cards. Photo from Dott 07 Festival, October 2007

Figure 9.5. A parent using a prototype of the personalised timetable.
Photo from Dott 07 Festival, October 2007

Figure 9.6. The notice board displaying the 'Get / Give a lift' cards, Activity cards, a bus timetable, and other local community news. Photo from Move Me interview
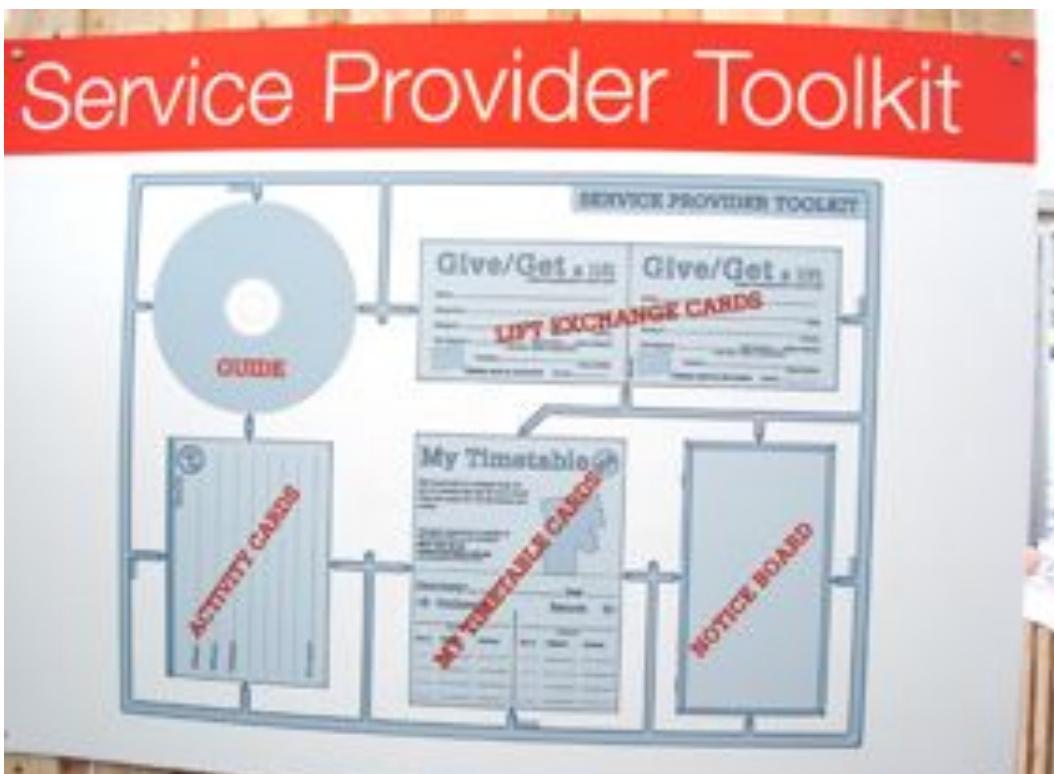
Figure 9.7. LiftExchange toolkit. Photo from Dott 07 Festival, October 2007

LiftExchange was implemented at Scremerston First School and in other locations in the NE region such as at the Berwick Community Centre. While the scheme seemed to be working well at Berwick's Community Centre, nine months after the project Scremerston First School relayed their situation:

> "[The] lift sharing scheme hasn't taken off… there did seem to be, at the consultation stage, a lot of enthusiasm for the idea. I think the reality is when people are faced with making that commitment, they baulk at it [...] Though it may be happening on an ad-hoc basis that we are not aware of" (Project Stakeholder 12, 2008: 13).

Of the LiftExchange implementation, designers spoke of missing a dedicated person to implement, maintain and champion the service. They noted this was not a role for them as the Move Me project finished in 2007:

> "[If you] want to see [LiftExchange] happen with a larger number of schools we'd have to start thinking about some sort of dedicated resource to ensure that information is being both captured and disseminated about this potential new service. So that kind of thing, you would need someone dedicated. That's not really a role for live|work" (Designer 9, 2008: 15).

As the project time frame was limited, the designers had little opportunity to revisit the issues with LiftExchange at Scremerston. Upon reflection, the designers discussed prototyping earlier in the process for more time to improve and implement ideas. They saw this as a possible approach as liftshare.org was already in existence as a platform that had a lot of potential. The Move Me project identified that all liftshare.org needed was a different communication tool. However, at the time of the project, the designers felt that they wanted to, "spend time on Insights so you know you are going with the right issue" but then reflected "sometimes you can go with your gut instinct and just give it a shot" (Designer 10, 2008: 23).

While LiftExchange might not have "taken off" at Scremerston, outcomes of the project have been a lot more positive in terms of their impact on the local community, local authorities and UK government. Within the local community, the school reflect:

> "The outcomes have been very positive in quite a lot of areas. In terms of the local community, the notice board, the opportunity for the community to discuss concerns about transport and the opportunity to engage with the transport providers and express the needs. Some of these needs were addressed by timetables that are easier to understand" (Project Stakeholder 12, 2008: 7).

The local authorities, such as Newcastle City Council, expressed a keen interest in Move Me, discussing the possibility of replicating it in more urban settings (Designer 9, 2008: 6). The designers saw that this may work better because "in urban areas, you do have… small communities of interest connected to transport" (Designer 9, 2008: 6).

In 2008, live|work entered the Move Me project into NESTA's (National Endowment for the Sciences, Technology and the Arts) Big Green Challenge. The Challenge looked to identify and fund ideas in local communities that reduced CO_2 emissions. The top 10 ideas would share in a pool of funding to turn ideas into "viable solutions that will improve all of our lives" (NESTA, 2008). Move Me was one of the 100 ideas shortlisted from an initial 355, but was not successful in attaining further funding. Also in 2008, live|work were invited by the UK government's Department of Transport to present the Move Me as case study that showcased a "approach to innovation in the public sector" (Designer 9, 2008: 14). No further outcomes of Move Me are known to date.

Discussion: The Designer as Social Entrepreneur

Move Me was a project that aimed to bring greater mobility to a rural community. Designers from live|work led a process that began by gathering insights using design to understand daily life in Scremerston and the mobility challenges people faced. Designers also gathered quantitative research, contributing vital information for the school's Travel Plan. Using all this research live|work developed a number of workshops to engage the community in co-designing ideas for better mobility and access to transport in Scremerston. These ideas were prototyped, improved and implemented. While LiftExchange seemed to have a positive response in the prototyping stages and worked in implementation in other communities, Scremerston has seen a limited take up. While the designers didn't see their role in maintaining the service throughout implementation, they did continue to explore different avenues to scale LiftExchange in others localities of the UK, by using Move Me as case study to demonstrate public sector innovation and seeking funding to scale and develop the service via NESTA's Big Green Challenge programme. The designers' ambition to create, implement and scale an idea with social aims recognises the designer's dominant role in Move Me as social entrepreneur.

A review of relevant literature for the Designer as Social Entrepreneur
What is a Social Entrepreneur

Interest in social entrepreneurship has been a driving force in the field of design where designers have been using design for social good[356]. David Bornstein, a writer in social entrepreneurship, observed this interest himself when he received an invitation to Parsons School of Design in New York and saw that students were not designing coffee makers and tables but:

> "…lightweight and attractive walkers for older people; stylised wheelchairs with racing stripes; a self-starter kit to teach Ugandan youths woodworking skills; portable therapeutic play aids to assist children affected by disasters; video games

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[356] See my conference paper 'Perspectives on the changing role of the designer: Now and to the future.' (Tan, 2009).

that teach about environmental destruction and protection; 'Life Review Therapy',
a game to provide memory assistance to people with Alzheimers" (Bornstein,
2007: xv).

In *Chapter 1: Introduction* (p 1) design for social good is profiled identifying that designing for social good reflects a designer's aspiration to use design for social causes, and it can be done by any designer who designs toward a social aim. This is distinct from the role of the designer as social entrepreneur, who brings an additional activity into play, turning their solutions into sustainable enterprise models. The following discussion explores literature in the field of social entrepreneurship to identify practices that constitute a social entrepreneur. It then uses Move Me as a case study to demonstrate this role of the designer.

Over the last two decades the field of social entrepreneurship expanded rapidly (Bornstein, 2007; Martin and Osberg, 2007; Phills, Deiglmeier and Miller, 2008). Bornstein (2007: ix-xiii) observed this increasing interest among university business schools (e.g. Said Business School, Oxford University), publications[357] (e.g. Stanford Social Innovation Review), the increase of corporate organisations involved in philanthropy (e.g. Google) and many foundations set up to pursue work in this area (e.g. The Bill and Melinda Gates Foundation). Bornstein who has been writing about social entrepreneurship for over a decade[358], identifies that interest in this area is due to a reduction of barriers in undertaking social entrepreneurial activity. He says:

"… people today have the freedom, time, wealth, health, exposure, social mobility,
and confidence to address social problems in bold new ways" (Bornstein, 2007: 7).

Simply put, social entrepreneurship is commonly described as "entrepreneurial activity with an embedded social purpose" (Austin et al, 2006 in Santos, 2009: 2). The concept of an entrepreneur has existed since the 1800s when Jean-Baptiste Say, a French economist, coined the word describing an entrepreneur as someone who creates value by:

"…shift[ing] economic resources out of an area of lower and into an area of higher
productive and greater yield" (Say in Dees, 1998: 2. Also see Martin and Osberg,
2009: 31; The Economist, 2009).

Since then many others have developed the understanding of what it is to be an entrepreneur. Joseph Schumpeter and Peter Drucker, two writers in business and management, emphasised that entrepreneurs create change through the exploitation of resources[359] (Dees, 1998: 2. Also see Martin and Osberg, 2007). Stevenson further notes that entrepreneurs contend with limited resources, but do not let such limitations inhibit their vision, with Browning adding that

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[357] For an extensive list of papers, publications, organisations and resources related to social entrepreneurship see *The Center for Advancement of Social Entrepreneurship* 'Resources' list http://www.caseatduke.org/leaders/resources.htm
[358] Bornstein (1996) wrote, *The price of a dream: The story of the Grameen Bank*, a book about the first microcredit bank that serviced the developing world. The bank was founded by Mohammad Yunus who was awarded a Nobel Peace Prize in 2006.
[359] Schumpeter writes that entrepreneurs change patterns of production "by exploiting an invention or, more generally, an untried technological possibility for producing a new commodity or producing an old one in a new way" (in Dees, 1998: 2). Drucker wrote "the entrepreneur always searched for change, responds to it, and exploits it as an opportunity" (in Dees, 1998: 2).

entrepreneurs "mobilise the resources of others to achieve their entrepreneurial objectives" (both in Dees, 1998: 3). Say, Schumpeter, Drucker, Stevenson and Browning (in Dees, 1998) discuss general entrepreneurship but Dees maintains that their discussions "can easily be applied in the social sector" (Dees, 1998: 3).

Dees outlines that the main difference between business and social entrepreneurs mostly lies in the type of value each creates. Business entrepreneurs see value as wealth creation while social entrepreneurs see "wealth [as] a means to an end" (Dees, 1998: 4) where they strive to create social value, that is; to improve social situations that have a "lasing, transformational benefit to society" (Martin and Osberg, 2007: 30). In the market economy that dominates the developed world, social value as an end goal is challenging because it is difficult to measure, and thus difficult to "justify the resources used in creating that value" (Dees, 1998: 4). When one considers that most social entrepreneurial activity is directed toward people who cannot afford to pay in exchange for goods and services, then the economic sustainability of social entrepreneurial activity becomes a key challenge.

There are many different definitions of a social entrepreneur (Martin and Osberg, 2007: 30). The concept is often described as "an immense tent into which all manner of socially beneficial activities fit" (Martin and Osberg, 2007: 30. Also in Santos, 2009: 3) and this has resulted in social entrepreneurship being poorly defined with "fuzzy" boundaries (Santos, 2009: 3). In this review of literature on social entrepreneurship, its most common definitions speak of social entrepreneurs as having a vision or mission to improve society, having ideas and solutions to address them, and maintaining a steadfast focus on spreading these solutions society-wide.

Dees writes that "social entrepreneurs play the role of change agents in the social sector" (Dees, 1998: 4). He expands on how they do this by saying that social entrepreneurs engage in:

- Adopting a mission to create and sustain social value (not just private value);
- Recognising and relentlessly pursuing new opportunities to serve that mission;
- Engaging in a process of continuous innovation, adaptation and learning;
- Acting boldly without being limited by resources currently at hand; and
- Exhibiting a heightened sense of accountability to the constituencies serviced and for the outcomes created (Dees, 1998: 4).

Martin and Osberg characterise social entrepreneurs as "extraordinary people [who] come up with brilliant ideas and against all odds succeed at creating new products and services that dramatically improve people's lives" (Martin and Osberg, 2007: 30). In more recent literature Light states that social entrepreneurs are not like other high achievers as they are "driven by persistent, almost unmistakable optimism… they truly believe that they will succeed in spite of messages to the contrary" (Light, 2009: 21-22). Further adding that their ideas start small but

will have an "ultimate impact [that] requires scaling up, diffusion, sustained pressure, and navigation" (Light, 2009: 22). Light also points out the common weaknesses of social entrepreneurs saying that they are "often inexperienced in the administrative procedures needed for transparency and tight governance" and they can often display attributes where they "reject the possibility that they could be wrong" (Light, 2009: 21-22).

Organisations that support and celebrate social entrepreneurs, such as Ashoka and the Skoll Foundation have their own definitions of a social entrepreneur. Ashoka (2009) outlines a social entrepreneur as someone who:

- Has innovative solutions to society's most pressing social problems – is ambitious, persistent and offers new ideas for wide-scale change;
- Works on change themselves rather than leaving change to governments or businesses;
- Are visionaries and realists; and
- Has ideas and solutions that are user-friendly, understandable, ethical, and engaging to maximise the number of people to seize their idea and implement it (summarised from Ashoka, 2009).

The Skoll Foundation (2009) maintains that social entrepreneurs aim for transformational change that benefits disadvantaged communities and introduces solutions to intractable social problems (Skoll Foundation, 2009).

The literature review shows there is an "immense tent" (Martin and Osberg, 2007: 30) which a social entrepreneur can be understood. It is one of the few fields, explored in this research investigation, that provides a lot of discussion on the "personal qualities of people" (Phills, Deiglmeier and Miller, 2008: 36) making social entrepreneurship distinctive compared to other fields that tend to emphasise more theory, processes or outcomes. But while social entrepreneurship literature emphasises the person, its "actual definition of what social entrepreneurs do to produce this order of magnitude return is less clear" (Martin and Osberg, 2007: 30). There are a number of different definitions of social entrepreneurs in the literature but David Bornstein provides one of the most concise, writing that a social entrepreneur is someone who has:

> "Powerful ideas to improve peoples lives and they have implemented them across cities, countries, and in some cases, the world [...] social entrepreneurs advance systemic change: how they shift behaviours and patterns.... They are unwilling, or unable, to rest until they have spread their ideas society-wide" (Bornstein, 2007:1-2).

Key practices of the Designer as Social Entrepreneur in Move Me

In conjunction with the literature reviewed, a social entrepreneur's key practices include:

- Having a vision and mission to improve social conditions[360];
- Being able to spot and seize opportunities and ideas, to create solutions that improve a social situation[361], in particular for populations who lack financial and/or political resource to achieve change on their own[362];
- Using and mobilising limited resources[363];
- Spreading solutions society-wide[364].

In the Move Me project, the dominant role of the designer as social entrepreneur can be seen through their demonstration of the above key practices which are elaborated below.

A vision for improving social conditions

One of the most widely cited practices of a social entrepreneur is their unwavering vision to improve long-term social conditions, especially for underserved communities (Dees, 1998; Leadbeater, 1997; Martin and Osberg, 2007; Light, 2009). Social entrepreneurs improve conditions by balancing their vision to stay grounded in the details of reality (Ashoka, 2009) and starting small and allowing ideas to grow (Santos, 2009: 2; Yunus, 2009: 10).

The vision of the Move Me designers was broad "to do something about what were quite large issues" (Designer 10, 2008: 8) to do with environmental sustainability and mobility, but also focused where it aimed to "just giv[e] the people more opportunity to access the existing transport" (Designer 10, 2008: 9). The designers sought to address not just local needs but also improve mobility and sustainability in the region saying that Move Me was to:

> "… look at how we could improve mobility and access without having more cars and building more roads…So how can we improve the situation, in a given context for a community without giving them more stuff" (Designer 9, 2008: 7).

In Move Me designers framed the project aims in a broad and visionary way. They spoke about improving social conditions as well as environmental sustainability, and to do this by starting small to address specific challenges of a small community, creating ideas that would create a positive impact locally, but also be regionally and nationally relevant. Designers discussed their aspirations to scale LiftExchange to other communities, to extend the social value beyond Scremerston. Designers took the project as a case study to national government, sought

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[360] Such as in Dees, 1998; Bornstein, 2007; Dees in Martin and Osberg, 2007; Ashoka, 2009; Light, 2009; Skoll Foundation, 2009.
[361] Such as in Dees, 1998: Martin and Osberg, 2007: 31; Ashoka, 2009.
[362] Such as in Bornstein, 2007; Martin and Osberg, 2007: 35; Ashoka, 2009; Skoll Foundation, 2009.
[363] Such as in Dees, 1998: 5; Martin and Osberg, 2007: 31.
[364] Such as in Bornstein, 2007; Light, 2009; Ashoka, 2009; Skoll, 2009.

additional funding streams post-project and expressed their interest in creating a social enterprise (Designer 9, 2008). The role of the designer as social entrepreneur shares with social entrepreneurship the aim to "create systemic change and sustainable improvements" (Dees, 1998: 4) often starting small (Light, 2009: 22) but with an aim for wide-scale impact (Ashoka, 2009).

Spots and seizes opportunities and ideas

Dees writes that social entrepreneurs have the ability to recognise new opportunities that create social value and "attack the underlying causes of problems rather than simply treating symptoms" (Dees, 1998: 4). Social entrepreneurs then "connect with the unmet needs of a group of users" (Leadbeater, 1997: 54) to create and deliver solutions.

In Move Me, designers used design research to identify the challenges of the local community and inspire new ideas. Designers employed methods from the fields of ethnography such as shadowing, design such as cultural probes and general research methods such as desk research. Each method brought insight and information to help designers understand the community, their needs and what opportunities could address these needs.

Shadowing was used to understand how people travelled but also identified a number of opportunities. For example during the shadowing, designers began observing from the side of the road, people in cars travelling with empty seats. This observation inspired ideas for Move Me, as the designers relay:

> "It really brought home the fact that we've got all this traffic rushing by us [and there] is that woman there [in the car] making that journey quite a lot and is there a possibility to just join her up [to other people who want to go in the same direction]?" (Designer 10, 2008: 12-13).

This observation led to the idea of getting and giving lifts to fill the empty car seats and increase the mobility of people. Dees (1998: 2) describes social entrepreneurs as those who see opportunities where others see problems, and designers in Move Me saw the empty car seats, not as a problem, but as an opportunity.

Desk research was another method that led designers to identify opportunities and ideas. Designers discovered a lift sharing service already in existence and while the website was a good idea, in practice wasn't largely adopted[365]. Designers hypothesised that the online technology didn't quite "suit the needs of the community… and it felt like it would be such a mistake to drop that technology on them if the principle of it wasn't up and running" (Designer 10, 2008: 19). The designers sought to build on existing ideas saying that:

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[365] Though today liftshare.com runs 1218 car schemes and has 323 092 members (liftshare.com, 2012)

"… all the way through we've always been keen to work with existing infrastructure, we absolutely don't want to reinvent the wheel if there is something that is there and available to use" (Designer 10, 2008: 19).

To help make the liftshare.org service idea accessible, designers took the service offline and developed a paper-based version of it, which would also "point people towards the site, because an outcome of the project would be to have more people using that resource" (Designer 10, 2008: 19). Beginning with paper-based tools would help familiarise the community with the service, before adding the technology. In the social entrepreneurship literature Dees states that social entrepreneurs need not invent "something wholly new; [they] can simply apply an existing idea in a new way or to a new situation" (Dees, 1998: 5).

The designer as social entrepreneur uses different research methods to identify opportunities to improve social situations. In the project, designers used research to understand that mobility issues had to do with access to transport, rather than a lack of available transport. Bringing greater access to transport didn't necessarily require adding more cars or infrastructure, rather it led the designers to look at a service that could leverage links between existing transport users among the community. Designers used these insights to develop opportunities to bring greater mobility to Scremerston. Designers created a paper-based liftshare.org, which would connect people to existing transportation in ways that were accessible and appropriate to them.

Using and mobilising available resources

The literature recognises that social entrepreneurs do not see resource limitations as a factor inhibiting the process to achieve their objectives (Dees, 1998: 2; Martin and Osberg, 2007: 31; The Economist, 2009: 2). In fact social entrepreneurs are known to use and mobilise these limited resources firstly by "attracting resources from others" and then by involving these people as partners and collaborators (Dees, 1998: 5). The emphasis on people as a resource is pointed out by Leadbeater who states that social entrepreneurs; "recognise that the knowledge and ideas of their staff, helpers and users are their most important resources" (Leadbeater, 1997: 55).

In Move Me, designers involved various stakeholders of the Scremerston community. They brought together the school[366], an organisation called Sure Start[367], transport users and the bus service provider, Arriva. Each stakeholder had a role in the project. For example, the school was the focal point of the community as it had strong links and relationships with families in Scremerston. In Scremerston "there [are] no actual community facilities in the village… everything tends to happen at the school" (Project Stakeholder 12, 2008: 6). The school community, who used different means of mobility; provided knowledge and insight into the

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[366] This included 42 pupils from 34 families and 11 employees of the school (Design Council, 2009f).
[367] Sure Start is a public sector organisation that focuses on the development of young children and parents.

experience of accessing transport in Scremerston. Arriva were representative of the local, private bus services and Sure Start would help connect the project with other local communities in the region by "offering access to their network" (Designer 10, 2008: 15). By bringing together different stakeholders, the project could gain a holistic view of the situation and provide a platform for exchanging experiences and knowledge to help inspire solutions. It would also develop a sense of ownership, and early buy-in for the project and its ideas, with the stakeholder involvement, increasing the chances of successful implementation and scale.

Part of the designer's role as social entrepreneur is to facilitate collaborations among the stakeholders and co-design new solutions to mobilise the existing resources. In the collaboration, designers developed a number of workshops to establish a platform to give a voice to users of the bus service (Wood Holmes Group, 2007: 9). They also organised co-design workshops to co-create responses to mobility challenges. Their efforts to "draw in partners and collaborators" meant the designers worked toward creating "systemic changes and sustainable improvements" (Dees, 1998: 5). Designers sought to:

> "… connect with as many parts of the system [to] influence bits of it on the understanding that other things will happen as a result, like ripples in a pond" (Designer 9, 2008: 11).

In fact the designers say this was their key role, further explaining;

> "We tend to be the lynch pin inside what are quite complicated projects…. one of the things that we do quite well is to map stakeholders, showing how people actually relate to each other" (Designer 10, 2008: 7-8)

The role of the designer as social entrepreneur thus mobilises and utilises local resources for collaboration. The designers in Move Me believed that anyone could be involved in the project saying:

> "To be involved in that process you don't have to be a designer, you have to be an open-minded individual to share thinking and ideas and designers help shape your thinking, you know, facilitate your thinking as you go through the process" (Designer 9, 2008: 4).

The designer as social entrepreneur brings together a number of different stakeholders to gain a holistic view of the situation and to co-design solutions. This collaboration mobilises people for change and uses existing knowledge and resources available among the community.

A result is the design of solutions that create an "entire ecosystem" that is "entire new ways of doing" things (Martin and Osberg, 2007: 34. Also, Bloom and Dees, 2008) that improve social situations. These ecosystem solutions are characterised as:

"… user-friendly, understandable, ethical, and engage widespread support in order to maximise the number of local people that will stand up and seize their idea, and implement it" (Ashoka, 2009).

Designers in Move Me built on existing service liftshare.org by developing paper-based tools to replace online ones. They observed how an online service "didn't quite suit the community" (Designer 10, 2008: 19). The LiftExchange cards therefore became a paper-based system of lifeshare.org. It included tangible touch-points such as a notice board, lift exchange cards and activity templates. To make the LiftExchange idea understandable, the designers visualised a toolkit to show how different elements of the service were needed to work together as an ecosystem. Of this Leadbeater writes that social entrepreneurs are good at storytelling to; "communicate the mission" (Leadbeater, 1997: 54). He says that social entrepreneurs communicate through stories and parables (Leadbeater, 1997: 55), but designers in Move Me show visualisation as an alternative form of communication to convey the LiftExchange narrative. LiftExchange illustrates how the designer as social entrepreneur creates and communicate an ecosystem for positive social change.

Spreading solutions society-wide

The designers discussed at length the scaling the LiftExchange, which the social entrepreneurship literature cites as crucial to social entrepreneurial activity (Bornstein, 2007; Ashoka, 2009; Light, 2009; Skoll Foundation, 2009). Designers understood scaling would involve the adoption of LiftExchange among many small communities and "ultimately if you can do lots of small communities you can have an impact with a larger number of people" (Designer 10, 2008: 6).

The Move Me project saw the implementation of the entire LiftExchange toolkit at Scremerston. This included installing a notice board on the school grounds, the distribution of activity cards, lift exchange cards and personalised timetables. After Dott 07 the Move Me design team pushed the project forward in a number of different ways. Designers had visualised LiftExchange as a toolkit making it a clear and understandable guide for replication in other localities. Designers also intended to establish a social enterprise, supported by live|work, to scale the idea[368]. They applied for funding such as in NESTA's Big Green Challenge and explored the interest from Newcastle City Council to apply LiftExchange in selected urban contexts (Designer 9, 2008: 5- 6).

But despite the involvement of the stakeholders, the prototyping and refinements, the implementation side of LiftExchange did not overcome some of the behavioural barriers of car sharing. At the time of data collection for this research investigation, the LiftExchange idea in

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[368] The project has, "been a catalyst for live|work to start thinking about setting up a social enterprise for projects where, we work with someone like [the project stakeholder], and we want to keep on working with them and apply funding to do so" (Designer 9, 2008: 6).

Scremerston was only slowly being adopted by the community. One of the Project Stakeholders reported that this was "disappointing" as there had been "a lot of enthusiasm for that idea" during the project (Project Stakeholder 12, 2008: 13). While LiftExchange was not widely adopted in Scremerston, the service seemed to be taken up in other localities such as Berwick.

Further research[369] on LiftExchange with stakeholders of the project would be needed to identify reasons why LiftExchange was not widely adopted by the Scremerston community, and if this is different in other communities. The social entrepreneurship literature emphasises the advantage of a community champion (Mulgan and Albury, 2003: 17). This could have been a contributing factor to the little participation in LiftExchange at Scremerston. One of the designers discussed this saying that at the completion of the project they would have liked to have seen "someone dedicated [to the service]" explaining that it was "not really a role for live|work" (Designer 9, 2008: 15). The designers explain the pros and cons of "multi-stakeholder type projects [which] are terrific" to engage and excite communities of interest, and connect them to authorities and policy "but they often end up not having a direct client. You don't have a person who owns the service provision responsibility" (Designer 9, 2008: 15)[370] minimising the chances of successful implementation. In the social entrepreneurship field, Bornstein admits that, "relatively few social entrepreneurs have achieved the levels of scale needed to excite state and national-level policy makers" (Bornstein, 2007: xii). However at a policy level designers did present Move Me as a case study of public sector innovation to the Department of Transport (Designer 9, 2008: 14) demonstrating its successes as a project and the intentions of the designers to spread their ideas society-wide.

Value of the Designer as Social Entrepreneur

The value of the designer as social entrepreneur is where designers help catalyse a process of social entrepreneurship using various design methodologies. Manzini speaks of this contribution in various writings stating that designers are:

> "… process facilitator who acts with *design tools* i.e. by generating ideas on possible solutions, visualising them, arguing them through, placing them in wide, many faceted scenarios presented in concise, visual and potentially participatory forms" (Manzini, 2005: 8)

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[369] Further areas of research are suggested in identifying the limited take up of LiftExchange. Considerations to local context may have an impact of the success of social solution and two pieces of research that could help this challenge in design projects are; Jegou et al's (2008) Enabling Cards and PhD researcher Katie Hill's forthcoming (2012) doctoral research. Jegou et al's (2008) Enabling Cards help replicate sustainable solutions in different contexts by firstly making the solutions visible, and secondly facilitating conversation for solution customisation in a new context. Hill's PhD investigates the contextual constraints in design projects, which are valuable reflections in helping designers address the constraints and challenges that surround particular social issues and the success of their ideas.
[370] The Dott Cornwall projects also identified that without a project champion, that is someone from the local community, a new service is very difficult to sustain (Ward, 2010; Dott Cornwall, 2011).

This, says Manzini, results in:

"… their ability to present to their possible users some alternatives that they can recognise as *better solutions* (to their need and desires) and that, at the same time, may be considered as *more sustainable solutions* (from a social and environmental point of view). [This enables a] to shift from an un-sustainable system and un-sustainable behaviours, to more sustainable ones" (Manzini, 2006b)

Designers in Move Me characterise Manzini's (2005; 2006b) descriptions by demonstrating the use of design in the key practices of their roles as social entrepreneurs. These include:

- Using *design research* to spot and seize opportunities;
- Mobilising limited resources using *co-design* for participation and collaboration; and
- Using *visualisation* to *prototype*, improve, communicate, replicate and scale solutions.

The designers show how design offers ways to inspire ideas, engage project stakeholders and communicate solutions to improve social challenges.

Together these demonstrate how designers use design in social entrepreneurial activity. They also define how "the designer has the ability to see a project through from beginning to end" (Benson, 2011). The practices of the designer as social entrepreneur, sees designers catalyse a process that seeks to achieve social aims[371]. As a designer in Move Me reflects:

"One of the things that we bring to this is that we don't just think about the issues and write a report and leave it at that, but actually to do something about it. And that's where I think design has the ability to make things look or feel quite real and just can be used and work immediately" (Designer 10, 2008: 23).

In Move Me the designer as social entrepreneur is well demonstrated and gives insight into the practices of designers but also of social entrepreneurs. Where "what social entrepreneurs do to produce this order of magnitude return is less clear" (Martin and Osberg, 2007: 30. Also see The Economist, 2009) investigating the role of the designer as social entrepreneur highlights a selection of methods, approaches and materials used for improving social situations. A lot of social entrepreneur literature defines who or what a social entrepreneur is or should be. While this is helpful in understanding social entrepreneurs and their barriers to achieving their social objectives, how entrepreneurial activity is carried out is largely absent. Investigating the designer as a social entrepreneur provides insight into not just the practices of designers when they assume this role, but can also contribute to an understanding of social entrepreneurs and their practices more generally.

The value of the designer as social entrepreneur is where designers help catalyse the process of social entrepreneurial activity (Manzini, 2005; 2006b; 2009). Using design methodology for

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[371] Manzini (2009) presented the role of the designer in catalysing social innovation in his lecture, 'Design for social innovation and sustainability.' http://www.themonthly.com.au/design-social-innovation-and-sustainability-ezio-manzini-2103

research, co-design, prototyping and communication, designers use their "skills and practices that are unique… to find the next social and sustainable innovation, and to amplify its adoption" (van der Meer, 2009).

Overlaps with other roles in Dott 07

The designer as social entrepreneur role overlaps with many other roles identified in Dott 07. Designers in Move Me also adopted the roles of:

- Co-Creator[372] – Co-designing solutions with a wide range of stakeholders that improve social situations.
- Researcher[373] – Who uses design research to discover information and inspiration to create innovative opportunities; and
- Facilitator[374] – Who brings together stakeholders of an issue mobilising them for change and creating the conditions for collaboration and co-creation to happen.

Designers demonstrate that many practices of design can address social challenges and create innovative responses to them.

Conclusion

The designer as social entrepreneur develops "powerful ideas to improve peoples lives and are unwilling, or unable, to rest until they spread their ideas society-wide" (Bornstein, 2007:1-2). In Move Me, designers looked to bring greater access to a rural community, without introducing more infrastructure for transport. They proposed LiftExchange, a service that facilitates better access to transport by getting or giving car lifts. Designers used design research to create a service that was fit for purpose and suited the context of people's lives. To scale and spread the idea, designers developed a LiftExchange toolkit that visualised the different elements needed to implement the service in other communities. Dott 07 finished shortly after LiftExchange was implemented at Scremerston and designers continued to seek additional funding and support to continue the project, demonstrating the practice of a social entrepreneur in their persistence to "spread their ideas society-wide" (Bornstein, 2007: 2). The value of the designer as social entrepreneur can be found in the use of design for research, co-designing solutions, prototyping and visualising to scale and spread ideas. Benson writes about the emerging importance of social entrepreneurship in design education:

> "[Social entrepreneurship] must be discussed in the design curriculum. It provides not only practical business skills for the student, but also philosophical and conceptual learning opportunities vital to the growth of themselves as citizens and

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[372] See *Chapter 5: Alzheimer100: The Designer as Co-creator* (p 101)
[373] See *Chapter 6: Design and Sexual Health (DaSH): The Designer as Researcher* (p 135)
[374] See *Chapter 7: OurNewSchool: The Designer as Facilitator* (p 167)

human beings. As the world continually faces huge systemic issues (climate change, poverty, war, racism, etc.), designers like doctors, lawyers, and engineers will all need to play a vital role in solving our wicked problems to create a sustainable future" (Benson, 2011).

Designers show that their practices can help catalyse social entrepreneurial activity by using design to understand complex social challenges then create, develop, iterate and implement ideas that address them. While designers in Move Me did not reach the "ultimate impact" of a social entrepreneur which Light describes as "scaling up, diffusion, sustained pressure, and navigation of... 'ecosystems' of change" (Light, 2009: 22) the designer as social entrepreneur in Move Me is well demonstrated through their resonance with what is described in the literature as the "special sets of attitudes, skills, and practices that make social entrepreneurs and their work distinctive" (Light, 2009: 21). Social entrepreneurship is a relatively new concept and understanding social entrepreneurs is still emergent. While definitions and descriptions of social entrepreneurs may be the focus for authors and academics, the importance of the social entrepreneur, and thus the designer as social entrepreneur, must not be forgotten as continuing in practice where societies will increasingly need social entrepreneurs for their vision, passion and action to help "find new avenues toward social improvement as we enter the next century" (Dees, 1998: 6).

Chapter 10

LowCarbLane:

The Designer as Provocateur

LowCarbLane: The Designer as Provocateur

Case study: LowCarbLane

In 2003 the UK government announced a 2050 target to reach a 60% reduction in the country's carbon footprint (DTI, 2003). UK households account for one-third of the country's carbon emissions and for the government targets to be met, household energy consumption needs to change drastically.

The LowCarbLane project in Dott 07 explored how design could help low-income households in the NE of England reduce their individual carbon footprint. A community in the NE town of Ashington was chosen as the site for the project. On a street called Castle Terrace, a demonstration house was proposed to show how investing in energy saving measures[375] could minimise a household's energy spend and reduce a its carbon footprint by 60%. However, in the research stages of the project, service design company live|work discovered many barriers to change in the community, one being fuel poverty, which is defined as:

> "… the need to spend over 10% of household income on fuel costs to maintain adequate warmth for health and comfort" (NEA[376], 2008. Also see Boardman, 1991).

Approximately 19.4% of people, or one in five households in the NE are fuel poor (Project Stakeholder 13, 2007). Fuel poverty is a complex issue that mainly describes the lack of affordability of households to sufficiently heat the home. It also recognises the related health issues that can result from fuel poverty including respiratory illnesses and diseases caused by cold and damp homes. In more severe cases this can lead to fatality, especially in infants and elderly people.

The LowCarbLane project thus not only dealt with environmental issues, but financial and social ones too. live|work's London office led LowCarbLane, bringing prior experience of using design to address energy issues from a project in Europe with energy company, the EDF Group[377]. EDF commissioned a project where designers explored smart metering technology and new models of energy companies[378]. A key learning from the project was the need to "encourage energy efficiency by rewarding efficient use" (Designer 12, 2008: 17) rather than punish changes in energy behaviour[379]. This project and its learning outcomes influenced a number of ideas in LowCarbLane.

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[375] For example solar panels.
[376] The National Energy Action (NEA) a charity that campaigns for "affordable warmth in the homes of vulnerable people" (NEA, 2008).
[377] The EDF Group are one of Europe's largest energy companies (EDF Energy, 2010).
[378] EDF worked with designers on "the potential for smart metering technology to provide clear real-time energy consumption information" (Design Council, 2009b).
[379] For example an energy company might charge a premium for households to use cleaner energy.

In LowCarbLane, designers worked closely with the charity National Energy Action (NEA) and its subsidiary, Warm Zones, an organisation providing energy advice to low-income households[380].

At live|work, projects are usually undertaken using a very broad four phase design process. These four phases include: Insights; Ideas; Prototyping; and Delivery (Designer 11, 2008: 15; live|work, 2009)[381]. In Insights, designers spent three days using the ethnographic method of shadowing[382] to shadow Warm Zone advisors and Council workers on the job. In shadowing the designers weren't observing the advisors or workers, rather they were used as a conduit to access residents of Castle Terrace who were challenging to engage. One designer described accessing residents as "very difficult… because [the locals were] suspicious" of people who came to their door and the residents were also "tougher people" to speak to, shaped by their socio-economic predicament (Designer 11, 2008: 19). Despite Warm Zones offering free-of-charge cost-saving advice, and the Council offering to listen to issues in order to make improvements to the area, the door-knocking approach was largely unpopular with residents. Responses such as shutting door, or not answering even though they were home were common (Designer 12, 2008: 7). Residents were highly suspicious and this was a barrier to them signing up for energy saving measures suggested by Warm Zones (Project Stakeholder 13, 2008: 9; Designer 12, 2008: 15). While the shadowing presented many challenges, designers described it as "invaluable" (Designer 12, 2008: 38) as they were able to draw insight into the complexity of Ashington's issues shaping their:

> "… understanding of the people on that street and their attitudes to energy, or attitude to basically anyone coming to their door and basically offering them something beneficial, irrespective of what it was" (Designer 12, 2008: 7).

The residents expressed a multitude of concerns such as gangs, graffiti and arsonists, as one resident commented: "People around here aren't so bothered by carbon emissions. It's the local arsonist they're worried about" (in Design Council, 2009b). Other concerns included the antagonistic relationship between tenants and landlords. This was fuelled by a lack of investment by landlords to improve rental properties and the lack of care given to the property by the tenants, with neither party willing to break the vicious cycle first. Designers relay how the shadowing changed their view of the project:

> "[It] was just a major eye-opener really because the whole thing about sustainability, and being green and being organic is a kind of middle-class issue. The middle-class have seemed to take it up because they can afford it, and it was

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[380] Such as grant assistance and support for installing energy saving measures.
[381] The designers recognised that other design companies use similar phases only named differently (Designer 11, 2008: 15) such as in the Design Council's Double Diamond and the Design Innovation Education Centre (DIEC) Marketing-Design Fusion Model. The designers note that when it comes to the design process: "It's very broad, and it's about what goes into them. So one company would do a different kind of 'Discovery', 'Insights', 'Understanding' than another. They might do more market research and less ethnography" (Designer 11, 2008: 15).
[382] See *Chapter 9: Move Me The Designer as Social Entrepreneur* (p 217) for descriptions on the shadowing research method.

clear to me that this was a completely different kettle of fish, this project.[…] I felt really embarrassed to be asking them about something as futile as energy. Which in the greater scheme of things is not futile at all… but in the context of that person, in that house, in that street, it is a million miles away from their consciousness and what affects them" (Designer 12, 2008: 9)." (Designer 12, 2008: 8-9).

The designers also spoke of how it shaped their early thinking in the project:

> "[It] just really kind of grounds you and makes you step back and go, you know, right what are we trying to do here? And that's why the outcome of the LowCarbLane project was about access to energy efficiency and not new technologies, or nothing kind of eco and woolly…. we need to create something which is attractive to anybody of any economic status" (Designer 12, 2008: 9).

The project's initial brief was to focus on environmental issues, but following the Insights phase this was expanded to address the linked social and financial issues too. This insight was key to the LowCarbLane project, as this led the designers to see that tackling energy issues alone was not enough.

The designers presented their research[383] to the Project Stakeholders to help validate their understanding of the issue, create a common basis[384] for which the Project Stakeholders could view the project and show that they weren't "shying away from the real issues at hand" (Designer 13, 2008: 10-11).

In the Ideas phase, designers brainstormed ideas. They had identified that:

> "Usually when people talk about sustainable energy they think… that technology is going to save the day… The technology exists, but the access to it doesn't" (Designer 12, 2008: 10).

Using this insight, their brainstorming occurred through a process of many questions and discussions, such as in the development of Saverbox:

> "We were in discussions…. 'why don't people realise that they are only going to be out of pocket for 24 months, and then they are in pocket?' And then we were thinking, 'Hang on a minute, all we'd have to do is loan them that money for 24 months and they'd never have to dip into their pockets once.'… So there is no change in their expenditure…. So I think it just came out of… trying to get around the pay back time" (Designer 12, 2008: 15).

The designers also worked closely with the NEA to ensure the feasibility of their ideas. They collaborated with the NEA's Energy and Environment Specialist Advisor who would "deliver technical advice" (Project Stakeholder 14, 2008: 3) to build on ideas, and this would be done through the designers sharing sketches of their ideas to explain and communicate them. For

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[383] Observations, interactions, interviews and visual documentation of them.

[384] The practice of the designer creating a common starting point or foundation early in the project is seen in a number of other Dott 07 projects such as *Chapter 6: DaSH: The Designer as Researcher* (p 163-4) and *Chapter 7: OurNewSchool: The Designer as Facilitator* (p 184-6).

example, energy saving technology in a household was sketched to understand how the technology worked together (Figure 10.1).

Figure 10.1. Sketching out the demonstration house and how the technology in it worked.

Photo from LowCarbLane interview

Designers then worked with the NEA to shape a service idea called Saverbox. Saverbox is a financial service (Figure 10.3) that gives low-income households an interest-free loan to install energy saving measures. The loan is delivered as a partnership between a Credit Union[385] and the NEA and a household pays back the loan over time with the savings made on a household's reduced energy consumption. Saverbox means that a household needs no initial investment to purchase and install energy saving measures. Nor does it see an increase in their financial spend over time, only precipitating financial savings in the longer term.

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[385] The designers discussed their preference for a Credit Union to deliver the loan rather than a bank, holding onto the project and Dott 07 programme's ethos of being: "Sustainable, socially and environmentally and economically… that's why we wanted Saverbox to be offered by a Credit Union… it is a much more responsible lender" (Designer 12, 2008: 17).

Designers visualised Saverbox (Figure 10.2) in a service blueprint which "maps the processes that constitute the service" (Shostack, 1984: 135). This allowed for the identification of "the components of a step or action [to reveal] the inputs needed and steps covered [and] every encounter between consumer and provider" (Shostack, 1984: 136). Later, as ideas were given form, detail and were validated, sketches turned into "high fidelity" visualisations (Designer 11, 2008: 17). Of this the designers explained:

> "We communicated a lot of the ideas in LowCarbLane through sketches, which are a very quick kind of thing to do. And then I quite quickly worked up more high fidelity visualisations of things we were proposing and they kind of became icons for projects, for ideas and it became easier to communicate because you are talking about, again, what people will be using, or could be using, and whether they understand it. So if you have a new proposition you can see whether people understand what the proposition is… something more of an interface, how do they work out what it is doing or whether they can use it" (Designer 11, 2008: 17).
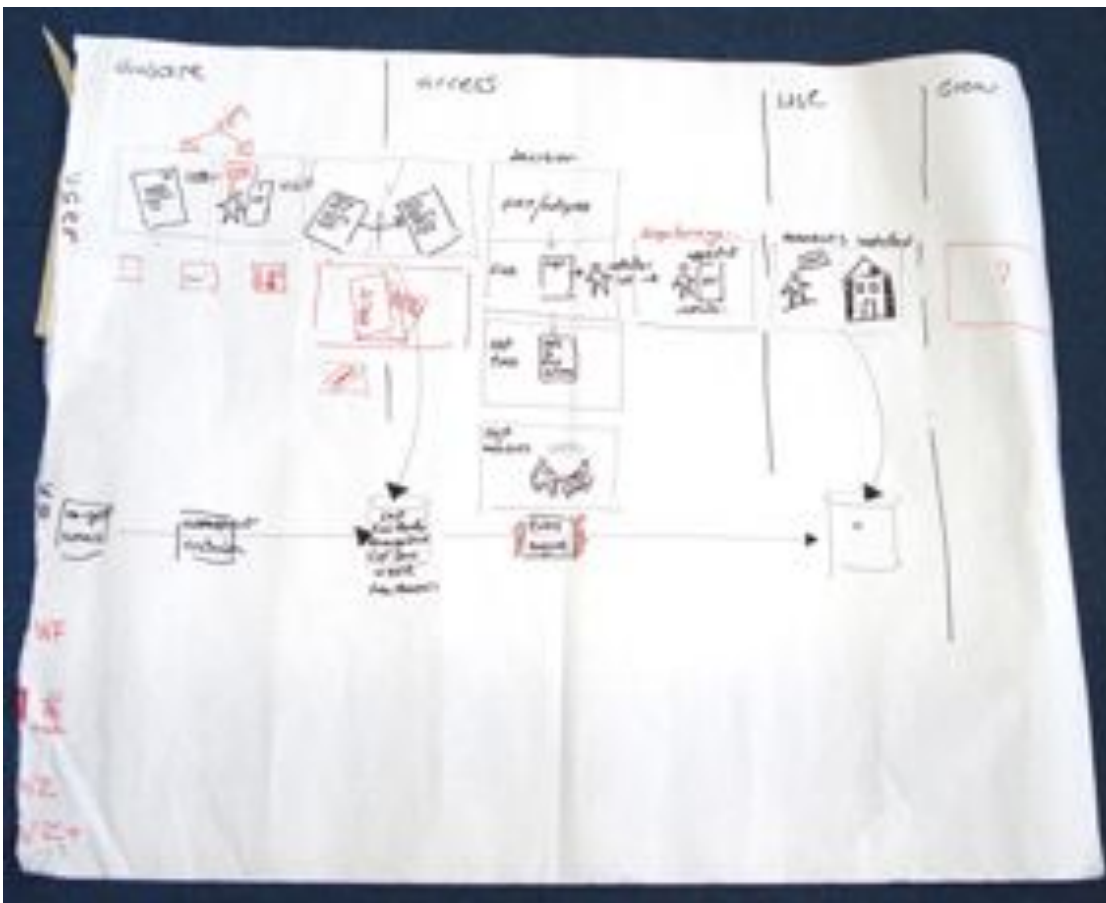
Figure 10.2. Sketching out how the Saverbox service could work.

Photo from LowCarbLane interview

Figure 10.3. Poster visualisations to show how Saverbox works.
Image from http://www.livework.co.uk

The service blueprint and following visualisations show that the first step in Saverbox would involve Warm Zones advisors to undertake an 'energy audit' of the home to help residents make decisions on appropriate energy saving measures. In blueprinting Shostack notes that: "the design of a service should therefore incorporate the orchestration of tangible evidence – everything the consumer uses to verify the service's effectiveness" (Shostack, 1984: 136). As residents were often suspicious of the door-knocking energy advice (Project Stakeholder 13, 2008: 9) live|work helped the Warm Zones advisors work on their approach including their marketing and use of language. Their interaction with residents were key to the uptake of Saverbox. This cumulated into another sketch of a service blueprint for the Warm Zones advisors (Figure 10.4).

Blueprinting is used in many professional areas such as marketing (Shostack, 1984; 2011), architecture and engineering (Polaine et al, 2009). In the field of marketing Shostack describes the value of service blueprinting as a way for a company, "to explore all the issues inherent in creating or managing a service. The process of designing a blueprint involves the consideration of several issues", which includes processes, fail points, timeframes and an analysis of profitability (Shostack, 1984: 135). Service designers adopt blueprinting to describe services in detail and map a service journey[386] (live|work, 2009).

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[386] live|work continued to work with Warm Zones after Dott 07 finished but this engagement was not within the time frame or scope of this research.

Figure 10.4. live|work's sketch of a service blueprint for Warm Zones.

Photo from LowCarbLane interview

After the 'energy audit' by the Warm Zones advisors, an installation occurs and residents enter a 'pay-as-you-save' scheme. As part of Saverbox an energy dashboard (Figure 10.5) or smart meter is installed, illustrating real-time, energy usage and financial savings. The dashboard can be viewed through the TV (Figure 10.6) showing energy use and financial savings/spend emphasising how residents are rewarded for their actions (Designer 12, 2008: 17).
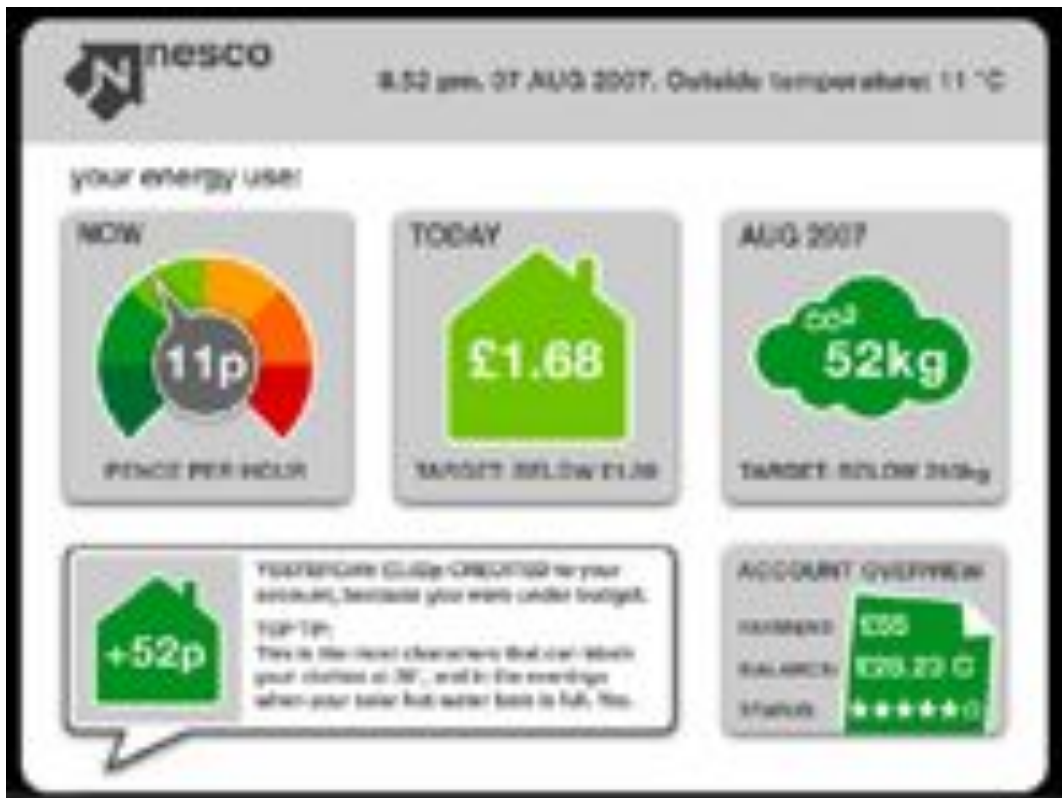
Figure 10.5. The energy dashboard which relays real-time information on energy usage, costs and savings. Image from Dott 07 website

Figure 10.6. A demonstration of how the energy dashboard would look on a household television. Photo from Dott 07 Festival, October 2007

The NEA, who have been involved in several years of smart metering research, distinguished the Saverbox smart meter dashboard from others currently on the market saying:

> "[The designers were] kind of pushing the boundaries… what live|work were trying to do was look at other methods of trying to get the information to the customer [by] looking at what other type of display panel and what kind of other information could be displayed either on a computer or a TV" (Project Stakeholder 13, 2008: 6).

To further encourage and incentivise the uptake of Saverbox, designers proposed a social enterprise called NESCO (Northeast Energy Service Cooperative). NESCO would purchase energy in bulk and sell this onto residents, with profits going back into the local community. In their Insights phase, designers found that "cheaper energy was not, in itself, an incentive for using less energy" (Design Council, 2009b). NESCO would put households in more control of their energy usage making "energy payment processes transparent" (Design Council, 2009b) through the membership model, and reward people where the community would share in profits. To bring the proposed organisation to life, designers created an identity for NESCO (Figure 10.7).

Figure 10.7. NESCO as a proposed social enterprise linked to the Saverbox financial service. Image from Dott 07 Festival, October 2007

The next phase in the project was to prototype[387] Saverbox. Designers explained this was challenging. Bringing into existence Saverbox required a partnership between an energy company and finance company and at the prototyping stage of the project, a live service was not possible to test. Designers used paper prototyping (Synder, 2003; Han, 2011) by visualising and describing how Saverbox would work (Figure 10.8). These prototypes were tested at a community day in Ashington. The designers explained the challenges of doing so:

> "We had some of the early Saverbox graphics as posters and explaining how it worked…. people would come along and they'd say, 'what's this about then?' and we'd say, 'we want to launch this new scheme and this is how it works, and what do you think about it? Would it hypothetically interest you?' And people didn't get it. They just couldn't get their heads around it wasn't real… it's not even that we got negative [responses]… it's just that we didn't even get a response" (Designer 12, 2008: 21).

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[387] Prototyping was discussed previously in *Chapter 8: New Work: The Desiger as Capability Builder* (p 198)

Figure 10.8. Visualisation prototypes of Saverbox. Photo from LowCarbLane interview

Designers struggled to gain evaluative data for Saverbox in the prototyping stages stating that it was "complicated and… difficult… to get those new schemes across to the people" (Designer 12, 2008: 21). Thus Saverbox progressed as a final output of LowCarbLane with little validation from its prospective users.

The final output of LowCarbLane was a demonstration house showing results of investment in energy saving measures (Figure 10.9). While it achieved a significant energy reduction, live|work's Insight phase identified that low-income households face a major barrier of finance, to access energy saving technology in the first instance. The demonstration house was also challenging to showcase to the public where the compromise of privacy for the tenants was an issue.

Figure 10.9. The demonstration house on Castle Terrace. Photo from Dott 07 website

The results of LowCarbLane were presented at the Dott 07 Festival. In summary these were:

- A demonstration home showing how a 60% reduction in energy consumption could be achieved with an initial investment of £8,000 in energy saving measures;
- A proposal for a financial service called Saverbox that proposed an interest-free loan for the installation of energy saving measures in the home. The loan would be paid back over time with the savings made on reduced energy usage;
- A proposal of an energy dashboard that relays real-time energy use and costs through a household television; and
- A proposal for a new model of an energy organisation, much like a social enterprise, where its members were also the consumers of energy. It would buy energy in bulk, sell it onto its members and the profits would go back into the community in various ways.

While Saverbox didn't reach implementation in 2007, since the end of Dott 07 it has shown many different outcomes including its implementation in the region and by the national government.

Directly after Dott 07, LowCarbLane as a project continued with funding from One North East to develop the proposal as a service offer. Saverbox was taken up by the NEA in partnership with Ashington Credit Union for delivery. The NEA detail the continuation of LowCarbLane on their website stating:

> "[The NEA were] awarded more than £100,000 from One North East to implement a ground-breaking initiative 'LowCarbLane' which will have a vital financial and environmental impact for households across Northumberland. The scheme is supported by One North East, Northumberland Warm Zone, Ashington Credit Union, NEA and the Wansbeck Life Initiative. If successful, it could be rolled out across the whole county by other partnerships and possibly to other Warm Zone areas" (NEA, 2008).

In 2008 Saverbox was developed and delivered in the NE with live|work continuing to assist in the implementation. But while Saverbox was marketed across a wide geography and achieved an increased awareness of energy grants for low-income housing, by 2009 no household had taken up the loan scheme. The Design Council reports of Saverbox:

> "[The] NEA have door-dropped over 1,000 homes. Official figures say 300 houses contacted them as a result and 11 houses have so far installed [energy saving measures]. However, they are all low-income houses and therefore qualify for free installation. No one has yet used the credit union loan scheme" (Design Council, 2009b).

While there has been no take up of the loan, different departments of government have looked at LowCarbLane as an exemplar and model of public sector innovation. In 2008 LowCarbLane featured as a case study in the UK government's report, *Innovation Nation*[388]. The report looked at ways that the UK could become an innovative nation where "innovation [could] flourish across every area of the economy" (DIUS, 2008: 1) LowCarbLane exemplified the innovation in public services taking place in the UK.

Then in late 2009 the UK government's Department of Energy and Climate Change[389] (DEEC) adopted the Saverbox model as a way to:

> "Make it as easy as possible for people to 'go green' in their homes [by introducing] a pay-as-you-save insulation scheme [to enable] people to use some of the savings they'll make from energy bills to spread the costs of energy efficiency over a long period of time" (Miliband, 2009).

The Saverbox model was part of the DEEC's white paper, *The UK Low Carbon Transition Plan* (HM Government, 2009) which provided a "route map" for the UK to reduce its carbon emissions for 2020 and beyond. It was launched by Ed Miliband, then-Secretary of State for DEEC.

The DEEC's pay-as-you-save scheme worked on a similar model to Saverbox and consultation reports cited both Saverbox and NESCO as examples of "an innovative financial model to incentivise householders" (BIS, 2008: 224). live|work report on their website:

> "We are really pleased to see that an idea inspired by seeing how hard it is for households to afford even simple changes has had such a significant impact" (live|work, 2009).

In 2009 the Carbon Trust also launched '0% business loans' that offered a financial service similar to Saverbox for UK SMEs[390] (small to medium enterprises). Today 0% business loans are still available, but only to businesses in Northern Ireland and Wales.

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[388] This was published by the Department for Innovation, Universities & Skills (DIUS).
[389] See http://www.decc.gov.uk
[390] See http://www.carbontrust.co.uk

The LowCarbLane project used design to explore opportunities for reducing energy consumption in low-income households. Prior European-based research[391] lay the groundwork for the LowCarbLane project with designers undertaking Insights research to identify how these ideas could fit with the local Ashington community. Outcomes of LowCarbLane were varied in nature and also success. The demonstration house, while a visible and tangible example of energy and financial saving, was challenging for engaging the public mostly due to privacy issues of the tenants. Saverbox, a more conceptual outcome of the project, was also challenging in engaging the public, especially during the prototyping stages of the project, but it evolved into implementation after the completion of Dott 07 with funding and resource from ONE, the NEA and Ashington Credit Union. This allowed Saverbox to be developed and delivered across a trial geography and while the loan is yet to be taken up by households, Saverbox raised awareness of energy issues among low income households and at a policy-level, was successful in inspiring and informing the implementation of a government-led pay-as-you-save-scheme that helps households and businesses across the UK meet the nation's carbon emissions target for 2050.

Discussion: The Designer as Provocateur

A contemporary movement happening globally has seen designers use design for positive social change. Their vision and actions often see them in the act of provoking by presenting alternative visions to the status quo and at best changing it, thus taking on a role of a provocateur. In LowCarbLane, the designer is seen as provocateur for presenting visions that challenge, yet work with the status quo. LowCarbLane challenged the status quo where designers saw that reducing energy consumption crossed environmental, social and financial issues, and required the collaboration of a number of industries, including that of energy and finance, if it were to drive change in human behaviour related to energy consumption or reduction. live|work used design to both discover and propose a vision, which was eventually adopted by regional institutions and national government.

The role of a provocateur is not a concept that exists in a single discipline. It is for this reason that discussions on the designer as provocateur draws upon literature in several areas to deepen an understanding of the provocateur.

A review of relevant literature for the Designer as Provocateur

Provocateur is commonly used in terms of agent provocateur to describe a secret agent or revolutionist. The term is also used to describe individuals who call forth a challenge and create change. For example Grenfell[392] discusses the French social theorist Pierre Bourdieu as an

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[391] The research the live|work designers had done with EDF.
[392] In his book, *Pierre Bourdieu: Agent Provocateur.*

'agent provocateur' characterising him as:

> "An iconoclast, as someone who was ready to challenge established orthodoxies and incite action against the violence (both symbolic and real) of the world" (Grenfell, 2004: 3).

An agent provocateur is an extreme example of a provocateur and the role of the designer is not discussed to this extent but it helps shape an understanding of the role as someone who challenges the orthodox or someone who provokes. The Oxford English Dictionary defines 'provoke' as a verb where one can "cause a strong reaction; deliberately make someone feel angry; stir someone to do something" (The Oxford English Dictionary, 2009: 740). The term is derived from the Latin term *provocare* which means "challenge" with pro meaning "forth" and vocare "to call" (Oxford American Dictionary, 2006). To elaborate on the role, the following literature review draws upon at a number of areas including that of Design Activism, Critical Design and Futures Thinking.

Design Activism

Literature on Design Activism has only recently emerged in the field of design (see Julier, 2007, 2008; Thorpe, 2008; Bell and Wakeford, 2008; Faud-Luke, 2009). Julier[393] describes Design Activism as "broadly encompass[ing] a wide range of real-life processes from greening neighborhoods to transforming communities through participatory design action" (Julier, 2008: 2). Faud-Luke writes that Design Activism results in proposing alternative discourses:

> "Design thinking, imagination and practice applied knowingly or unknowingly to create a counter-narrative aimed at generating and balancing positive social, institutional, environmental and/or economic change" (Faud-Luke, 2009: 27).

Thorpe[394] takes a broader view of Design Activism beginning with a definition of activism as "taking intentional action to instigate change on behalf of a neglected group" (Thorpe, 2008: 2). She continues to say that activism is a dynamic process whereby:

> "Groups in society call for change, and society responds… [and] gradually the public sector steps in… This process gradually raises the bar so that businesses do more, governments change policy, and activism pursues yet new areas that have been neglected" (Thorpe, 2008: 2).

Thorpe (2008) acknowledges that an outcome of activism is where change is instutionalised. This is evident in Julier's (2006) case study of The Home Zones project that transformed an unused neighbourhood street into a recreational and mixed-use civic space by laying down lawn

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[393] Guy Julier, Professor of Design at Leeds Metropolitan University, hosted the first known gathering to discuss design activism in the UK in 2007. The one-day workshop called, *Mapping Design Activism*, brought together activists practitioners, researchers and other interested individuals to share experiences and map the field and evolution of design activism (Julier, 2008).
[394] Thorpe's current PhD research looks at Design Activism in a number of architecture case studies where, "design's role at the leading edge of this process" (Thorpe, 2008: 2). She looks at "how activism is studied within social movements" in order to explore a framework for design, which would allow the discipline to better "understand, debate, and critique" its actions (Thorpe, 2008: 3).

(Julier in Cipolla and Peruccio, 2008: 813). The project took eight years to be implemented but its ideas have:

> "…led to a change in government policy and a commitment of £30 million to create neighbourhoods with pedestrian priority all over Britain"[395] (Heads Together, 2010).

In order to effect such change, Thorpe points out numerous methods used in activism including:

- Marches and demonstrations;
- Bans and boycotts;
- Petitions;
- Strikes;
- Barricades;
- Sit-ins and other forms of non-violent civil disobedience;
- Bearing witness;
- Symbols of identity and affiliation: e.g. the red AIDS ribbon;
- Pamphlets/pamphleteering;
- Vigils;
- Legal obstructions;
- Destruction of symbolically meaningful objects (Thorpe, 2008: 6).

Thorpe makes design activists distinct by stating that they "focus more on social practices and social meaning rather than constant novelty in specific artifacts (such as products, buildings, or clothing)" (Thorpe, 2009b). Later on in this literature review we look at Critical Design which presents a similar sentiment whereby the designer is more concerned with "explor[ing] the form of values rather than the form of things" (Dunne and Gaver, 1997: 2) which is an inversion of the traditional role of the designer who is often defined in name by the specific artifact they produce. For example a product designer makes products, and interior designer produces interior designs. Julier (2007) describes design activists as "media agnostic" meaning that they:

> "Do not prescribe a particular creative platform in response to situations; rather, whichever is most appropriate to address a context and issues will emerge from discussions" (Julier, 2007: 206. Also Julier in Thorpe, 2009b).

However, a designer's concern of issues over artifacts should not downplay the importance of the design artifact as an important aspect of expressing, engaging and demonstrating ideas for people to interact with. It is this artistic talent of the designer that uses the power of design to raise awareness of issues. For example, Hideaki Matsui's[396] landmine soap (Figure 10.10) aims

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[395] For more on this case study see: http://www.headstogether.org/home_zones.html
[396] For more on Matsui's case study see:
 http://www.hideakimatsui.com/ Or: http://www.id-mag.com/article/Student_Design_Review

to both raise funds for NGOs involved in de-mining, and raise "people's awareness of the problem. As someone cleans their hands with the soap, they can also help clean the world of landmines" (Matsui, 2008).

Figure 10.10. Cleanup: Landmine soap by Hideaki Matsui.

Image from http://www.hideakimatsui.com

Another recent example is in the 2008 Barak Obama presidential campaign. Throughout Obama's campaign, design principles and aesthetic concern were strongly present[397] (Heller et al, 2009). For example in 'Obama for America' website[398] and Shepard Fairey's 'Hope' poster[399]. Such uses of design have risen a few critiques of the balance between the political message and aesthetics in design. Richardson (2009) critiques the 'Hope' poster of the Obama campaign which won the 2009 Brit Insurance Design of the Year Award. She questioned the criteria for the poster's judging:

> "How much of the discussion and the judging was actually about design[400]? The Obama poster was applauded because it captured a mood: an entrepreneurial idea that expressed a new spirit of democracy… And what of the quality of the poster as a piece of graphic design? … I was left wondering if the poster would have won the award if Obama had lost the election … The decision to give the award to the Obama poster tells us more about the political persuasions of the jury, rather than the quality of the design" (Richardson, 2009).

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[397] For more on the Obama campaign see Heller et al, 2009 and the forthcoming book by Scott Thomas named, *Designing Obama*. It should also be recognised that the Obama campaign highlights the longer history of the activity of graphic and communication designers in the area of raising awareness of social issues (See Lee, 2006; Randall, 2009). As early as 1989, Design Activists have been communicating commentary on social issues, particularly in the area of consumerism, for example *Adbusters*, which was founded by Kalle Lasn and Bill Schmalz in Canada.

[398] See http://www.bluestatedigital.com/work/case-studies/barack-obama

[399] See http://obeygiant.com/headlines/obama

[400] Another issue here is Richardson's definition of 'design'. The debate Richardson raises here is similar to Hilary Cottam's award for 'Designer of the Year' in 2005 which generated a tremendous outcry from the traditional professional design practitioner community as Cottam was "not a trained or traditional designer of 'things'. Instead, she has applied a design approach to some of the UK's biggest problems: prisoner re-offending rates, failing secondary schools and the rising burden of chronic healthcare" (Burns et al, 2006: 6).

Richardson (2009) recognises the aesthetic challenge of design activists who design for issues rather than artifacts[401] but also the political orientations of designers by fulfilling such commissions. The latter is rarely discussed, except in the case of Tonkinwise (2010) who asks if designers show a political stance or are apolitical. At New Designers[402] where a poster asking 'Should design be political' produced a very even result from the design audience, under 'yes' and 'no' (Figure 10.11).

Figure 10.11. Photo of 'Should design be political' poster at New Designers, London 2009

While literature on Design Activism is still limited many design activists and organisations have been involved in initiating change. Design Activism demonstrates how contemporary designers feel a sense of responsibility for issues in their work but also sees the power of design to initiate change. They are "media agnostic" (Julier, 2007: 206; Julier in Thorpe, 2009), concerned with the issue first, and the form later[403].

Design Activism seeks to create a range of outcomes from raising awareness of issues to institutionalising change where "businesses do more, governments change policy, and activism

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[401] In the Student Design Review for which Matsui won 'Best of Category' the judges critique was that the packaging was slightly "lackluster" But they awarded Cleanup based on being a design project as the "research was excellent, and everything about this project [was] top-notch" (Krum in I.D Magazine, 2007).
[402] For more see my blog post 'New Designers' http://letterstoaustralia.blogspot.com/2009/07/new-designers-london.html
[403] As in Matsui's landmine soap where the designer uses their artistic and communication skills to convey values, meaning and ideas. This inverts the traditional model of the design discipline that has defined itself by the design artifact and is still debated among the field in terms of the quality of design and the political message.

pursues yet new areas that have been neglected" (Thorpe, 2008: 2). Design Activism sees a practice of the designer as using design to create a brand range of outputs, with the aim of inciting change through staging a protest against the status quo. The area of Critical Design, takes a more subtle approach, by creating provocative scenarios that often work with the future predicament, to initiate change.

Critical Design

In Design Activism, design is used to provoke change by raising awareness, aiming to get governments and organisations to do more. The area of Critical Design can also be seen to provoke by presenting alternative visions for the world. In his PhD study[404], Anthony Dunne (1997) explores a "conceptual toolbox for developing and communicating design proposals" (Dunne, 1997: 102) which he calls Critical Design. Dunne used design as a methodology and medium to explore, critique, discuss and reflect upon issues, in particular "how we live amongst electronic objects" (Dunne, 1997: 102) making explicit his findings and reflections on issues through six essays in his thesis. Critical Design is currently taught at the Royal College of Art (RCA) and practiced by Dunne and his collaborator Fiona Raby. They define Critical Design as:

> "Us[ing] speculative design proposals to challenge narrow assumptions, preconceptions and givens about the role products play in everyday life. It is more of an attitude than anything else, a position rather than a method. There are many people doing this who have never heard of the term Critical Design and who have their own way of describing what they do. Naming it Critical Design is simply a useful way of making this activity more visible and subject to discussion and debate. Its opposite is affirmative design: design that reinforces the status quo" (Dunne and Raby, 2007).

An example of Critical Design is seen in designer Jon Ardern's (2006) conceptual proposition of ARK-INC. Ardern describes ARK-INC as a response to:

> "The mounting body of scientific evidence, about the dangers inherent in continuing with our current lifestyle, was (and in-part arguably still is) being ignored or denied for fear of impeding the current economic paradigm" (Ardern, 2010).

ARK-INC responds to this situation by accepting the future and works on the premise that humans can better prepare for a post-crash world. ARK-INC offers a range of products, services, networks, skills and knowledge for such survival. Ardern used design as methodology and "medium" (Dunne and Raby, 2007) to explore these contemporary issues. This approach is akin to what Frayling called research *through* design (Newbury, 1996). The idea of design as the medium emphasises the importance of the tangibility of ideas and proposals. As Tassinari says "Critical Design is where criticism goes from being theoretical to being concrete and tangible" (Tassinari in Folkmann, 2010). An outcome of Critical Design seeks to provoke, cause

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[404] Titled, *'Herzian Tales: An investigation into the critical and aesthetic potential of the electronic product as pot-optimal object.'*

a reaction but also have an audience entertained "in an intellectual sort of way" if proposals are "too normal… it will be effortlessly assimilated" (Dunne and Raby, 2007).

Critical Design shifts the role of a designer from being a "servant problem solver" (Thorpe, 2008) to proposing alternative visions, accepting situations of the future, by reinforcing the status quo (Dunne and Raby, 2007) while "challenging orthodox thinking" (Raby in Folkmann, 2010)[405] such as in ARK-INC. In other design literature, Manzini also discusses design visions widely (See Manzini, 2004; 2006; 2008; 2009) referring to the acceptance of the future and creating design visions of:

> "… scenarios that show feasible, socially acceptable, even attractive, alternatives on different scales for various aspects of people's lives […] visions stimulate and steer strategic discussion" (Manzini, 2009: 8-9).

This feature of Critical Design makes it different from Design Activism, the latter which seeks to counteract the status quo.

Critical Design describes the use of design as a methodology and medium to communicate possible scenarios of the future. These scenarios engage and provoke an audience to question, reflect, explore, and also be entertained. Critical Design is an important concept that brings better understanding and insight into the role of the designer as provocateur.

Futures Thinking

The final area of literature to help understand a provocateur is Futures Thinking. Much like Critical Design, Futures Thinking presents scenarios of the future. Casico writes the goal of Futures Thinking is "to come up with a picture of possible futures that will help inform strategic decisions" (Cascio, 2009d). Its methods include scenarios planning, futures-mapping, simulations, Futurescapes[406], timelines[407] and backcasting[408] (Casico, 2009b; Wayman in Villiers-Stuart and Stibbe, 2009). It enables an examination and testing of "different possible outcomes—potential threats, emerging ideas, existing opportunities" (Casico, 2009a).

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[405] A great example in practice is design futures company, Superflux. See http://www.superflux.in

[406] Futurescapes as a method "provides a way of prompting learners to engage with Futures Thinking for Sustainability. This exercise provides ten scenarios covering a range of topics, for which learners need to decide the probability/improbability, possibility/impossibility and desired/undesired nature of the scenario within their lifetime" (Wayman in Villier-Stuart and Stibbe, 2009).

[407] Timelines are used for, "The object is to get learners – usually working in pairs to begin with – to draw a timeline (say 2009 to 2050) on one side of which they note the local/global events, trends and issues that they expect to unfold, while on the other side they note the future that they hope for. Once completed, they are prompted to focus further on their hopes and ideals through an envisioning process. They have to imagine and articulate what proof they would accept that their preferred futures have come into being, what evidence of individual and social change they could see. The images and metaphors they use to represent their ideals can become a useful source for discussion, and a valuable resource for future sessions" (Wayman in Villier-Stuart and Stibbe, 2009).

[408] This method, "begin[s] with groups of learners describing a utopian vision of a more sustainable school, university, or local community, and giving a fixed date in the future for when this vision becomes a reality, say 2020. They can then use the technique of 'backcasting' to describe the policies and programmes that led up to this desirable future along a timeline stretching back to the present" (Wayman in Villier-Stuart and Stibbe, 2009).

Futures Thinking is similar to Critical Design in needing to be "simple, dramatic and bold" (Edwards, 2007: 6) and also "critical and look beneath the surface of current orthodoxies" (Wayman in Villiers-Stuart and Stibbe, 2009). Futures Thinking thus seeks to:

> "Identify and challenge assumptions, recognise the importance of the social, political and historical contexts of events, interpretations, behaviours, and to imagine and explore alternatives" (Brookfield, 1987 in Villiers-Stuart and Stibbe, 2009).

A key difference between Critical Design and Futures Thinking is the role that design plays. In Futures Thinking text-based mediums are used to communicate visions and help aid strategic decision making. In Critical Design, and also Design Activism, design is used as a medium, where design artifacts engage audiences to think, consider and reflect on the future.

Key practices of the Designer as Provocateur in LowCarbLane

This literature review has looked at a number of fields to develop an understanding of the designer as provocateur. These fields include the areas of Design Activism, Critical Design and Futures Thinking. In summation of the literature, the designer as provocateur's key practices are understood as:

- Proposing alternative visions to the status quo[409];
- Using design as methodology and medium to raise awareness and engage audiences[410];
- Having values or ideas eventually institutionalised by governments and organisations[411].

Proposing alternative visions to the status quo

In Critical Design and Futures Thinking alternative future scenarios are imagined, explored and communicated. Critical Design uses design as process and medium to create and communicate these scenarios. The designer as provocateur in LowCarbLane demonstrates the designer's vision for alternatives to the status quo and the use of design as the process and the medium to create them. In LowCarbLane, designers used design methodologies in their research, ideation, prototyping and specifications for their ideas. Design was used as a medium to create visual communication pieces to articulate the Saverbox idea, and the ecosystem in which it would operate, including a social enterprise energy company and smart meter dashboard.

Manzini characterises proposals such as Saverbox as 'design-orientating scenarios' (DOS) where "a variety of comparable visions" are presented (Manzini, 2003)[412]. DOS comprises of

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[409] Such as in Critical Design which works with future predicaments, as demonstrated in ARK-INC. And in Futures Thinking which presents scenarios of the future.
[410] As Dunne (1997) illustrates through his PhD study and teaching at the RCA.
[411] As asserted by Thorpe (2008) and demonstrated in the Home Zones project.
[412] In his paper Manzini also identifies 'policy-orientating scenarios' (POS) describing then as "usually deal[ing] with the macro-scale of the socio-technical systems and present a variety of possible futures" (Manzini, 2003).

visions, proposals and motivations where:

- Visions: Give "an image of a whole context of life" (Manzini, 2003). For example designing Saverbox and the ecosystem around it;
- Proposals: To give "concrete form to a vision" (Manzini, 2003). For example the designer's use of design as the medium to communicate ideas; and
- Motivation: Where meaning and legitimisation is given to a scenario (Manzini, 2003). This was well demonstrated in the designers' research that showed energy linked to social and financial issues.

The Project Stakeholders both praised and critiqued the ideas from the designers. The extent to which the designers brought their own vision to the table can be seen through reflections of the Project Stakeholders who commented on the need for a better balance with the feasibility of ideas:

> "What could have actually been better in this project would have been to understand more about the energy market and the regulations that are prescribed in this country that will prevent some of this happening. So you have to know what your constraints are and [in the project] this was totally unconstrained" (Project Stakeholder 13, 2008: 19).

It is here that this case study review identifies a more limited use of co-design in LowCarbLane as compared to other Dott projects. The designers of LowCarbLane explained that it "wasn't a big co-design project […] we didn't want it to be, but I think Dott wanted it to be like that" (Designer 11, 2008: 20). While co-design was central to the ethos of Dott, LowCarbLane demonstrates that designers can achieve a similar level of impact when they propose visions for the future, rather than co-designing this future with stakeholders. Many successful organisations such as Ford and Apple have taken a similar approach where rather than ask customers what they want and involving them in co-designing ideas, they enter the market with products as provocation. Henry Ford infamously claimed that, "If I had asked people what they wanted, they would have said a faster horse [rather than a car]" (in Kelley, 2005). The late Steve Jobs stated: "It's really hard to design products by focus groups. A lot of times, people don't know what they want until you show it to them" (Jobs in Businessweek, 1998). While it may appear that these examples rely solely on the designer or entrepreneur for ideas, LowCarbLane showed that even though the customer or user was not actively involved in the process, ideas are underpinned and informed by user insight. In LowCarbLane the origins of their ideas was as follows:

> "We already had some ideas from work… in Sweden, so in some ways, we were trying to figure out how the ideas we already had sat with the community in Ashington… to see what attitudes and behaviours were already in place. So it was kind of like an adaptation" (Designer 11, 2008: 6).

Further adding in hindsight that had they prototyped Saverbox earlier and:

> "… been more explicit upfront to say that we wanted to do this idea, maybe we could have gotten a bit further during the Dott programme because we would have been going out and saying, 'we need a lender, we need a…' but we went back to sort of, first principles and did our Insights work, to see if that idea was still valid" (Designer 11, 2008: 14).

In the UK, the Saverbox "concept was entirely new" (Project Stakeholder 13, 2008: 6) yet it proposes:

> "… some aspect of how the world could be and, at the same time [it was] supported by complex ecological equilibria, which are acceptable socially and attractive culturally" (Manzini, 1993: 19)

And this is clearly seen in the development of a partnership between the energy company, EDF, and financial lender, the Co-operative Bank[413] who implemented Saverbox. While designers recognised the opportunity of Dott 07 as a space that "mitigated risk" (Designer 11, 2008: 12) giving them freedom to explore visions (Manzini, 2003) and critiques of the status quo, they did not create entirely foreign proposals, nor did they seek incremental change, instead they worked toward a radical rethink of an existing situation. The proposition of a financial service is an alternative model to what appeared in the more orthodox thinking, which was to promote the installation of energy saving measures to reduce domestic carbon emissions. Faced with the financial barriers of a low-income community, designers proposed a solution based on the premise that the barriers to change in energy use, were linked to finance and behaviour. Saverbox presented an alternative vision that incorporated better access to energy technology and encouraged and rewarded behaviour change. Design was used as both the process to understand the issue, and the medium, to present visions and proposals.

Using design as methodology and medium

The LowCarbLane case study demonstrates how the designer broadly follows a design process of Insights, Ideas, Prototyping and Delivery, while also adopting a mindset of Critical Design that includes using design for "challenging narrow assumptions" (Dunne and Raby, 2007). Designers expanded the project's key issue of energy to also include issues in behaviour and finance. Saverbox illustrates that people can be rewarded financially for installing energy saving measures, rather than be punished by making a large financial investment upfront. Saverbox also shows how providing accessible and visible information on energy and finance can change behaviour and incentivise energy use and reduction. In LowCarbLane designers challenged many assumptions about energy issues, in particular how low-income households view energy

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[413] The Cooperative Bank is a bank owned by its members, whom in 2000 initiated green mortgages (Lonsdale, 2007) where funds from the mortgages would go toward various Climate Care projects that helps reduce the impact of carbon emissions (Co-operative Bank, 2010). See:
http://www.co-operativebank.co.uk/servlet/Satellite/1193206371043,CFSweb/Page/Bank-Mortgages?WT.svl=copy

consumption, which was "a million miles away from their consciousness" (Designer 12, 2008: 9) as they had many other issues to contend with. The LowCarbLane designers worked on challenging these assumptions, illustrating a mindset similar to Critical Design. To move the project forward, the designers used the design process to undertake research, ideation and prototyping. The medium of design was then used in the development, communication and delivery stages of the project.

In his book, *Rules for the Radicals,* activist Saul Alinsky (1971/1989: 81) outlines that the most important quality of an activist is the art of communication. That is to be able to communicate issues and establish a relationship between the activist and others to create and mobilise a community to initiate change. Both Julier (2007) and Thorpe (2009b) discuss activist designers as "media agnostic" whereby designers use appropriate media to communicate issues and ideas, and tend to emphasise on communicating values and meaning rather than form (Dunne and Gaver, 1997: 2).

In LowCarbLane designers used various mediums to communicate the issues and ideas. Designers communicated the complexity of the LowCarbLane issues through storytelling. One of the Project Stakeholders spoke about this communication approach:

> "When I was at the house [the designer] was just taking photos of like the most bizarre things. And I was taking photos of like the boiler, and stuff, really technical stuff. And [the designer] was taking photos for the sign for Castle Terrace… I actually saw a presentation that he gave down at the Baltic and I had kind of pieced together why he'd done it because he was kind of keen that the audience didn't just view it as a really technical project, it was engaging the public with the whole environmental and community energy theme" (Project Stakeholder 14, 2008: 17).

Designers used their communication skills to build collaborative relationships with the Project Stakeholders by bringing a shared understanding of issues among the group. Storytelling was used to convey the complexity of challenges faced by the Ashington residents, showing these issues extended beyond the environmental, to the financial and social too.

In the development process, a designer's communication skills were used further to collaborate with technical experts on ideas and test them with the public. As one designer explains "there is a lot of work on the communication of ideas and helping [Project Stakeholders] work out what propositions work with their customers" (Designer 11, 2008: 4).

During the idea generation phase, visualisation through hand sketching helped communicate ideas at the early stages of development. Hand sketches were used with technical experts as the designers recognised that the technicalities of energy was:

"… their space, which we don't own. So we had some ideas which were unfeasible because they would cause all sorts of problems with people's housing benefits, so they would give you the kind of information you need" (Designer 11, 2008: 11).

As the ideas for LowCarbLane became more concrete, designers moved from sketches to more "high fidelity" visualisations to communicate propositions to the wider group and develop ideas:

> "We communicated a lot of the ideas in LowCarbLane through sketches, which are a very quick kind of thing to do… they kind of become icons for projects, for ideas and it becomes easier to communicate… you can see whether people understand what the proposition is… when you are building something, when you are refining and carrying on and testing it with people, so you get better stuff" (Designer 11, 2008: 17).

Communication design was also used in prototyping, to develop and refine ideas through testing. Designers mostly used paper prototypes to convey the Saverbox service, which was challenging for the public to engage with. Nevertheless, Saverbox was delivered as a key project output, explained through a series of posters, a logo and branding to suggest a service offer even though the service did not exist yet. Information and digital design was used to show how better behaviour could be shaped in relation to energy use. Designers spoke of their efforts and concerns to communicate energy because "it's invisible" (Designer 12, 2008: 18). The energy dashboard information design would help overcome this by making energy usage visible and accessible through the household TV.

Designers used a variety of other media to communicate ideas. The demonstration house was a different medium to show technology, energy use and savings. The idea for the house had initially been to allow the public to view it, but this was limiting due to privacy issues of the tenants. To build awareness around the house, designers used information design to create an icon graphic (Figure 10.12) to inform a wider audience the four steps taken to help achieve a 60% reduction in domestic energy usage. This was an alternative way to communicate the idea of the demonstration house[414].

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[414] As a designer said: "We also had picked up a bit of a headline for the project, the suggestion that most homes in the UK could achieve a 60% reduction" (Designer 11, 2008: 7).
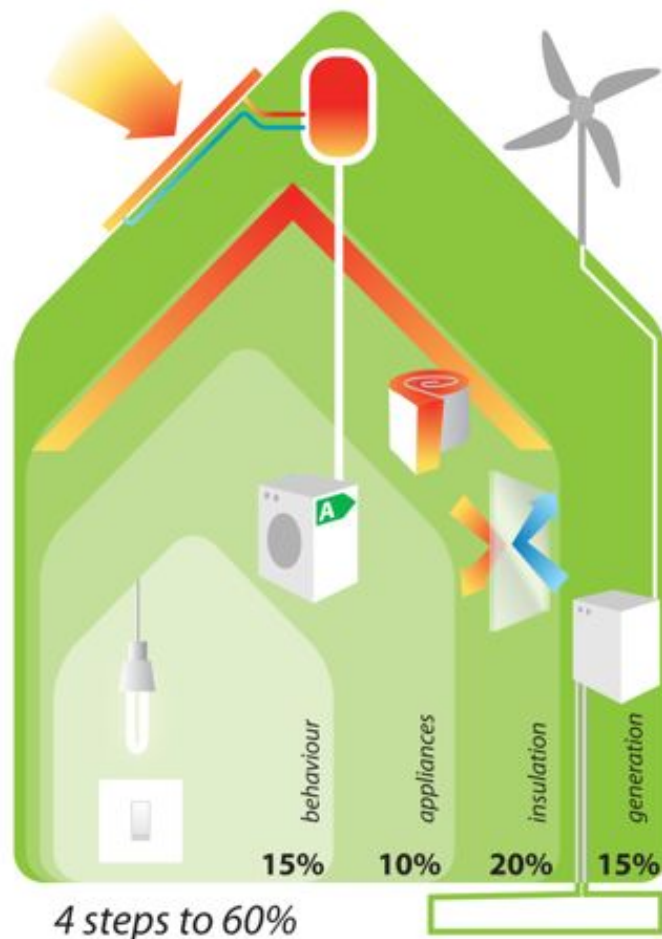
Figure 10.12. An icon graphic to show four steps to reducing domestic energy use by 60%.

Photo from Dott 07 website

Designers also spoke about their actions and plans to promote and do some marketing around Saverbox using various communication and media channels:

> "… we want to put those posters up in the pub, in the post office, in the newsagent where they have a wall 'for sale' and we want to use those avenues of marketing, not on TV or inside of buses, because that's just too expensive. So a fair amount of thought went into the look and feel and the graphics and how Saverbox works" (Designer 12, 208: 18-19).

They also discussed the potential to use word-of-mouth and networking, both which could be incentivised:

> "We plan to get involved with Health groups, a Neighbourhood Watch scheme. So we need to try and get in… what we need to find is somebody in the community who can act as a champion, so what we have also been talking about doing… is just saying to somebody 'we'll give you loft insulation for free, so in return you tell all your friends and neighbours about it.' You become a community champion and you go and tell everybody down at the pub, you try and sell it on our behalf" (Designer 12, 2008: 22).

The designers also featured in the media on television and in the news:

> "[I was] on telly a couple of times. On Look North… ITV, Climate Change Make a Difference. And the newspapers, the Chronicle and the Journal covered it. Which is good because it was a media outlet, but again it was just an idea… so it'll be great when we are trialing it and get the news involved and the BBC" (Designer 12, 2008: 28).

For the final outputs of the project, communication, digital and information design were used, to create real-life scenarios to engage and help the Project Stakeholders see how the service would work and appear in context. Later these proposals were used to inform a wider audience that ranged from the public at the Dott 07 Festival to national government. The designer as provocateur uses design a methodology and medium to propose scenarios of the future and are "media agnostic" (Julier, 2007) using the appropriate communication mediums that are relevant to the issue and people. The power of design as the medium allows people to interact and imagine the future, and this found particular success where Saverbox became instutionalised among key project stakeholders and in government policy.

Ideas that are eventually institutionalised

Thorpe maintains that activism is a dynamic process whereby "the process gradually raises the bar so that business do more and the government changes its policy" (Thorpe, 2008: 2). The legacy of LowCarbLane reflects this outcome from initiating partnerships between an energy company and financial institution to informing policy whereby the UK government implemented a similar loans scheme to help households and businesses achieve energy efficiency (Carbon Trust 2009; Miliband, 2009).

When LowCarbLane as a Dott 07 project ended, One North East provided more funding[415] to develop and pilot the project ideas. As the designers explain:

> "We are designing the Saverbox to be delivered within a trial geography and we are working with them on all the materials and with the Warm Zones team on communicating it" (Designer 11, 2008: 21).

Where Thorpe (2008) states that an outcome of activism is that "businesses do more", LowCarbLane demonstrates how the project helped initiate a long-term relationship and partnership between the NEA and the Ashington Credit Union:

> "We've also now, got this relationship with the Credit Union and the possibility of the legacy project, which we have submitted to ONE. This is to have a revolving loan fund in place, so that the Credit Union has had to change its rules so it can lend to new lenders" (Project Stakeholder 13, 2008: 11).

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[415] This was said to be between £100,000 and £300,000.

But this was just the start of the 'institutionalisation' of LowCarbLane. In 2008, DIUS (2008: 71) published the project as an exemplar of public sector innovation. Then in 2009, the launch of *The UK Low Carbon Transmission Plan* included a loan scheme (HM Government, 2009) which was of a similar model to Saverbox. LowCarbLane not only developed collaborations between organisations, but also inspired and informed government policy (live|work, 2009).

The legacy of LowCarbLane shows how the institutionalisation of change is underway. A longer term review of the project is needed to identify its full impact. At present ONE, the NEA, NPower, Warm Zones and Ashington Credit Union are working on delivering Saverbox. The Project Stakeholders have also been championing Saverbox speaking of its future in terms of scaling it in other regions:

> "I am hoping now that the project will be used as an exemplar. And that what will happen is that there will be greater take up of its measures […] We'd do probably what we have already done in Northumberland [to scale Saverbox]. Which is to talk with whoever the energy supplier is with the Warm Zone... and try and get some funding set aside … specifically for the development of work for the lower income residents, the difficult areas and work with other Credit Unions in the region" (Project Stakeholder 13, 2008: 9-14).

Regionally, LowCarbLane has made a significant impact, but nationally it has been used as a model for how UK households and businesses around the country can reduce their carbon emissions to meet the government's targets.

The value of the Designer as Provocateur

The value of the designer as provocateur is in their ability to use design as a methodology and medium to engage, entertain, communicate and demonstrate ideas, alternative futures and scenarios to a wide audience. In Futures Thinking, propositions are mostly text-based but design uses a wide range of media, where designers work with what is appropriate to the situation.

The designer as provocateur doesn't just use the medium of design to communicate future scenarios, but design is used throughout the project process to achieve the engagement and collaboration of the project stakeholders. The designers of LowCarbLane used communication design to mobilise and communicate with a multitude of different stakeholders to explore, and test ideas, and also help build relationships and partnerships among the project group.

This is important especially when designers are proposing a whole system re-design. Saverbox, the smart meter and NESCO illustrate the designer's activity in rethinking an entire system, or what Goedkoop calls a Product/Service System (PSS) a "marketable set of products and services capable of jointly fulfilling a user's need" (Goedkoop et al, 1999 in Morelli, 2002: 4). In designing the system, the designers acted in a similar capacity to how Myerson describes Apple and their innovation in the music industry where they "didn't stand around bemoaning

the current state of affairs; [Apple] seized control. In rethinking music delivery through the iPod, it became the law" (Myerson, 2008: 13). The designers spoke about the evolution of how LowCarbLane could proliferate to become a system of people, companies and services:

> "That whole, cooperative, community-based, not-for-profit community ethos, starting it quite small with a loan and trying to grow it into an energy company really" (Designer 12, 2008: 26).

Morelli recognises that playing a bigger role in the PPS expands the domain of the designer's activities from "technological definition of industrial artifacts" to the "organisational aspects of the production and consumption system he/she is working on" (Morelli, 2002: 5).

The power of design as a medium allowed for the project outputs to be used for and by a wider audience. For example the outputs from LowCarbLane were used by government lobbyists as an exemplar to show how environmental issues were linked to social and economic ones and that re-designing the system would be required to change human behaviour in energy use. The Alzheimer100 project was used in a similar way, with its Signposting Service proposal used to speak to government about the future of dementia care[416]. Both projects illustrate the potential for design as a way to convey political messages to the public and also to government, raising the question of the design output as a political stance in itself. More reflection to explore and discuss the links between design and politics are encouraged beyond this research investigation. Some designers and authors have already begun such conversations (See Buchanan and Margolin, 1995; Manzini, 1995; Winhall, 2006; Tonkinwise, 2010). Only time will tell if designers more explicitly position themselves and their practices politically.

Overlaps with other roles in Dott 07

While the discussion here has focused on the designer as provocateur, the designers in LowCarbLane displayed many other practices drawn from other roles identified in Dott 07. The designers of LowCarbLane acted as facilitators[417] of a multi-stakeholder groups throughout the project. As a Project Stakeholder recognised:

> "It's quite a difficult thing to do to engage all those partners. It's kind of notoriously fragmented the domestic energy and efficiency market. Particularly in the NE, so I think initially they found it difficult [in identifying] who they needed to be speaking to but once they pulled the people together, it was quite a good steering group that they [got] into place" (Project Stakeholder 14, 2008: 18).

The designers took on the role as researchers[418] in their Insights phase showing a recognition of the complexity of energy issues and the use of insights to inspire new opportunities. For

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[416] See *Chapter 5: Alzheimer100: The Designer as Co-creator* (p 101).
[417] See *Chapter 7: OurNewSchool: The Designer as Facilitator* (p 167)
[418] See *Chapter 6: Design and Sexual Health (DaSH): The Designer as Researcher* (p 135)

example identifying that the key barrier to carbon efficiency for low-income households was primarily to do with access to finance. Finally they were strategists[419] designing a service for implementation and connecting people to policy where Saverbox was used as a model to show government how in daily life energy issues are inextricably linked to social and financial issues too.

The designer as provocateur is distinctive from the other Dott 07 designer roles through their use of design as provocation to raise questions about assumptions and present alternatives to the status quo. The designer as provocateur often emphasises less co-design approaches[420] that have previously been discussed in the designer roles of Dott 07.

Conclusion

In the LowCarbLane project, the designer as provocateur:

- Proposes an alternative vision to the status quo;
- Uses design as methodology and medium; and
- Has ideas which eventually become institutionalised by organisations and institutions.

Designers in the LowCarbLane project looked at a small community in Ashington to identify the key barriers to change in their domestic energy use. They discovered a complex weave of environmental, social and economic issues. Using design as methodology designers explored issues and created responses to them, presenting an ecosystem of innovative ideas. They used the medium of design to communicate their ideas, as if they were real solutions. LowCarbLane resulted in a number of proposals that could help local people in Ashington change their behaviours toward energy usage. The project also demonstrated how its ideas were nationally relevant to the UK through the implementation of the Saverbox model by government across a number of households and businesses.

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[419] See *Chapter 11: Urban Farming: The Designer as Strategist* (p267)
[420] Though design futures company, Superflux (2012), actively involve stakeholders in designing future scenarios.

Chapter 11

Urban Farming:

The Designer as Strategist

Urban Farming: The Designer as Strategist

Case study: Urban Farming

Food miles refers to "the distance food travels from the farm to consumer" (Smith et al, 2005: i). In recent years increasing awareness has been given to local food production because the impact of food miles is recognised as being social, environmental and economic. The environmental impact of food miles sees it contribute to 30% of the UK's CO_2 emissions (World Wildlife Fund, 2011). Thus reducing food miles would positively impact the environment. The social and economic benefits of local food production also sees it linked to more local employment, better use and beauty of the land, and giving the local communities access to fresher food[421]. The Urban Farming project in Dott 07 aimed to use design to help reduce food miles in the town of Middlesbrough.

Middlesbrough is a town of almost 140,000 people (Middlesbrough Council, 2009a) located on the River Tees in the NE region of the UK. Its history is heavily steeped in industrial economies such as steelwork, shipbuilding, ironstone and transporting coal[422]. In recent decades however, the decline of these industries in the UK has seen Middlesbrough suffer from a "comparatively low-wage economy… lower than the national average" (Middlesbrough Council, 2009a). This economic deprivation has impacted social indicators such as poor health, high crime rates, and a prevalence of smoking, obesity and teenage pregnancies (Middlesbrough Partnership, 2010). Middlesbrough's issues became well known to the rest of the UK in 2007 when the TV show *Location, Location, Location* branded Middlesbrough as the "worst place to live" in the UK[423]. This outraged Middlesbrough residents and the Mayor of the time, Ray Mallon, who filed a complaint to Ofcom, the UK's regulatory authority for broadcasting and communications[424]. But with its many issues, Middlesbrough looked to change this public perception, with its forward thinking local authority and a local community enthusiastic to be involved.

Urban Farming was led by a multi-disciplinary team comprising of a service designer, a TV producer and an artist. The project began by undertaking design research with Middlesbrough residents to uncover opportunities for reducing food miles. Research included the use of observation and informal conversations with different people around the town (Dott 07, 2007;

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[421] See 'Urban Food Growing in Havana, Cuba' short film which illustrates the environmental, social and economic benefits of city gardens or *huertas* in Cuba http://www.youtube.com/watch?v=jRz34Dee7XY&feature=youtube
[422] From Middlesbrough on Wikipedia.
[423] In 2007, Middlesbrough was named 'worst place to live' after the Channel 4 show, *Location, Location, Location*, conducted an audience poll on the best and worst places to live in the UK. For reporting on this see:
http://www.channel4.com/news/articles/society/middlesbrough+tops+worst+town+poll/921247
or http://www.channel4.com/4homes/on-tv/best-and-worst/middlesbrough-named-worst-place-to-live-2007-08-06-09_p_1.html
Also see:
http://www.middlesbrough.gov.uk/ccm/navigation/council--government-and-democracy/mayor-and-political-structures/mayor/biography/2007-08-/
[424] Ofcom cleared the TV show of unfair treatment in 2009 (Tryhorn, 2009). See 'Watchdog clears TV show that branded Middlesbrough UK's worst place to live.' http://www.guardian.co.uk/media/2009/aug/03/location-location-location-kirstie-allsopp-ofcom

Designer 14, 2008) allowing the design team to "quickly [get] a sense of what made that place tick" (Designer 14, 2008: 10). The team quickly identified Middlesbrough's geographic advantage surrounded by rich agricultural land, but discovering that very little of this local produce ended up in town because of the dominance of the national supermarket distribution networks. This saw local produce leave Middlesbrough. The lack of local food in town was further encouraged by the:

> "…assumption… that [residents] are not interested in health. So, none of the suppliers and the people who might be supplying the town with food bothers" (Designer 13, 2008: 7).

The team also discovered that the concept of food miles did not engage the community, as the designers relayed "their priorities were very different to that" (Designer 14, 2010: 10)[425]. The more deeply rooted issue was linked to Middlesbrough's image and identity that *Location, Location, Location* had made visible. A designer on the project elaborated:

> "The nickname of the people… they are 'smoggies.' It's very industrial and if you drive down from Newcastle, the first thing you see, even though it's not even in Middlesbrough, are all these enormous chimney stacks and chemical processing plants and that's the mainstay of industry there. It's got a massive industrial heritage and it's very obvious, but they have got quite a negative image… there was this programme on TV [that] named [Middlesbrough] worst place to live in England" (Designer 14, 2008: 10).

After a short research stage, the design team gathered over a weekend to undertake an intensive "idea generation" session (Designer 14, 2008: 13) to devise the Urban Farming idea. The design team needed to address the brief from Dott 07 to reduce food miles, consider the strategic priorities of the town and take on board the insights and observations from their research with the local community. As the team explained, they had to contend with "the place and what it was about, and what this brief was about, and how the two didn't quite match up" (Designer 14, 2008: 13). These factors posed the question "how [could] we morph the project to fit what would engage the people of Middlesbrough… and what the objectives of that brief were?" (Designer 14, 2008: 13). Many discussions took place during the idea generation (Figure 11.1) and by the end of the weekend, the team produced a proposal for a four-part Urban Farming programme. It would engage and involve the community in growing, cooking and celebrating locally grown food. As the designers described:

> "[We invented] a narrative of experience, which is that you grow food, you learn how to cook it, you share it in a meal and [the other designers] come along and maps it all and you use the whole package as a way to promote urban agriculture and you use the process to seed, slight adjustments to the way public agencies deliver public services" (Designer 13, 2008: 12-13).

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[425] This was similar to the designers' insight in *Chapter 10: LowCarbLane: The Designer as Provocateur* (p. 239-240)
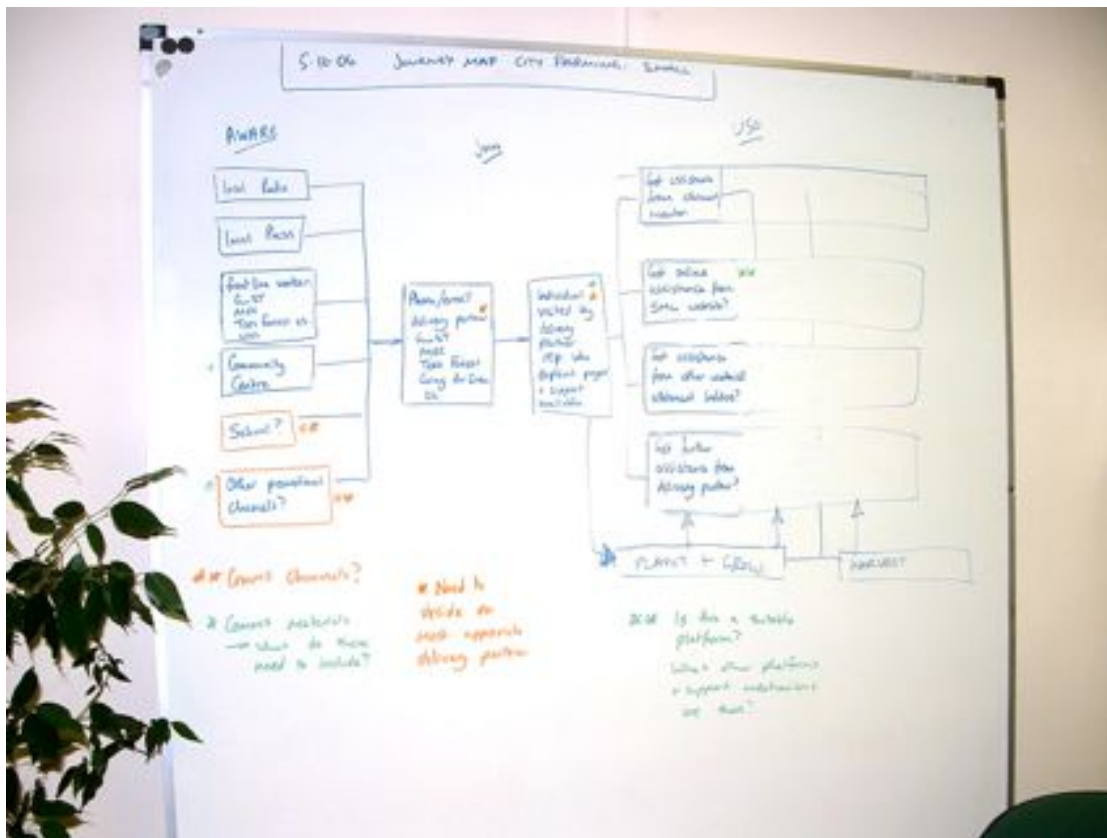
Figure 11.1. Process work during idea generation. Image supplied by Urban Farming team

In detail the Urban Farming proposal would see:

- A Grow Zones campaign – That provided locals with tools, such as seeds and containers, to grow their own food;
- Kitchen Playgrounds or cooking workshops – To create new recipes based on the locally grown food;
- A Town Meal Event – Which brought together the town to celebrate locally-grown food and raise the profile of Middlesbrough; and
- An edible landscape map – Which visualised over 200 potential grow-zones around Middlesbrough[426].

The team conducted informal consultations with the local community who were very receptive to the ideas, and then presented the idea to the Council using a simple visualisation (Figure 11.2).

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[426] This map would be provided to the local authorities and the community as part of the project's legacy and a longer term strategy.

Figure 11.2. A visualisation of the Urban Farming concept.

Photo from Urban Farming interview

The Council provided a mixed response stating:

> "[It's] different, it's interesting, it's stimulating, but I had some real worries about its deliverability. On three counts 1. Whether it could be delivered within the budget and 2. Did we have the organisational and institutional infrastructure to deliver it and thirdly…. 3. Vandalism. These were my three big concerns" (Project Stakeholder 2, 2008: 7).

Despite these concerns, the Council were enthused by the idea and the opportunity to explore a new model of community engagement (Project Stakeholder 2, 2007: 10).

The implementation of Urban Farming began with the Grow Zones campaign. This involved many community organisations distributing containers and seeds to residents for food growing. Alongside this, the design team started communicating other up-and-coming events. The informal conversations[427] and consultation with the community generated valuable feedback on the Kitchen Playgrounds idea. Initially, this would be based on the American concept of Meal Assembly Centres. These centres minimise efforts of home cooking by providing the raw ingredients and guidance for creating up to two-weeks worth of home-cooked meals. Family members then take these meals home (Severson and Moskin, 2006). But feedback from the Middlesbrough community saw they preferred something different. As a designer recalls:

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[427] As Designer 14 described: "It was just like, 'Here are our ideas, what do you think? Would you want to get involved? It was more a, test-the-water kind of thing" (Designer 14, 2008: 17).

"Everyone said to us, 'we don't want to do an assembly line kind of thing. We just want to experiment and play.' And so we said 'fine, we'll do that'" (Designer 14, 2008: 22-3).

The idea of Kitchen Playgrounds involved local chefs helping residents create new recipes using locally grown food. Marketing for the events was done via posters which came folded as a booklet (Figure 11.3). The poster included guidelines on organising an event, who to contact and what food was available to experiment and cook with. The design team described it as:

"Sort of a little manual to running your own event, but it wasn't set in stone, and you could do what you wanted with it and you didn't have to use the recipes we had given you… the idea was that people would set up their own thing" (Designer 14, 2008: 22-3).

Figure 11.3. Poster and booklet to promote Kitchen Playground events.

Photo from Urban Farming interview

As the ideas for Urban Farming developed with more clarity, the Council decided to take over leading the project having observed that:

"… it had gotten to that point where the shape of it was in place, but it was more about implementation. So a different set of skills would be required" (Project Stakeholder 1, 2007: 8).

The designers describe this point of the project as a "tricky process" where the Council took over the ownership:

"There was going to have to come a moment when the local authority was going to have to take over responsibility for delivering it and also become the accountable body which is the legal entity to take it forward, to carry the liabilities and to underwrite all the costs. And that's quite a tricky process, that's what makes the process deliverable, that's what gives the process a legacy" (Designer 13, 2008: 21).

It became obvious not just to the Council but to the design team too that:

> "Events organisation… wasn't playing to our strength as a team and [none] of us were up to that job [at this point what was needed was] an events manager or someone with a project management specialism to manage that whole process" (Designer 14, 2008: 21).

The Council hired in a project manager to oversee the remainder of Urban Farming with a particular focus on implementing the Town Meal Event. The Council put together a detailed action plan and established additional channels for communication to maintain the project momentum. They describe their activities in the project implementation stage:

> "We emailed every school, we emailed all the relevant people, we wrote out to all the houses and schools. We had regular planning meetings, we had a pre-meal delivery meeting where over 60 people, representing various organisations and schools where there […] It was about getting out there and selling the message… making the product understandable as opposed to concepts [...] If there is going to be the creative, you also need hard and fast level-headed project delivery managers" (Project Stakeholder 1, 2007: 7-12).

At the end of summer 2007, the Urban Farming project finished with the Town Meal event. It brought together Middlesbrough locals, local authorities, and private and public sector organisations (many of whom provided sponsorship for the event) to cook, share and celebrate Middlesbrough's locally grown food. The event was a great success. It had aimed for a turn out of 1000 people but 8500 attended the event in the City Square at the centre of town (Wood Holmes Group, 2007; Middlesbrough Council, 2008) (Figure 11.4).

Figure 11. 4. Photographs of the Town Meal event in 2007. Photo from Dott 07 Festival.

The Council's own account of the event was as follows:

> "The initiative culminated in a grand Town Meal on Saturday 22nd September 2007, where vegetables grown in homes, streets, parks, allotments, school yards and community centres were harvested and shared with the community in the town's Centre Square overlooking mima[428]. Centre Square also housed an arts festival, with seventy different art and craft stalls on display, with many having links to the day's food theme. The day, officially opened by Mayor Ray Mallon, was a great success and generated a fantastic atmosphere with 8,500 people attending the event and the Town Meal being enjoyed by 2,500 people. Several supporting activities were provided also e.g. face painting, Punch and Judy, tug of war etc" (Middlesbrough Council, 2008).

The project's final phase was the development of an edible landscape map (Figure 11.5). The map was created by designers, Andre Viljoen and Katrina Bohn[429] who visualised 260 potential grow zones (Wood Holmes Group, 2007) in and around Middlesbrough. The three-dimensional map given to Middlesbrough Council at the end of the project as a vision for how urban farming and local food growing could be taken forward in Middlesbrough.

Figure 11.5. A map visualising over 200 grow zones in the town of Middlesbrough.

Photo from Dott 07 Festival, October 2007

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[428] Middlesbrough Institute of Modern Art.
[429] Also authors of *Continuous Productive Urban Landscapes.*

The success of the Town Meal and the Urban Farming project inspired Middlesbrough Council to repeat the programme in the following years[430] and inspired a number of ideas the Council could lead related to food. At the end of Dott 07 they described these ideas as:

- A Jaime-Oliver-Fifteen-style[431] restaurant to assist training and employment opportunities;
- The development, distribution and regeneration of allotment sites, many of which had fallen derelict in past years;
- A food co-operative; and
- Plans for the UK's first food policy council (Project Stakeholder 1, 2007: 8).

In 2008 a Town Meal was organised to take place after a summer of food growing that involved 2000 individuals and 280 grow sites (Early, 2008). Days of rain leading up to the event saw the cancellation of the Town Meal, so in 2009 contingency plans to host the Meal in the Town Hall were in place for inclement weather. But on 18 September 2009, the Town Meal took place under the sun in City Square with great success (Gazette Live, 2009). This event saw 10,000 people attend with 2000 meals served of locally grown food donated by residents after 6-months of food growing all over town.

In 2009 the Town Meal became part of Middlesbrough Council's £9-million Healthy Town initiative (Middlesbrough Healthy Towns, 2009). The initiative is delivered in partnership with Middlesbrough NHS to "tackle obesity through increasing physical activity and promotion of healthy eating" (Middlesbrough Healthy Towns, 2009).

By 2010 Urban Farming became part of an even broader initiative under the local charity, Middlesbrough Environment City (MEC). The role of the MEC is to "demonstrate ways of managing cities and large towns in more sustainable ways" (MEC, 2010). Under MEC the Town Meal is run annually. In October 2010 the MEC was a finalist for The BBC Derek Cooper Food and Farming Awards and during the awards Urban Farming was recognised for having:

> "…helped over 100 local groups and families in urban areas grow their own fruit and vegetables. Food is grown in school playing fields, allotments and local parks as well as back and front gardens. Each group donates a small portion of their produce to be cooked up into a Town Meal feeding thousands of local people in a festival atmosphere. Now in its 4th year the Town Meal and the urban growing project have bought together people of all ages and backgrounds to enjoy the benefits of growing and eating fresh food" (BBC Radio 4, 2010)[432].

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[430] This was scheduled to happen in September 2008 but due to heavy rainfall leading up to the event, the event was cancelled.
[431] "Fifteen is a restaurant group that uses the magic of food to give unemployed young people a chance to have a better future. The group is made up of three restaurants: the flagship Fifteen London established in 2002, Fifteen Amsterdam in December 2004 and Fifteen Cornwall in May 2006." (from http://www.fifteen.net/about)
[432] http://www.bbc.co.uk/radio4/features/ffa/2010/finalists

Since 2007 the legacy of Urban Farming has been strong and a testament to the project's success. Urban Farming has informed new initiatives and decision-making within the local authority, who began linking environmental and social issues: such as local food growing; community engagement and participation; health eating; and outdoor activity. The project demonstrates how design can identify opportunities for a town that faces a number of complex issues. Urban Farming created a programme of work that engaged the local community, local authorities and community organisations in a series of "creative endeavours" (Project Stakeholder 1, 2007: 6) related to food-growing, cooking, increasing awareness of healthy eating and increasing the productivity of the land. The success of Urban Farming is seen in its lasting legacy which informed local government policy and created a:

> "…tremendous partnership across the Council and with external agencies and the community and the voluntary sector and in the public and private sector" (Project stakeholder 1, 2007: 13).

The partnerships have continued post-project to develop several initiatives together to improve community health, well-being and the local environment. Urban Farming illustrates how design can create outcomes that "range from the very simple [and] practical, to the signposting of new thinking and new policy directions" (Project stakeholder 2, 2007: 5).

Discussion: The Designer as Strategist

The Urban Farming project exemplifies the designer as strategist due to its resonance with traditional approaches to strategy. Traditional strategy-making uses the military metaphor of a general devising plans to conquer the opposition. These plans are then deployed by troops for implementation. In Urban Farming the designers devised a plan and proposed it to the Council who eventually took over the implementation. The following discussion of the Urban Farming case study draws upon strategy literature from the field of business and management, and literature in the design discipline that discusses the role of design in business strategy.

A review of relevant literature for the Designer as Strategist

What is a strategist

Historically the word strategy has its roots in the Greek word *strategos* which describes "the art of the general [in the army]" (Harvard Business School, 2005: xi. Also see Mintzberg, 1987a; Whittington, 1993; Mintzberg and Quinn, 1998/2002). This military reference sees that a general devises a plan for his army and then deploys his troops to defeat the opposition through implementing the plan. This metaphor is used in traditional or classical approaches to strategy (Whittington, 1993; Mintzberg, 1994) and implies that strategy is a process where thinking is separated from doing.

However since the mid-1960s many new definitions of strategy have developed to contend with rapidly changing contexts that contemporary organisations operate within. Today strategy is seen as a broad range of approaches and activities ranging from "strategy as a plan for controlling and utilising [organisational] resources"; to defining an organisation's strengths, weaknesses, opportunities and threats[433] ; to outlining an organisation's competitive advantage i.e. The activities that set an organisation apart from its competitors to create value for its customers (Harvard Business School, 2005). Many of these definitions are related to for-profit organisations, so to discuss strategy in relation to not-for-profit organisations, this research sees a broader definition used by Henry Mintzberg, a business and management scholar, who writes that; strategy is, "the *pattern* or *plan* that integrates an organisation's *major* goals, policies and action sequences into a *cohesive* whole" (Mintzberg, 1998: 3). In addition to this, the Harvard Business School writes that the nature of strategy is "about understanding what you do, what you want to become, and – most importantly – focusing on how you plan to get there" (Harvard Business School, 2005: xiv). In summary, a strategist recognises where an organisation is now, where it wants to be and how it gets there (Harvard Business School, 2005) and creates a plan that integrates the organisation's goals, policies and actions (Mintzberg, 1994). The organisation's capabilities and resources are then used to execute the plan (Whittington, 1993).

Design's role in business strategy

A key element of strategy is the creation of a strategic plan and this is one of many overlaps between the fields of strategy and design. One of the most cited definitions of design is by Herbert Simon who states that design is about devising "courses of action aimed at changing existing situations into preferred ones" (Simon, 1969: 5). In this definition the idea that design devises a course of action to achieve a preferred situation in the future is very similar to how strategy is characterised in business and management literature i.e. a strategic plan outlines how an organisation gets from where they are now, to where they want to be (Harvard Business School, 2005).

Another overlap can be seen where Mintzberg[434] (1987b: 66) uses the idea of a craftsperson to demonstrate how a strategist crafts strategy. This analogy is close to design whose roots are in arts and crafts-based activities. Mintzberg describes strategy formation like a potter who:

> "Sits before a lump of clay on the wheel… Her mind is on the clay, but she is also aware of sitting between her past experiences and her future prospects. She knows exactly what has and has not worked for her in the past. She has an intimate knowledge of her work, her capabilities, and her markets. As a craftsman, she

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[433] Which developed into the popular business tool commonly known today as a SWOT analysis.
[434] Mintzberg (1993) an influential author in strategy disfavoured the 'design school' of strategy describing "design as planning which is: controlled, conscious process of thought; devised by the CEO and fully formed before implementation" (Michlewski, 2006: 224). Both Michlewski (2006) and Liedtka (in Hitt et al, 2001) write that this was disadvantageous to design as the field of strategy understood design as "very different to the nature of the professional design culture's contribution" (Michlewski, 2006: 224). But while Mintzberg critiqued the 'design school' he also used an analogy very close to design to illustrate how strategy is crafted.

senses rather than analyses these things; her knowledge is 'tacit'. All these things are working in her mind as her hands are working the clay. The product that emerges on the wheel is likely to be in the tradition of her past work, but she may break away and embark on a new direction. Even so, the past is no less present, projecting itself into the future" (Mintzberg, 1987b: 66).

The idea of a strategic plan and this craft analogy are fascinating starting points to explore other similarities of strategic thinking and practices between the design and business disciplines. A comprehensive discussion of these similarities can be found in Liedtka's papers *In defense of strategy as design* and *Strategy Formulation: The role of conversation and design* (Liedtka, 2000 and Liedtka in Hitt et al, 2001). Liedtka outlines that both design and strategic thinking share the qualities of being: value-driven; seeking emergent possibilities; synthesis; and abductive thinking (Liedtka in Hitt et al, 2001). Many other authors from the design discipline have also explored the links between design and strategy (see Buchanan, 1995; Lester et al, 1998; Design Council, 2001; 2008a; Borja De Mozota, 2003; Boland and Collopy, 2004; Brown, 2005; 2008a; Cox, 2005; Michlewski, 2006; Stevens et al, 2008; Martin, 2009).

When IDEO coined the phrase, Design Thinking recognising design for its process and principles in solving complex problems, it became commonly used to describe design working in the strategy space (Myerson, 2008: 6). Myerson points out the designer's role in strategy as an emerging role today saying that "designers are now clamouring to have a bigger say in the 'what' and 'why' of innovation" (Myerson, 2008: 5). He describes the designer as strategist, as someone: "…swimming upstream to work at the front-end of innovation" going beyond the design brief to act as "a voice of conscience and a catalyst at the first stages of the innovation process" (Myerson, 2008: 5-6).

Valtonen (2005) adds further insight into this role outlining how designers in Finland have taken on a role she labels as "pushing innovation" or as "innovation drivers" contributing to a country's competitiveness and productivity. Similarly in the UK Sir George Cox, former-Chairman of the Design Council, outlines in the *Cox Review of Creativity in Business* the importance of design[435] and creative capabilities in UK businesses for national competitiveness and innovation (Cox, 2005). Cox states that the use of design and creativity leads to:

> "…greater productivity, whether by way of higher-value products and services, better processes, more effective marketing, simpler structures or better use of people's skills" (Cox, 2005: 3).

Valtonen sums up the role of the designer in innovation saying that the designer is involved by "looking at things with a creative mind and finding new solutions" (Valtonen, 2005).

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[435] Cox stated "'Design' is what links creativity and innovation. It shapes ideas to become practical and attractive propositions for users or customers. Design may be described as creativity deployed to a specific end" (Cox, 2005: 2).

Many design councils around the world, such as the Design Council in the UK, Design Singapore, Better by Design in New Zealand, the Korea Institute of Design Promotion (KIDP) and the Danish Design Centre, advocate and promote awareness of strategic uses of design among business and more recently in the public sector[436]. These councils lead various activities such as campaigns, showcases and demonstrator programmes to explore and create awareness to business, government and the public. But, designers have not traditionally had a formal role at the front-end of innovation or in strategy. The traditional designer role has been at the "downstream step of the development process" (Brown, 2008). Brown elaborates:

> "Unfortunately, many people continue to think of design in very narrow terms. Industrial products and graphics are outcomes of the design process, but they do not begin to describe the boundaries of design's playing field.... Someone must come up with the concept of what's going to be done" (Brown, 2005: 53).

Brown's company, IDEO, one of the most successful in the world to dominate this area, relays that work in strategic Design Thinking constitutes around 15% of its business (Myerson, 2008: 7), a clear indication that designer as strategist is still very emergent. However, this role is seen to be increasing where "during the latter half of the twentieth century design became an increasingly valuable competitive asset" (Brown, 2008a: 84). For example in October 2009, business journal, Businessweek profiled twenty-one designers they saw as changing the world of business[437]. In March 2010, the Design Council in partnership with business magazine, The Economist, hosted a design and business summit[438] exploring design's role in the areas of business and innovation.

More detail on the role of the designer as strategist is provided by Seidel who states that a lack of focus on the role of the designer in this context gives "little guidance for designers or their clients about the nature and breadth of opportunities available or about design-led strategic thinking" (Seidel, 2000: 35). Seidel's research aims to:

> "… help designer[s] consider in which of these roles they can best serve and how to match the selected roles with strategic decision-making processes within client companies" (Seidel, 2000: 40).

His study of five product design firms in London, identifies four roles of the designer in strategic planning with a key role being a strategy visualiser[439]. Seidel maintains that the strategy visualiser is the "most consistent role" in his research where designers develop "physical and visual prototypes [to] provide a test vehicle for strategy" (Seidel, 2000: 37). Strategy visualisation is also identified by others in the design literature (see Brown, 2005;

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[436] A recent article by McGuirk (2011) titled 'Mr Cameron, it's time to get the designers in' advocated for more use of designers within UK government and public sector. It profiled the use of design and designers in such a context in Finland. See http://www.guardian.co.uk/artanddesign/2011/oct/11/government-planning-designers-finland

[437] http://images.businessweek.com/ss/09/09/0930_dschool_alumni/index.htm

[438] See http://www.designcouncil.org.uk/our-work/Insight/The-Big-Rethink/

[439] For an extended discussion on Seidel's (2000) research see *Chapter 2: Literature Review* (p 48)

Burkhard, 2005; Michlewski, 2006; Burns et al, 2006; Cipolla and Peruccio, 2008; Stevens, 2009) and in the business literature (See Mintzberg, 1999).

More recently Heskett (2002) and, Chung and Kim (in Cooper et al, 2011) have presented research on the roles of designers in product and online strategy. Heskett shows designers as interpreters, differentiators, connector and creators (Heskett, 2005). Perks et al (2005) discuss designer roles as functional specialists, multi-functional team members and process leaders (Chung and Kim in Cooper et al, 2011). Chung and Kim present two taxonomies of the designer's role in product and on-line strategy. They show that designers hold 'interactional' and 'functional' roles. 'Interactional roles'[440] of the designer show what areas of strategy they are involved and with whom in the organisation (Chung and Kim in Cooper et al, 2011). 'Functional roles' look more at the activities of the designer in strategy, which include: concept generators; service initiators; solution providers; and form givers[441]. While strategies in product and online services are different to Urban Farming, Chung and Kim's (in Cooper et al, 2011) research show that designers involved in the strategy space take on a variety of roles that can be defined as interactive roles, that is how a designer interacts with the organisation, and functional roles, that is, what the designer does in the strategy space.

Since the turn of the century design in business, innovation and strategy has become increasingly recognised. A short overview of this literature identifies that many authors and researchers recognise that design is valuable to strategy. Most outline; *what* is valuable about *design,* providing a limited understanding of; what is valuable about the *designer* and *how*. Only a handful of design researchers and authors such as Seidel (2000), Valtonen (2005), Myerson (2008) and Chung and Kim (in Cooper et al, 2011) explore the latter – the designer's role and practices in the strategy space. Yet none focus attention on this role in public and social sector innovation. It is for this reason that the Urban Farming case study discussion will build on the research, literature and understanding of design in strategy by exploring the know-how (Ryle, 1949) or key practices of the designer as strategist.

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[440] These role types include - Initiative: where designers provide guidelines for new product strategies; Participative: where designers formulate new product strategy; and Subordinate: where designers are involved in the implementation of the strategy (summarised from Chung and Kim in Cooper et al, 2011: 262-3).
[441] Concept generator: designers here create competitive brands; Service initiator: designers create new user experiences; Solution provider: designers materialise web services; Form giver: designers decorate the digital content. (summarised from Chung and Kim in Cooper et al, 2011: 263-4).

Key practices of the Designer as Strategist

In review of the literature, the key practices of the designer as strategist in the Urban Farming project include:

- Devising a strategy for implementation[442];
- Demonstrating characteristics of strategic thinking[443];
- Visualising strategy[444]; and
- Working at the front-end of innovation[445].

Devising strategies for implementation

Traditional concepts of strategy use the military metaphor to convey a strategist who devises a plan and deploys capabilities and resources to carry out the plan. In the Urban Farming project the design team devised a four-part programme, presenting this as a visualisation to the local Council, who then implemented the plan. In their devising of the plan, the designers crafted a strategy (Mintzberg, 1987b) based on a good understanding of the people and context. Recognition of Middlesbrough's agricultural surrounds and priorities of the local community were key to inspiring the Urban Farming proposal. The Council saw the proposal as a "new model of community engagement… bringing people together by a series of events converging into a Town Meal" (Project Stakeholder 15, 2008: 7). In the early stages of the Urban Farming, implementation was attempted by designers, but the Council recognised the different skill set required for carrying out the plan, as opposed to devising one. This take-over of ownership was an apprehensive process, which the designers described as "tricky" (Designer 13, 2008: 21). Traditional processes of strategy outline that strategies are devised by leaders and their implementation is delegated to others. The Urban Farming project process is similar to such a process where the design team devised a strategy for implementation by the Council.

Demonstrating characteristics of strategic thinking

The designer as strategist displays characteristics of strategic thinking. In the literature Lietdka (1998; 2001) and Seidel (2000) bring together the areas of design and strategy to show the contributions of the designer in such a context. Liedtka demonstrates the similarity between the two fields by comparing design thinking literature and theory in strategic thinking. She outlines that both design and strategy are value-driven, require synthesis, abductive thinking and seek "new and emergent possibilities" (Liedtka, 2001).

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[442] As in Harvard Business School (2005); Mintzberg (1987a); Whittington (1993); Mintzberg and Quinn (1998/2002)
[443] As in Liedtka (2000); Liedtka (in Hitt et al, 2001)
[444] As in Seidel (2000). Also in see Brown (2005); Burkhard (2005); Michlewski (2006); Burns et al (2006); Cipolla and Peruccio (2008); and Stevens (2009)
[445] As in Myerson (2008).

In being value-driven Liedtka writes that "a strategic thinker has a mental model of the complete end-to-end system of value creation" (Liedtka, 2001: 89), further pointing out that successful design connects with the values held by the audience. In Urban Farming designers were led by a "human-centered design ethos" (Brown, 2008: 84), to devise solutions that connected and engaged people to the issue of food. Brown writes that "any real-world strategy starts with having fresh, original insights about your market and your customers" (Brown, 2005). Such insights were uncovered in Urban Farming by discovering what was happening in Middlesbrough daily life. For example, a key insight for the team was "what made that place tick… wasn't reducing food miles [it was] image more than anything" (Designer 14, 2008: 10). It was observations and conversations with people that helped ascertain this issue that became a key part of inspiring the Urban Farming proposal, in particular the Town Meal event, which was a high profile event that would showcase the community spirit. Observational research also identified a number of derelict sites around town. This led to the design team to envision more productive uses of the land that would encourage local production of food, reduce the distance food travelled from producer to consumer and improve the visual landscape of Middlesbrough. The designers devised the idea of Grow Zones, a campaign for local food growing that would involve the community in the process and in the making of the Town Meal event (as it would be the locally grown food that would be for consumption). The designer's knowledge of the local people and context inspired and informed ideas for Grow Zones and the Town Meal, which were central to the Urban Farming narrative, creating an "end-to-end system of value creation" (Liedtka, 2001: 89).

The designer as strategist shows how they enable possibilities to emerge through synthesis where synthesis is about bringing together different parts to form a whole. Liedtka writes that synthesis occurs "out of often disparate demands [and] a coherent overall design must be made to emerge" (Liedtka, 2001: 88). The image issues of the community, the derelict land and the recognition that reducing food miles was an "abstract concept for people" (Designer 14 in Dott Debates, 2007) led designers to form ideas based on "having a fun experience [rather] than a theoretical, abstract thing" (Belk in Dott 07, 2007). The Urban Farming proposal addressed the priorities of the Council (to do with health and diet), the brief from Dott 07 (which emphasised food miles) and the interest of the Middlesbrough community (whose concerns were identity). The design team emphasised the issue of identity and fun experiences, to engage residents and bring the project to life. Choosing this as a focal point was deliberate and saw people "falling over themselves to sign up to it" (Designer 14, 2007: 10). The designer as strategist in Urban Farming highlights how food can be a lynch pin for a number of community priorities for Middlesbrough that included health, diet, exercise and community spirit. The Council reflected that Urban Farming "was really well aligned for many priorities for this Council but we hadn't pulled them together in that way" (Project stakeholder 1, 2007: 4). In this the designer as strategist also allows for "new and emergent possibilities" (Liedtka, 1998; 2001) by being:

"Responsive to their materials, learning about their organisations and industries through a personal touch. [Strategists] are also sensitive to experience, recognizing that while individual vision may be important, other factors must help determine strategy as well" (Mintzberg, 1987b: 73).

Urban Farming resulted in the participation of 1200 people and an attendance number of 8000 at the Town Meal event. The response of the community illustrates how the designer as strategist allows strategies to emerge by bringing together priorities and values held by all the different stakeholders, with the Urban Farming narrative demonstrating an end-to-end system of value creation.

Abductive thinking is the final characteristic that Liedtka (1998; 2001) states both design and strategic thinking share. Abductive thinking was described by Aristotle almost 2500 years ago as a form of reasoning where "things can be other than what they are" (2nd Road, 2006: 7). In other words "abductive thinking focuses on what is possible rather than provable" (Liedtka, 2001: 88). This practice of the designer was more widely discussed in *Chapter 10: LowCarbLane: The Designer as Provocateur* (p 259-263) where designers use design as both method and medium to create and communicate future scenarios (Dunne and Gaver, 1997: 446). The four-part Urban Farming proposal is a demonstration of abductive thinking. It proposed a new model of community engagement, so new to the Council they were initially very hesitant of it, saying it "both excited me and appalled me" (Project Stakeholder 15, 2007: 7). In the strategy literature Hamel and Prahalad identify strategic intent, which works outwards to "force the organisation to be more inventive, to make the most of its limited resources" because strategic intent calls for organisations to make "a sizeable stretch [where] current capabilities and resources will not suffice" (Hamel and Prahalad, 2003: 153). The Council saw the Urban Farming project as high risk, mostly because the proposal exceeded the Council's current organisational capacity[447]. However, it let the Council draw on its role as the heart of the community, networking and partnering with many other organisations where it had its "finger in a lot of pies" (Project Stakeholder 1, 2007: 22) enabling them to deliver the project. It was this collaboration that made the Urban Farming proposal possible[448] and resulted in "a tremendous

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[446] Critical Design in *Chapter 10: LowCarbLane The Designer as Provocateur* (p 255-6) demonstrates how designers create scenarios of the future by using design as both methodology and medium. Saverbox from the LowCarbLane project and the ARK-INC project are key examples.

[447] The Council has said they questioned whether they had "the organisational and institutional infrastructure to deliver [the project]?" (Project Stakeholder 2, 2007: 7).

[448] We could continue the discussion to say that the Urban Farming project created what Mintzberg and Quinn (2002) call an adhocracy. Mintzberg and Quinn (2002: 309) state that: "Sophisticated innovation requires a very different configuration, one that is able to fuse experts drawn from different disciplines into smoothly functioning ad-hoc project teams. To borrow the word coined by Bennis and Slater in 1964 and later popularised by Alvin Toffler's *Future Shock* (1970), these are the "Adhocracies of our society." The Urban Farming concept saw that at each stage of the programme, delivery capacity from different organisations would be needed. For example in Grow Zones, environmental regeneration organisation, Groundwork South Tees, led the delivery of boxes and seeds for food growing. The Kitchen Playgrounds needed to tap into locals with cooking knowledge and the Town Meal was sponsored by organisations such as Sainsbury's to provide food that couldn't be locally grown. The Urban Farming adhocracy created "a tremendous partnership across the Council with external agencies and the community and voluntary sector and in the public and private sector as Sainsbury's came on board" (Project Stakeholder 1, 2007: 13). The nature of an adhocracy sees that an, "organisation is never quite sure what it will do next, the strategy never really stabilizes totally but is responsive to new projects, which themselves involve the activities of a whole host of people" (Mintzberg in Mintzberg and Quinn, 2002: 318) and this is reflected in the legacy of Urban Farming. The adhocracy of Urban Farming informed the Council of the relationships and capabilities it could leverage in its network and develop a legacy of the Urban Farming project which is in its 4th year in 2010.

partnership across the Council… with external agencies and the community and voluntary sector and in the public and private sector" (Project Stakeholder 1, 2007: 13). Designers create strategic intent, encouraging organisations to be more innovative, inventive and achieve more than their current organisational capacity. The designer as strategist demonstrates a number of similarities between design and strategic thinking.

The designer as strategist is value-drive, uses synthesis and abductive thinking and allows for "new and emergent possibilities" (Liedtka, 2001). Later in this chapter the latter is elaborated where the value of the designer is argued as continuously connecting people to policy.

Visualising strategy

Designers have traditionally worked at the tactical end of projects (Brown, 2008a) making them very capable of creating very "tangible, real outcomes" (Brown, 2005: 52), even if ideas are highly conceptual. Being able to imagine futures and make them tangible and visible is a key practice of the designer as strategist. Similar to discussions in *Chapter 10: LowCarbLane: The Designer as Provocateur* (p 257-9) Seidel describes the strategy visualisation of designers where they "provid[e] physical examples and visual projections of what future product development and company strategy would look like" (Seidel, 2000: 37)[449]. The designer as strategist uses visualisation to bring tangibility to high-level strategic concepts and such visualisations are defined as:

> "… the systematic use of complementary visual representations to improve the analysis, development, formulation, communication, and implementation of strategies in organisations" (Burkhard, 2005: 528).

In Urban Farming, designers communicated and visualised their concept with simplicity and on a single page. The visualisation showed the narrative of the programme, presenting key stages and suggesting resources and capabilities for implementation. The visualisation was simple and understandable yet enough to inform and inspire the Council to deliver the idea and identify associated risks and resources.

In strategy literature, communication is one of the most important tools for a strategist:

> "…to make clear: what the strategy is for; why the strategy is important…who will benefit [and] what role each person will play" (Harvard Business School, 2005: 117).

Kaplan and Norton have written about strategy maps as a way to increase the success of strategy implementation. Research with 300 managers showed that the implementation of strategy often fails (Kaplan and Norton, 2000) so they proposed that business executives visualise or map their

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[449] There is an overlap in the roles here between the Designer as Strategist and the Designer as Provocateur. See *Table 12.3* of *Chapter 12: Conclusion* (p 302-3).

strategies to bring better clarity to the organisation of: its strategy; the value it will create; how people will work together to realise a strategy; and identifying gaps in the strategy to enable corrective action to be taken (adapted from Kaplan and Norton, 2000).

Visualising strategy, and other forms of business and organisational knowledge, has created an industry[450] for designers in producing engaging visualisations, from scribing to synthesising data[451]. UK-based company, Cognitive Media state that visual scribing of meetings and workshops provide a simulating alternative to meeting minutes where "pictures rather than words… has provoked a different conversation and different thoughts" (Cognitive Media, 2009). Visualisation also has "the ability to expand [ideas] rather than simply reflect" (Seidel, 2000: 38).

The use of visualisation in Urban Farming enabled designers to share their vision for a longer-term strategy for Middlesbrough. It also allowed the Council to share their vision with others. The edible landscape map by architects, Andre Viljoen and Katrina Bohn, proposing over 200 grow zones around Middlesbrough was proudly showed to me during the qualitative research for this investigation, having taken up residence at the centre of Council offices. At the time the Council said this strategy map was:

> "…very challenging, but very interesting [and] a different way of looking at the activity of growing, of producing food and of landscape as well" (Project Stakeholder 2, 2008: 4).

Working at the front-end of innovation

The final practice of the designer as strategist is where the designer works at the front end of innovation (Myerson, 2008) signposting directions for the future. Urban Farming demonstrates how design can catalyse grassroots community action to inform and change government policy. The implementation and success of Urban Farming inspired the Council to take a policy driven approach to food to address issues in healthy eating, active lifestyles and well being. This is shown in the continuation of the Urban Farming programme and the expansion of the project into a broader initiative called Healthy Towns, which not only runs numerous related community activities but has also seen the development of partnerships between the Council and other local organisations. Results of Urban Farming were described by the Council as a mix of "outcomes rang[ing] from the very simple [and] practical to the signposting to new thinking and new policy directions" (Project Stakeholder 2, 2007: 10).

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[450] Companies such as Cognitive Media (UK), Radarstation (UK) and 2nd Road (Australia) all use visualisation from design practice to articulate and communicate strategy.
[451] Scribing to synthesising data is what UK-based company Cognitive Media offer in their range of services. See http://www.cognitivemedia.co.uk.

The value of the Designer as Strategist

In the project, the role of the designer as strategist is strongly demonstrated in Urban Farming. The first interpretation of the designer as strategist is due to practices of the designer, which resonated with traditional approaches to strategy described in the literature where strategies are devised and deployed. The designer as strategist also demonstrates characteristics of strategic thinking (Liedtka, 2001). A result of this sees designers work at the front end of innovation (Myerson, 2008) to inform policy decisions. The case study analysis and its correlation with strategy literature indicates that the value of the designer as strategist is where he/she uses insight and understanding of people to craft a strategic plan based on what is relevant and engaging to people and their context. Designers use design research to inform strategy creation and then use visualisation skills to communicate these strategies. The research helps "zero in on the top priority" (Harvard Business School, 2005: xvii) and in Urban Farming, designers used design research to develop an understanding of the people and local context. Designers demonstrate the value of their role as strategist by "look[ing] up from our desks and step[ping] outside our offices and embrac[ing] the people we are designing for" (Alben, 1997: 18). This enables designers to create strategies that are:

> "…grounded in the real world, to design in appropriate and sometimes compelling ways. At the center are real people, not design theory or abstract, disconnected concepts" (Alben, 1997: 9).

Being grounded in the context guides the creation of practical and relevant strategies that also link to organisational priorities. For example, Grow Zones reduced food miles and addressed improvements in people's diet and lifestyle through the growing and consumption of fresh food, and physical activity in planting and cultivating food outdoors.

Throughout the process of strategy creation, the designers ensured Urban Farming remained relevant to the people of Middlesbrough. Much of the Urban Farming plans evolved based upon feedback from the residents. For example the Kitchen Playgrounds, which had initially intended to copy Meal Assembly Centres in the USA, changed to reflect the community's desire for something more fun and playful, hence the name Kitchen Playgrounds and activities of experimenting with the local produce, rather than using the Meal Assembly Centre model to cook a week's worth of food for people to take home. The Urban Farming designers were skilled at evolving the strategy based on feedback. The strategy literature calls this an 'emergent strategy' where "action drives thinking" (Mintzberg in Hitt et al, 2001: 77). These strategies are opposite to 'deliberate strategies' which are formulated before they are implemented (Mintzberg, 1987: 68; Mintzberg and Quinn, 1998). While upfront the Urban Farming project was a deliberate strategy, as the project developed, designers let the strategy evolve based on feedback from the local community.

The value of the designer as strategist is to craft a strategy that addresses both aims and objectives from the top, and engages and is relevant to people on the ground. Designers described this as "think[ing] laterally about how to achieve the objectives of the brief" (Designer 14, 2008: 10). Or as Chung and Kim state in a private sector context:

> "…design can connect companies and consumers in a meaningful way by presenting companies with the real voices of the consumers that they act upon, as well as creating competitive advantages by translating business strategies into actionable plans for products and services with superior emotional and experiential value in diverse industries" (Chung and Kim in Cooper et al, 2001: 261).

The Urban Farming project delivered a range of outcomes from the practical, such as food growing tools for urban farming, to the signposting of future directions for the Council in the area of local food and healthy lifestyles. The value of the designer as strategist is seen where their practices connect people to policy.

Overlaps with other roles in Dott 07

The designer as strategist in Urban Farming shares two main roles with other Dott 07 projects. These are:

- Provocateur[452] – Where designers presented a provocation demonstrating a new model of community engagement and signposts new directions for policy. However the difference between a provocateur and a strategist is that the strategist focuses more within an organisation, with an interest for its long-term future, rather than attempting to incite change in the public domain; and
- Researcher[453] – Where research played a key part in informing the Urban Farming ideas and its development.

The Urban Farming project sits at the opposite end of the 'designing *with* and designing *for'* spectrum to Alzheimer100 because it employed the least co-design of all Dott 07 projects. However, the success of Urban Farming shows that while Dott 07 encouraged designers to design *with* rather than *for* people, approaches such as co-design are not necessarily better than other design approaches. The successful results of the Dott 07 projects at either end of the spectrum show that it is the use of *appropriate* practices and roles of the designer related to the project context that create the most powerful positive social change.

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[452] See *Chapter 10: LowCarbLane: The Designer as Provocateur* (p 237)
[453] See *Chapter 6: Design and Sexual Health: The Designer as Researcher* (p 135)

Conclusion

The role of the designer in strategy is commonly discussed in design literature[454]. Myerson observes that the designer as strategist shows how their roles have moved from:

> "… being the handmaiden of commerce [to being] a voice of conscience and a catalyst at the first stages of the innovation process" (Myerson, 2008: 6).

Designers of the Urban Farming project demonstrate the designer as strategist in many ways from the traditional approaches of strategy to more contemporary ones. Reflections on the case study and discussion see the value of the designer as strategist as the ability to connect people to policy, where designers support high-level strategic decision-making while staying grounded and connected to the real lives and emotions of people.

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[454] See Buchanan (1995); Lester et al (1998); Seidel (2000); Liedtka (2000); Boland and Collopy (2005); Nussbaum (2005-2010); Martin (2006); Myerson (2008) for some of these discussions.

Chapter 12

Conclusion

Conclusion

"Never doubt that a small group of thoughtful, committed citizens can change the world.

Indeed, it is the only thing that ever has"

— *Margaret Mead, Anthropologist*[455]

Validating the seven roles of the designer beyond Dott 07

The literature reviews helped to validate the roles through discussion of their nature across analogous disciplines. This literature defined the seven roles in Dott 07 by identifying their key practices where a role is seen as a person's function "within a situation" (Waite and Hawker, 2009: 805) who demonstrate "a clutch of norms or rules that govern the *role*" (Bruce, 1999: 22). Other forms of validation of the roles emerged in the research process.

Some of the roles were validated by looking at the core competencies of the design companies who led the Dott 07 projects[456]. For example the role of co-creator identified in thinkpublic's Alzheimer100 project, is validated through a number of other thinkpublic projects. For example their work with the NHS in Experience Based Design[457] (EBD) where thinkpublic developed a toolkit to help hospital patients and frontline staff work together to improve and transform healthcare. In 2009 thinkpublic also produced a short film outlining 'The Story of Co-design'[458] to illustrate simply and quickly their co-design process. Co-design is then demonstrated as key to thinkpublic's practice and their competency. The role of the designer as facilitator, attributed to the OurNewSchool project led by Engine, can be observed by the number of facilitation methods that feature on Engine's method bank including Relationship Mapping[459], Graphic Facilitation[460], Distributed Scenario Brainstorms[461] and Personas[462]. The Design Council also recognise that one of Engine's strengths is facilitation, often engaging them to lead and facilitate workshops[463]. Finally, the roles of social entrepreneur and provocateur, attributed to the projects led by live|work, are evident in some of the company's past practices. In 2002 live|work were established as the first service design agency in the world[464]. They coined the phrase 'Service Design' among the industry, pioneering it in practice and later authoring a provocative piece on 'Service Thinking'[465] critiquing the 'product problem' where product development processes continue to be used today by organisations and governments to develop

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[455] From Bowman-Kruhm (2003) in *Margaret Mead: A Biography*.

[456] This avenue of validation could only occur for those projects led by a single design company. These projects were Alzheimer100, OurNewSchool, Move Me and LowCarb Lane.

[457] See http://thinkpublic.com/case-studies/case-study-experience-based-design

[458] The film can be viewed at http://www.youtube.com/watch?v=HWgJlwTDlRQ

[459] See http://www.enginegroup.co.uk/service_design/m_page/relationship_mapping

[460] See http://www.enginegroup.co.uk/service_design/m_page/graphic_facilitation

[461] See http://www.enginegroup.co.uk/service_design/m_page/distributed_scenario_brainstorm

[462] See http://www.enginegroup.co.uk/service_design/m_page/personas

[463] Such as in the Design Council's workshop that involved match-making designers and SMEs' of which Engine led in 2005. Short case study here: http://www.enginegroup.co.uk/projects/pcs_page/matchmaking_designers_and_smes

[464] live|work stated this on their 10th anniversary in 2012 at http://www.livework.co.uk/articles/livework-are-10

[465] See http://www.livework.co.uk/articles/service-thinking

services. They maintain that Service Thinking and Service Design is the antidote. These endeavours demonstrate live|work as both entrepreneurs and provocateurs.

Further validation of the roles in practice is illustrated through observations of design companies and individuals who were not part of Dott 07. Throughout this research investigation, Industry Ethnography and observations of the global design community have been an important part of informing the research. These observations led to the discovery of a number of design practices and their projects[466] outside of Dott 07 who validate the seven roles identified in the research investigation.

The Designer as Co-creator

The designer as co-creator involves multiple stakeholders throughout several phases of the design process. Participle[467] is a multi-disciplinary social business that evolved from the Design Council's RED team. They state that their approach "creates future services with and for the public" (Participle, 2008). Participle involve numerous people to co-create responses and develop services that address social issues. For example in their Southwark Circle project, Participle engaged over 250 people to develop the service that aims to improve the lives of the UK's ageing population. As a membership organisation, Southwark Circle, facilitates a network to help elderly people share interests, engage in activities and access support. Participle also assume the role of social entrepreneur, where they are involved in scaling up the Circle service nationally throughout the UK, reporting that the service is designed to be "self sustaining" and by its third year, should not require "further funds from the local authority." (Participle, 2008).

A similar social business, Australian-based InWithFor, blend design, social policy, social science and business to address social problems in partnership with The Australian Centre for Social Innovation (TACSI). A key part of the company's approach is to work in, with and for a local community meaning they partner with key stakeholders and work with the local community "to co-design, test and improve solutions" (InWithFor, 2009). InWithFor's project Family by Family co-designed a model to support families in crisis, involving 35 families throughout the process of research, design, prototyping and implementation (TACSI, 2011).

The Designer as Researcher

The designer as researcher co-ordinates, undertakes and communicates research for information and inspiration. London and Amsterdam-based design company STBY conduct "design research for service innovation" by "connect[ing] service providers with the lives and

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[466] The discovery of a number of design practices and their projects occurred through various peer review sessions, for example prentations of this research were given to the Dott 07 designers such as in the case of Engine (24 July 2009). See Appendix 23 for list of peer review presentations. These are formal peer review sessions that took place. Many conversations with industry as part of the Industry Ethnography also validated the roles.
[467] The evolution of Participle's approach largely stems from the work of the Design Council's RED team, which was largely documented in their report *Transformation Design* (Burns et al, 2006).

experiences of their customers" (STBY, 2011). One of their key methods, design documentaries[468], provides a "visual way of bringing everyday life into design processes, as a source of inspiration" (STBY, 2011). STBY's project for Nokia produced several films showing how people connect daily with the world. The films were used internally by Nokia to inspire various departments to design services that aligned with customers' real life contexts[469].

Social design agency, Uscreates, are usually involved in projects beyond research, but their research method of the Rantbox™ demonstrates the designer's role as researcher to develop innovative methods to gather research for inspiration. Rantbox™, a conversation space where people are engaged and filmed for project research, was used in a project for the NHS East Midlands to explore inappropriate uses of A&E (accident and emergency) services (Uscreates, 2010). Target groups were filmed as they relayed their opinions, behaviours and attitudes to A&E and how they use these services. The films formed part of a co-design day with the client to develop responses to address misuses of A&E, also illustrating how Uscreates assumes the role of co-creator.

The Designer as Facilitator

The designer as facilitator brings design methods to facilitate a process from reflection to invention. Thinkplace are an Australian-based strategic design consultancy who authored a paper on design facilitation[470] used in discussions for *Chapter 7: OurNewSchool: The Designer as Facilitator* (p 167). In their paper, Thinkplace recognise the expanding role of the designer from being sole creators to facilitators in organisations and government (Body et al, 2010). As a practice Thinkplace offer 'Strategy Design' which provides "guidance for ongoing strategic conversations and for ideas to shape these conversations into a coherent strategic identity and direction" (Thinkplace, 2011). Thinkplace state that strategy design helps organisations work together to make the journey from reality to vision[471] (Thinkplace, 2011) demonstrating the resonance they have with the designer as facilitator who facilitates a process of reflection to invention using a number of methods inspired by design. While Thinkplace do not make explicit their methods, their practice describes the use of Design Thinking throughout their work such as visualisation and prototyping.

The Designer as Capability Builder

The designer as capability builder illustrates a role of the designer in building design capacity among individuals and within organisations. Projects such as the Experience Based Design toolkit by thinkpublic (page 7), Service Design Capability™ by live|work (p 210) and SILK

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[468] This method was developed and explored in PhD research by STBY co-founder Bas Raijmakers.
[469] See http://www.stby.eu/2010/06/15/2519/
[470] 'Design facilitation as an emerging Design skill: A Practical Approach' by Body et al (2010)
[471] For a visualisation see http://thinkplace.com.au/services/strategy-design

Innovation Lab at Kent County Council by Engine[472] (SILK, 2007) demonstrates the designer as capability builder for the transformation of organisations and government. This capability building role usually forms part of a design company's offer and an interesting model has recently emerged from IDEO that explores the scaling of design capacity around the world and across many organisations. In 2010 IDEO in partnership with ExperiencePoint, developed Design Thinker[473], a four-hour simulation that leads teams through Design Thinking techniques (ExperiencePoint, 2012). Design Thinker illustrates a role of IDEO as a capability builder, at scale and at a distance, as workshops are not necessarily delivered by IDEO, nor do they have to be led by a designer (in Australia, where there is no IDEO office, Design Thinker is licensed to a group of generalist facilitators giving IDEO a presence in the country without having a practice in the location). Designer Thinker illustrates a commoditisation of Design Thinking for a broader scale of application.

Another model that brings design capability into business and government has been where designers are employed in client organisations, working from within to affect change, transformation and innovation. One such example is seen at BT Financial Group in Australia, whose in-house Customer Centred Design and Innovation team uses an "agency structure" (Yom-Tov, 2011) to enable strategic uses of design across the organisation[474]. In the public sector, former thinkpublic designer, Ian Drysdale, works within Shropshire Council to build design capacity in a transformation programme that explores "design based approaches" to reform services and "help [staff] think differently and creatively about how they might achieve the ambitious cash savings needed over the next few years" (Drysdale, 2012). Part of Drysdale's role includes training in design process and methods, and educating internal civil servants to better understand the value of design. Of their move from consultant to internal employee, Tom-Yov states that assumptions of the client are "debunked" by "living inside the organisation" (Tom-Yov, 2011). Drysdale highlights the opportunities, saying that while there are lots of barriers "it's possible to make the projects you want to happen, happen" (Drysdale, 2012). The designer as capability builder role illustrates that there are a number of different engagement models designers pursue to spread and share the uses of design for positive change[475].

The Designer as Social Entrepreneur

The designer as social entrepreneur has a vision and mission to improve social conditions, and aspirations to scale their ideas society-wide. commonground, a London and Lisbon-based socially responsive design organisation state that their aim is:

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[472] The SILK Lab at Kent County Council "build[s] capacity across their organisation for connecting people's everyday lives with the process of policy making and service design" (Engine, 2008)

[473] See: http://www.ideo.com/news/archive/2010/02/#pos3698

[474] The Customer Centred Design and Innovation team act as an internal design agency working with different parts of the business on projects (to lead learn-by-doing approaches) and training (to equip internal staff with design skills) (Yon-Tov, 2011).

[475] Other engagement models observed in industry include the formation of design teams that work or partner with organisations. For example InWithFor, mentioned earlier in this section, works with The Australian Centre for Social Innovation (TACSI) helping them, mostly through project-based work, "turn bold ideas into better lives" (TACSI, 2010).

> "To design in response to social challenges and not just market needs. Socially responsive designers want to meet people's real needs, make a difference in society, being sustainable and creative." (commonground, 2011).

In their project FLiP[476], which started out as a competition idea to break the cycle of youth offending through digital applications, commonground used similar design methods to Move Me such as design research, visualisation and prototyping to identify opportunities, test ideas and build them, resulting in an online tool to profile youths and match them with employment opportunities. commonground were awarded seed funding to pilot their idea and their plans for FLiP include being able to "scale the project up and offer it to other councils and organisations in the UK and abroad" (commonground, 2011). The methods used and vision to scale ideas society-wide see commonground as social entrepreneurs. commonground have largely operated as a consultancy, and recent changes to the political and economic climates in the UK and Portugal have led them through a process of changing this business model[477]. This illustrates the challenge of social entrepreneurs to maintain fiscal viability, in particular through tough economic times. It also highlights the different social design business models explored by designers[478]. One such has been where designers and design companies have invested in social initiatives for example IDEO's OpenIDEO platform and thinkpublic's social ventures[479] such as The Real Work Experience which aims to engage young designers in using design to address social challenges (thinkpublic, 2007). The model of partnerships has also been explored by designers. For example the previously discussed Southwark Circle by Participle which saw designers work in a partnership model, rather than a consultant-client model to create a financially sustainable service. The role of the designer as social entrepreneur not just occurs in a design project, where designers work *in* their business, but the role is evident where designers work *as* a business. This is where a designer as social entrepreneur leads an enterprise that has first and foremost a social purpose. The designer here does not lead a design company, but a service organisation focused on addressing social issues. One illustration of this is the social enterprise, The Amazings, led by designer Katie Harris. The Amazings support and help people (Amazings) who have retired, or are about to retire, to share their skills, knowledge and passions with the wider community through activities (The Amazings, 2011). The Amazings organise the marketing and activities. They cost between £10 to £30 to attend, of which an Amazing and The Amazings both share in the profit. Harris states of the social enterprise: "I've become a big believer in sustainable social business models" (Harris, 2011) illustrating a divergent model from the traditional consultancy models of earlier social design projects.

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[476] For commonground's case study see http://gotocommonground.com/index.php/projects/flip
[477] In conversation with the designers of commonground and also implied at http://gotocommonground.com/index.php/blog/post/cmngrd-wishes
[478] A few social design companies have also recently (around 2011) explored different business models since the global economic downturn which started in 2008 and the change in UK government since 2010.
[479] thinkpublic have been investing in a number of social ventures since 2007. View them all at: http://thinkpublic.com/home/social-enterprises

The designer as social entrepreneur outlines a number of different engagement models of designers that they choose to assume when working with clients, partners and/or toward a social goal. These include the designer as: *consultant*; *partner*; *social investor*; or as a *social innovator (leader of a social enterprise)*. From the previous discussions of the designer as capability builder, another engagement model of the designer includes as *internal employee* (of a client organisation).

The Designer as Provocateur

The Designer as Provocateur in LowCarbLane is someone who uses design (methodology and medium) to create a provocation to elicit a response. These provocations, such as Saverbox, eventually become instutionalised by governments and organisations. Design, technology and business company Sidekick Studios created Buddy[480], a digital platform that allows people with mental illnesses to "keep a daily diary of what they are doing, and how they are feeling" (Sidekick Studios, 2011). This information is used by the NHS to improve therapy sessions and focus on recovery goals. Buddy started out as a project under NESTA's Reboot Britain programme[481] that looked at challenges faced by the UK and how technology could help address them. Buddy was one of ten projects to go live with public sector partners under Reboot Britain and was initially presented as a radio that would allow mental illness patients to 'broadcast' their moods to a selected social network (NESTA, 2009). Today Buddy has developed into a sophisticated digital platform that supports therapy services through daily text messaging (Buddy, 2012) and is being rolled out across the UK and by 2014 will have 1 million users (Sidekick Studios, 2011). Buddy demonstrates Sidekick Studio's role as the designer as provocateur by using design (alongside technology and business) to create a provocation and elicit a response that has led to the institutionalisation of the idea in the NHS. Other areas of Sidekick Studio's practice further demonstrates their provocateur role. Its recently established Sidekick Ventures[482] allows the studio to invest time in their own interests to solve social problems by creating their "own products and services, and setting ourselves our own goals and challenges" (Sidekick Venture, 2012). This self-initiation of projects illustrates Sidekick Studio's provocateur role, and also as social entrepreneurs where one of Sidekick Venture's success stories has been the previously discussed, The Amazings.

The Designer as Strategist

The designer as strategist devises and visualises a strategy for implementation, with the distinctive aspect of a design strategist as being able to connect people to policy, or strategy. IDEO, often assume a strategist role in a number of their projects. One such is the Coasting

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[480] For more on Buddy see http://sidekickventures.net/businesses/buddy
[481] See http://www.nesta.org.uk/areas_of_work/public_services_lab/reboot_britain/assets/features/buddy
[482] See http://sidekickventures.net/our_story

design strategy for bicycle components company Shimano. IDEO's user research led them to identify how people were "intimidated by cycling" yet people "rode a bike as a child and had happy memories of doing so" (Brown, 2008). This led IDEO to design a new purchasing and riding experience that targeted casual cyclists, reconnecting them to the experience of riding as a kid. A new bike design, as well as a campaign called 'Coasting' was implemented to "raise awareness among casual bikers and educate independent dealership staff about the… new offering" (IDEO, 2010). This resulted in ten equipment manufacturers listing for Coasting bikes in 2008 (Brown, 2008) with three manufacturers selling out of all their bikes in less than a year (IDEO, 2010). IDEO demonstrates the designer as strategist where they connect people to strategy. IDEO further illustrate the strategist role where Coasting allowed Shimano to "organise growth across the entire bicycle industry supply chain" (IDEO, 2010) showing IDEO's "work right at front end of innovation" (Myerson, 2007).

Conclusion to validating the roles

In this section a number of design companies and individuals are identified to validate the seven roles of the designer in Dott 07 through discussions of their projects (both public and private sector) and practices. A result of identifying and exploring these designer roles in Dott 07 and among a number of other design companies, has led to greater insight into their practices. Although it is not a focus of this research investigation, it is important to note that the opportunities in exploring designer roles can greatly benefit and help design companies. For example in using the roles to: help them connect with their identity; recognise their strengths; identify the gaps in their capability; track their changing relationships with clients; reflect on how they deliver projects; and so on. This was a late observation of the value of exploring designer roles, hence it is only introduced here and suggested as a future research question later in this chapter.

This discussion has validated the seven roles of the designer identified in Dott 07. It illustrates the seven roles in contemporary design practice – identifying the key practices of the roles in a broad range of design companies and their projects. It notes that many designers and design companies are exploring new models of practice, and new models of engagement with clients and partners of design. This is in an effort to discover new ways for business, government and society to more effectively use design for social good.

Concluding summary to the research investigation

Since the turn of this century, designing for social good, has become increasingly popular among design communities across the globe. Many designers, academic institutions and organisations have demonstrated their interests in re-orienting design practices toward social good through projects, programmes, initiatives, debates, research and publication[483]. One of the most high profile programmes was Dott 07 which aimed to: "design and develop innovative new approaches to local issues that are also nationally relevant and support sustainable living in the UK" (Design Council, 2008d: 21). Dott 07 dealt with a broad range of issues employing a broad range of design methodologies to address them. This research has shown that many of these practices were innovative in their application in this context, contributing to emergent fields that are often referred to as Service Design or Social Design, where design is used most to address social issues. With the emergent nature of this area, and reflections on the Design Methods Movements which distanced academia from practice[484] (Press and Cooper, 2003: 127), this research developed a number of novel research methodologies to investigate the Dott 07 projects with the aim of re-engaging design practitioners in academic design research. The research process resulted in novel research methods to: collect, analyse and communicate data, using the concepts of layering, stockpiling and intersecting strands of data to create new knowledge[485]. The key concept of layering reflects the designerly approach taken in this research investigation. Heskett uses the concept of layering[486] to describe how designers evolve their practice and the industry where "new developments are added over time to what already exists" (Heskett, 2002: 6-7). The same can be said of this research journey which layered data through the 'circularity' of its process[487], and layered 'designerly' approaches[488] to discover new knowledge about design with academic research methods for rigour, reliability and validity. In this way the research aimed to circumvent the errors of the Design Methods Movement which:

> "…became more theoretical and many of those drawn to the subject turned it into the academic study of methods (methodology) instead of trying to design better things" (Jones 1971/1992: xi).

This research has grown to understand that investigating design requires some experimentation, appropriation and new combinations of research methods for the creation of new and relevant

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[483] The *Changing the Change Conference* in Italy, 2008 is evidence of industry and academia's interest in the re-orientation of design to social good.

[484] Press and Cooper (2003) describe this distancing as so: "Theory and practice have had at best an uneasy relationship within design. The design methods movement of the 1960's and 1970's was seen as an attempt to graft a rationalist cricket bat of method onto the delicate intuitive tomato plant of practice. While the movement raised relevant questions, it's distancing from the everyday practice of design (and the real world of designers) consigned it to a marginalised academic role. As a consequence the theoretical base of design has remained to a large extent impoverished, vulnerable to anti-intellectualism and perhaps justifiably, 'few practicing designers now see the relevance of what they know of design theory to what they practice'" (Press and Cooper, 2003: 127).

[485] Knowledge stockpiled as strands of data intersected over time converging into new knowledge.

[486] As discussed in *Chapter 3: Research Methodology* (p 92-3)

[487] "A circular process is encouraged: to research through reflecting, mulling over, speculating, is to practice the continual honing of thinking crafts to be employed and shared further through research" (Pryke et al, 2003: 4)

[488] Nigel Cross writes that there are "designerly ways of knowing, distinct from the more usually-recognised scientific and scholarly ways of knowing" (Cross, 2007: 22).

knowledge for design research and literature but also design practitioners. Design researchers typically run the risk of distancing themselves from design practioner audiences, mostly through the creation of design process models to describe the activity of designing. This research looks at design methodology from the perspective of different designer roles. It identifies seven (dominant) roles of the designer in the Dott 07 projects and explores them through understanding how designers assume these roles in practice. The findings resulted in an articulation of the valuable contributions designers make when they use design for social good. The reframing of design methodology from *process* to *people (roles)* was able to engage the practitioner audience, who closely followed and reflected on the research through various mechanisms such as peer review sessions. The remainder of this final chapter summarises the knowledge resulting from this research investigation: what is known; what is learnt; and signposts for future design research.

Practices and values of the different roles of the designer

Each of the central seven chapters in this thesis conveys a *case study* of the Dott 07 projects and a *discussion* that identifies the dominant role of the designer, elaborating on this role by exploring three to four key practices of the designer. The table below (Figure 12.1) summaries these roles and their practices as understood through Dott 07.

Role	Key practices
Co-creator	• Involve many stakeholders throughout the entire design process • Create the conditions for co-creation to happen • Co-create a range of outputs which results in different outcomes.
Researcher	• Coordinates the research exploration including planning the research, developing research tools and undertaking research in the field • Uses a number of different research methods drawn from a number of disciplines • Communicates and synthesises research findings.
Facilitator	• Leading the process • Populating the process with flexible use of methods • Espousing values and considering the environment for group work
Capability Builder	• Developing organisational and individual effectiveness • Joint diagnosis in defining business issues • Involving the client in planning for action • Using (design) interventions to achieve intent
Social Entrepreneur	• Having a vision and mission to improve social conditions • Being able to spot and seize opportunities and ideas • Using and mobilising limited resources • Spreading ideas society-wide
Provocateur	• Proposing alternative visions to the status quo • Using design as methodology and medium to raise awareness and engage audiences • Having values or ideas eventually institutionalised by governments and organisations.
Strategist	• Devising a strategy for implementation • Demonstrating characteristics of strategic thinking • Visualising strategy • Working at the front-end of innovation

Figure 12.1. Table summarising the roles of designers in Dott 07 and their key practices

In investigating the roles, a better understanding of them was sought in literature from outside of the design discipline. Almost all the roles, except for that of co-creator, were found to be pre-existing professional roles in other fields and disciplines. Analogous literature reviews were used to create and shape an understanding of designer roles. The process of comparing and contrasting designer roles with descriptions of the roles in analogous fields and disciplines, also led to an identification of the valuable contributions of designers. This research provides an articulation of the value and distinctiveness of the designer in design for social good. In addressing complex social issues, designers often work in multi-stakeholder co-operations. Articulating their value early in projects, even at inception, is critical if designers want to be key players in tackling complex social challenges. Often designers are seen to encroach, even replace, other fields and disciplines when it comes to the roles[489]. For example in the early

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[489] Some debates can be found in Myerson (2008) and Lee (2008). Furthermore, many conversations with designers identified how they were often "pigeonholed" into other professional activities such as market research and ethnographic research, rather than being distinctive as design research.

2000s design companies "became competitive with management consulting firms[490] in certain areas of work" (Buchanan, 2008: 3). The valuable contributions of designers in this research investigation does not suggest designers replace professional roles, rather it suggests that designers collaborate with other fields and disciplines to bring practices of design to better contend with the complexity of challenges they face, or are tasked with finding solutions for. Banerjee (2008) describes this as:

> "The interplay of the different disciplines is to be choreographed such that the key strength of each discipline is leveraged, and the opportunities for gestalt phenomena and emergent synergies is maximized" (Banerjee, 2008: 8-9).

The valuable contributions of designers are discussed in the Dott 07 chapters but are summarised here in Figure 12.2.

Role	Value of the Designer (in this role)
Co-creator	• Uses design as a way to involve the participation of people in the process for the co-creation of outcomes
Researcher	• Undertakes research for inspiration, not only information and uses research methods to build design capability
Capability Builder	• Leads the use of the design process, methods and approaches for individual and organisational development
Facilitator	• Expands the facilitator's toolbox with methods for reflection to invention
Social Entrepreneur	• Catalyses the process of social entrepreneurial activity using various design methodologies
Provocateur	• Uses design as a methodology and medium to create scenarios of the future
Strategist	• Connects people to policy (or strategy)

Figure 12.2. Table summarising the roles of designers in Dott 07 and their value

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[490] *The Designing for Services* project conducted by Lucy Kimbell and Victor Seidel (2008) at Oxford University's Said Business School observed this issue of differentiation between service design innovation and management consulting firms.

Complexity of designer roles in Dott 07

The sequence of the *case studies* and their *discussions* in the thesis was deliberate. Determining the sequence and structure of the case studies followed the consideration of the increasing complexity of the roles as observed from the data analysis which correlates with the spectrum of designing *with* to designing *for*. This spectrum describes the different engagement models designers had with the project stakeholders. At the designing *with* end of the spectrum, where designers involve a large number of stakeholders in several stages of the design process, designers must adopt more roles thereby increasing the complexity of their practice and the project. At the designing *for* end, designers lead the project process with a comparatively smaller number of stakeholders and in only a few phases of the design process.

One way to distinguish between the two ends of the spectrum is to look at them as different models of engagement. The designing *with* end being a collaborative engagement with stakeholders, and the designing *for* end being a consultancy engagement, the latter is the traditional form of engagement, which many design companies still apply, where they operate as consultant with a client. The spectrum was used to map the Dott 07 projects and for their sequence in the thesis.

Table 12.3 shows the Dott 07 projects mapped along this spectrum. It also illustrates the designer roles and the plurality of these roles across this spectrum, where at the end of designing *with* designers assume more roles due to the comparative increase of stakeholders involved in several stages of the design process. Key methods of each role are also identified in Table 12.3. The list of methods recognises the overlaps in the roles through their use of common methods such as visualisation, interviews, workshops and ideation[491]. These methods were used in every project and across every role.

In summary, Figure 12.3 represents the interface between designer roles, methods (processes), content[492] and context[493]. It shows the designer roles and corresponding projects. These projects define the content and context designers worked with. The key methods illustrate the overlaps between the roles. Finally the value of the designer in the different roles is also captured.

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[491] The importance of recognising the methods here is to reference not only the overlaps in the roles, but also the starting point for this PhD programme with the co-sponsors of this research investigation who were interested in the design methodologies in Dott 07.
[492] What was done.
[493] Issue that framed the project.

Role	Key methods for the role (in bold)	Number of roles demonstrated in the project							Value of role
		A100	DaSH	ONS	NW	MM	LCL	UF	
Co-creator	**Visualisation** **Workshops** **Mapping** **Observation** **Personas** **Ideation** **Interviews** Immersion Shadowing Cultural probes **Prototyping** **Project branding** **Skills Share** **Film**	✓	✓	✓	✓	✓			Uses design as a way to involve the participation of people in the process for the co-creation of outcomes
Researcher	**Visualisation** **Workshops** **Mapping** **Observation** **Personas** **Ideation** **Interviews** Immersion **Shadowing** **Cultural probes** Prototyping Project branding **Skills Share** Film	✓	✓	✓	✓	✓	✓	✓	Undertakes research for action and inspiration, not only information
Facilitator	**Visualisation** **Workshops** **Mapping** **Observation** **Immersion** Personas **Ideation** **Interviews** **Shadowing** Cultural probes Prototyping **Project branding** **Skills Share** **Film**	✓	✓	✓	✓	✓	✓		Expands the facilitation toolbox with methods for collaboration and creating futures
Capability builder	**Visualisation** **Workshops** Mapping **Observation** Personas **Ideation** **Interviews** Immersion Shadowing Cultural probes **Prototyping** Project branding **Skills Share** Film	✓	✓	✓	✓				Leads the use of the design process, methods and approaches for organisational development
Number of roles in the project		7	5	5	4	4	5	3	

Designing with ←---→ Designing for

Continued next page…

Role	Key methods for the role (in bold)	Number of roles demonstrated in the project							Value of role
		A100	DaSH	ONS	NW	MM	LCL	UF	
Social Entrepreneur	**Visualisation** **Workshops** Mapping **Observation** Personas **Ideation** **Interviews** **Immersion** **Shadowing** **Cultural probes** **Prototyping** Project branding Skills Share Film	✓		✓		✓	✓		Catalyses the process of social entrepreneur-ial activity. In particular uses design research and communicatio n for the development and sharing of ideas
Provocateur	**Visualisation** Workshops **Mapping** **Observation** Personas **Ideation** **Interviews** Immersion **Shadowing** Cultural probes **Prototyping** Project branding Skills Share Film	✓					✓	✓	Uses design as a methodology and medium to create scenarios of the future
Strategist	**Visualisation** **Workshops** Mapping **Observation** Personas **Ideation** **Interviews** Immersion Shadowing Cultural probes Prototyping Project branding Skills Share Film	✓	✓				✓	✓	Connects people to policy/strategy
Number of roles in the project		7	5	5	4	4	5	3	

Increased number of people involved increases the complexity and the need for more reflexive designers i.e. More roles

More complex ←---→ Less complex

Table key	
A100: Alzheimer100 DaSH: Design and Sexual Health ONS: OurNewSchool	NW: New Work MM: Move Me LCL: LowCarbLane UF: Urban Farming

Figure 12.3. Table showing the complexity of designer roles, key design methods and the value of the designer role in Dott 07

It should be noted that this research does not see either end of the spectrum as good or bad. Both Alzheimer100 and Urban Farming, which sit at opposite ends of the spectrum, displayed the strongest legacies in Dott 07, both having informed government policy. This suggests that designers working in and with the public and social sectors need to have the skills to understand the content and context, and then assume appropriate roles. The content and context include the people and stakeholders involved, the issue being dealt with and also the relevant policy landscape. It was observed in this research investigation that the more successful Dott 07 projects had either a strong awareness, or their projects were clearly linked, to government policy. This awareness and link to policy has tended to give projects a stronger legacy such as those seen in Alzheimer100 and Urban Farming.

The idea of roles

Design methodology research has largely investigated design as a process. Dorst (2008) encourages design researchers to investigate other dimensions of design methodology such as the object, context and actors of design. The actor, or designer, has been "the missing person in design research" (Dorst, 2008: 8). Using a Grounded Theory approach the initial research focus did not emphasise the roles of designers, instead this focus emerged through literature reviews, qualitative research, data analysis and successive peer reviews. This process confirmed that the designer in design methodology is a neglected area of design methodology research. Literature reviews showed limited research and elaborations on designer roles, in particular where design methodology has empahsised the process of design rather than the people involved. This has created a substantial body of knowledge on 'knowing-what'[494] of the design process, but paucity in design knowledge that emphasises the 'know-how' of the designer. Investigating designer roles allowed for an examination, elaboration and articulation of design 'know-how' and this was also found to be an engaging topic area for a broad audience.

In many conferences, workshops and meetings attended during the research investigation, designer roles had almost always arisen in discussion. This was mostly as an acknowledgement, a reflection on design activity and sometimes a recognition of a type of role, such as 'facilitator' that that enlarges the professional role of the designer. Furthermore, the roles were engaging to design practice because they were able to address many concerns (see p 42 for list) of designers that related to design methodology, such as shaping a new vocabulary for design methodology and discovering new insights about design such as the valuable contributions of designers compared to other professionals, which is helpful knowledge for design practice. Designer roles were an engaging subject of interest for both academic and practitioner audiences, which have not historically shared a good relationship[495]. It was an underlying intent and interest of this

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[494] As discussed by Ryle (1949) and discussed in the design discipline by Cross et al (1981 in Jacques and Powell, 1981: 26) and Cross (1984 in Young, 2006)
[495] See Archer (1981); Schon (1991: 308); Holness (2000); Banerjee (2008); Bayzit (2008); and Cross (2007a)

research investigation to better connect academia and practice and it has been found that the subject matter of roles succeeds in engaging both audiences of the design community. Furthermore, the roles seek to cross disciplinary boundaries. In the Prologue (pg 1) I state that a personal reason for entering academic design research was to do with my concern of the barrier of vocabulary between design and other disciplines. The naming of the roles in this research investigation was deliberately simple and universal. It enabled other disciplines and fields to recognise the roles, and enabled this research to compare roles of designers with those in other professions and fields. The considered use of vocabulary allowed for a "layering" (Heskett, 2002) and "stockpiling of knowledge" (de Certeau, 1986) by permitting me to move in and out of the design discipline, investigating design from within itself, but also visiting other disciplines to compare the roles leading the research toward communicating and articulating the designer's value.

The roles capture figuratively what designers do in contemporary design practice. The roles are effective in conveying the "gestalt" of designer attributes (Banerjee, 2008). They serve as a way to understand how the practices of the Dott 07 designers worked as a whole. This whole, rather than a single practice, is what makes designers valuable contributors to addressing and responding to complex social challenges. Often confusion about how the designer is distinctive from other professional roles results when only a single practice of design is identified. For example when designers are 'strategists' and are recognised for their skills in visualising strategy, this alone does not convey the value of the designer as strategist, nor should it because many other professions also recognise the value and undertake the visualisation of strategy (See in the business literature Mintzberg, 1999; Kaplan and Norton, 2000). Rather, visualisation is part of a "gestalt" (Banerjee, 2008: 4) of practices that form the value of the designer as strategist meaning the designer is a whole "complex" of practices (Banerjee, 2008) and these practices, on an individual basis can be shared with other disciplines. For example, the *process* of design is similar to that used in crafting strategy[496] and in facilitation[497]; the *principles* of design, in particular the human-centred ethos, is shared with anthropology which also emphasises the importance of people[498]; and the *attitudes* displayed by designers are not dissimilar to that of other creative disciplines such as artists and musicians. The *process*, *principles* and *attitudes* of designers are shared with many other professionals and disciplines, but it is the 'gestalt' of designer practices, which Banerjee (2008) calls the 'design complex' where the whole is more than the sum of its parts[499]. To get the 'whole' value or this 'gestalt' of practices, designers are needed. The designer is the *agent* of design practice and a number of researchers and writers have explored this as the culture of designers (Michlewski, 2006; Julier,

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[496] See Liedtka in Hitt et al (2001) on design and strategy. Also Benedict Singleton's PhD (2012) titled *On Craft and Being Crafty: Human Behaviour as the Object of Design*, which deals the metic capacity of design to craft a strategy of practice for a project.
[497] See Merholz (2007) on design and facilitation.
[498] See Sylver (2009) on design and ethnography.
[499] Aristotle first wrote that "the whole is greater than the sum of its parts" in his book *Metaphysics* (translation Lawson-Tancred, H., 1999).

2007), Design Thinking (Buchanan, 1995; Brown, 2008a) or design attitudes (Boland and Collopy, 2004). The use of the designer role helps to describe and demonstrate this 'gestalt' of attributes (Banerjee, 2008) and supports the notion that the designer is an *agent* of design practice.

Throughout this research a lot of reflection on the roles of designers has also let to some reflection on my role, as a designer, but mostly as an academic design researcher. As mentioned, one of my main concerns was to better engage academia and practice with each other. The opportunity as an academic design researcher was to be a conduit between academia and practice. This was manifested in a number of ways such as the development of a service design community and the co-authoring of papers with designers.

In 2008 a service designing community was co-founded and established in London. It served several purposes including the sharing of service design knowledge via a series of informal events among the practitioner community. These events fell into two main streams – Service Design Drinks and Service Design Thinks. The former were drinks nights for designers to come together socially to share experiences in practice. 'Thinks' nights were more formal evenings of presentations to share practices and the challenges commonly faced by service designers. In four years the network has grown globally to now include twenty cities in sixteen countries, which run similar models for service design knowledge exchange. The frequent meetings of the community allowed me to conduct novel research methodologies to develop "intersecting strands of data" (Derrida in Pryke et al, 2003) where research and the real world come together. For example Industry Ethnography conducted over the duration of the PhD investigation permitted continuous sharing, with the design practitioner community, of my research and ideas as they evolved and the receiving of feedback. It is important to note that my role as an academic researcher allowed a 'neutral' or apolitical position within industry, to connect and bring together different designers and design companies. This position made it possible to undertake Industry Ethnography.

Co-authoring of papers also occurred as collaborations between myself and design practitioners. This role brought together knowledge from design research and design practice. Several papers were co-authored, published and received by various audiences including the Service Design, design education and the medical fields (See Appendix 22). In co-authoring, my role was to help design practitioners reflect on their work, communicate their voice and experiences, and provide the literature base related to their projects and practices. I found that working with industry to help articulate their pratice resulted in the co-creation of new design knowledge and was highly rewarding. Dorst states that "Design researchers should join design practitioners in co-creating the design expertise and design practices of the future" (Dorst, 2008: 11).

The idea of the roles has shown to be a fascinating, worthy and relevant subject matter for doctoral investigation. The roles have been vehicles to reframe design methodology as *process* to *people*. The subject matter of the roles themselves has also been engaging for both academic and practitioner audiences. The research on roles has addressed a number of concerns of contemporary design practitioners identified early in the investigation (see p 42 for list) hence its ability to engage design practice. The roles allowed explorations of design methodology to evolve from 'knowing-what' to 'knowing-how' (Ryle, 1949) recognising the designer as an agent of design practice and bringing new insight into the valuable contributions of designers. The roles also make a contribution to new knowledge addressing the paucity of designer roles in design research and literature. The roles shaped new research methodologies that included a number of novel methodologies for qualitative research (e.g. Industry Ethnography) and data synthesis (e.g. visual case studies). This "layering" (Heskett, 2002) of design research and academic research was more widely discussed in *Chapter 3: Research Methodology* (p 92-3). The roles also demanded a constant interaction with industry to remain relevant to contemporary practice, and this led to a "stockpiling" of knowledge (de Certeau, 1986) and "intersecting strands of data" (Derrida in Pryke et al, 2003) where research and the real world came together. Finally, the roles offered me a way to reflect on my journey throughout this PhD, to discover answers to personal questions. In the Prologue I express how this research investigation had been driven by a thirst to find answers to many questions about design and about my own role as a designer. This PhD process has populated these questions with many answers and now, a field of new questions begins, that I do not doubt will be the focus and attention for my next journey.

Lessons and learnings from Dott 07

Research into Dott 07 and its design projects recognised many lessons and learnings. The following is a brief list of the lessons and learnings one can take from Dott 07. These may be simply a matter of interest or used to shape other frameworks[500] that host social design projects.

- **Social design projects demand multidisciplinary ways of working**: Dott 07 emphasised design and designers but observations of the projects showed that social design projects demand a 'cast of characters' (see p 86-7) of different people with different skills and knowledge who contribute to the project. Leadership is also vital on both sides to advocate and champion a design-led approach.

- **Co-design can harness creativity in everyone:** The projects of Dott 07 showed how co-design can encourage creativity and collaboration in everyone. Trust is an important

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[500] Manzini spoke of Dott-like projects and frameworks happening around the world at the Dott Cornwall 'Inspired' conference in 2010. For a review of the conference see *Dott Cornwall think tank 'Inspired'* at http://letterstoaustralia.blogspot.co.uk/2010/03/dott-cornwall-think-tank-inspired.html

factor in co-design to encourage a space for openness, sharing and honesty. Co-design also results in new knowledge and capabilities in design attitudes, process and methods, and the ownership of ideas that increase the likelihood of implementation and delivery.

- **Connecting projects to policy is important if government decisions are to be influenced and if there is to be a project legacy:** The Dott 07 projects with the strongest legacies were connected to policy. For example Alzheimer100 connected with the government's National Dementia Strategy.

- **A number of factors must be considered if projects are to have a legacy:** These include identifying an owner or owners of the project and project champions, who can carry forward ideas and the approach of design among their communities, organisations and even use the projects to lobby government. Project owners and champions become critical to carry forward ideas after the design team completes their work. Funding for delivery and implementation is also imperative for taking ideas into implementation. For example in the OurNewSchool project there was government funding for a new school building.

- **Find different ways to promote and celebrate the projects**: The Dott 07 Festival exhibition was a great way to promote and celebrate the projects of Dott 07 but the strategic nature of the projects and the length of time needed for the projects to produce visible results posed many challenges in displaying the projects in an exhibition. A similar challenge was also faced in the Dott 07 book, *Wouldn't it be great I if….* Many of the projects began to show their true results at least one to two years after Dott 07 finished. This co-funded PhD programme allowed for the legacy of Dott 07 to be captured and its long-term results documented. However more planning for other outputs to promote and celebrate Dott 07 over time could have been considered.

- **The legacies of Dott 07 are both visible and embedded:** Visible legacies of Dott 07 include Dementia Advisors, Bensham Hospital's GUM clinic and Walker Technology College's new-build. Embedded legacies include those buried or embedded in the communities and organisations who participated in the projects such as changes in attitudes and approaches to how communities and organisations address their complex challenges.

Signposts for future research

This research is about undersanding design methodology in design for social good. It does this by examining seven different roles of the designer in the projects of Dott 07. These seven roles can be described and catergorised into present, emerging and new roles (Figure 12.4). This catergorisation is based on literature reviews undertaken where the design discipline had either recognised or showed a paucity of description of these roles.

The 'Present roles' of the designer reflect those roles which have been discussed and documented in design literature. The designer as facilitator, researcher and strategist are common roles adopted by designers and some design literature already recognises such roles (e.g. Seidel, 2000; Burns et al 2006; Sanders, 2008).

The 'Emerging roles' of the designer describes those roles which are becoming known in the literature. In this category, it is the role of the designer as co-creator, which shows that while many designers have been involved in these practices[501], a limited but growing body of literature is currently being formed (e.g. Bradwell and Marr, 2008; Sanders, 2008).

Finally, 'New roles' of the designer describes those not found or known explicitly in the design literature. In my research, the literature employed to understand these roles drew mostly from fields and disciplines outside of design. In Dott 07 the roles of provocateur, social entrepreneur and capability builder drew on literature from fields such as; Futures Thinking, Social Entrepreneurship and Organisational Development to provide a better understanding and definition of these roles.

Present[502] roles of the designer	Emerging[503] roles of the designer	New[504] roles of the designer
Designer as facilitator	Designer as co-creator	Designer as provocateur
Designer as researcher		Designer as capability builder
Designer as strategist		Designer as social entrepreneur

Figure 12.4. Table of present, emergent and new roles of the designer based on research into the projects of Dott 07 and based on literature reviews in the design discipline which either identify with or display an absence of these roles.

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[501] Such as thinkpublic (UK) and Maketools (USA).
[502] Roles that are commonly known among the design literature
[503] Roles that are becoming known among the design literature
[504] Roles that are no yet known i.e. largely absent in the design literature

The present, emerging and new roles identify the opportunity for design research to contribute to the written discourse of design. Whichever of these roles are investigated, explored and articulated will no doubt contribute new knowledge to the field both academically and for practice. Other research questions that arose from this investigation include:

- **How to evaluate social design projects:** The evaluation of social design projects is currently a challenging area for designers. It is increasingly demanded by business and government in terms of the social return on investment (SROI)[505];

- **How to develop sustainable socio-economic paradigms for design practices involved in design for social good projects:** The different funding streams of public service design presents many challenges for design projects. For example the need for projects to involve more stakeholders in the process and that projects should be linked to policy. Funding streams impact the project direction and the socio-economic sustainability of projects as funding is not infinite. These are examples of the complexities designers must contend with in public service design projects;

- **Review of design business models:** Observations from industry noted that many design companies undertook private sector work to help the smaller margins and losses in public sector work. Business and engagement models of design practices could be investigated[506];

- **Investigating different engagement models designers have with clients, partners and project stakeholders:** Some identified include the designer as: consultant; partner; social investor; social innovator (leader of a social enterprise); and the designer as internal employee (of a client organisation).

- **What is social design:** The development of this space of design is emergent. In 2011 the Young Foundation appointed a Head of Social Design to help define what it is.'[507] Also in 2011 OpenIDEO was founded hosting an online community to share ideas for improving social problems;

- **What opportunities are there in design for International Development:** This is a field which is more developed in the USA for example IDEO's work with a number of NGOs[508]. Many practices from Dott 07 can be translated and oriented toward International Development projects for example in participatory governance[509];

- **Design education for new designer roles and practices**: How do educational institutions educate young designers for future roles that do not exist yet;

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[505] SROI accounts for environmental and social value, as well as financial value. In the UK the New Economics Foundation (nef) first published literature on SROI in 2007 in their brochure *Measuring Real Value: A DIY Guide to Social Return on Investment.*
[506] Victor Papanek (1971/1985) encourages designers to devote one tenth of their time to help underserved communities and other models of how designers engage in socially responsible work is discussed earlier in this chapter (p 294-5)
[507] See Kimbell (2011) available at http://designleadership.blogspot.com/2011/12/why-im-joining-young-foundation-as-head.html
[508] Non-government organisations.
[509] See *Chapter 5: Alzheimer100: The Designer as Co-creator* (p 132) for a discussion on this

- **What political interventions are needed to stimulate demand for design for public services:** RED proposed a clear link between design and policy (Burns et al, 2006). What conditions in the political context would stimulate demand for designers to work with and in public services;

- **How can social design projects and ideas be scaled:** Many Dott 07 project ideas found it challenging to scale-up their intervention. What kinds of enabling conditions are needed[510];

- **What other knowledge can be created from designer roles identified in this research**: Opportunities to develop a deeper understanding of each role would lead to how the roles could be improved, made more distinctive and taught to young designers;

- **What other roles of the designer exist in current design practice**: What new roles can be identified from similar projects for example in the design projects of Dott Cornwall 2010;

- **How can exploring and identifying designer roles be used to benefit practice**: For example how can these roles help identify a design company's core competencies; its strengths and gaps in capability; help frame and define projects; help decide engagement models (consultancy to collaborative) designers establish with clients etc.;

- **What is the legacy of Dott 07**: The measurement and impact of the Dott 07 projects needs to happen over a long period of time. Many legacies and results from the Dott 07 projects occurred between one to four years after the projects were completed and many are still on-going and worthy of further investigation[511].

This final chapter summarises the findings of the research investigation. It validates the seven roles and outlines their practices and the value of designers in the context of design for social good. A discussion on the overlaps of roles across the Dott 07 projects is also acknowledged showing how designer roles are complex. The idea of the roles is also discussed. It serves not only as an avenue to explore design methodology but also as a way to engage academic and practitioner communities in the discourse of the changing and expanding role of the designer. A research investigation on designer roles could not escape some reflection on my own role. Finally, discussion to signpost future research is framed by a typology of present, emerging and future roles of designers, and identifying a range of future research questions.

Contributions to new knowledge and the field of design

To research designer roles, this investigation used a number of research methodologies in a novel application to create a robust process of study. These methodologies were used through a

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[510] Jegou et al (2008) have begun research in this area
[511] In particular the projects – *Chapter 5: Alzheimer100 The Designer as Co-creator* (p 101)*; Chapter 7: OurNewSchool The Designer as Facilitator* (p 167)*; Chapter 10: LowCarbLane The Designer as Provocateu*r (p 237); and *Chapter 11: Urban Farming: The Designer as Strategist* (p 267).

process of 'layering' (Heskett, 2002), 'stockpiling of knowledge' (de Certeau, 1986) and using 'intersecting strands of data' (Derrida in Pryke et al, 2003: 31) to create new knowledge about the different roles of designers in design for social good. This research has resulted in a number of contributions to the field and discipline of design:

For academe: This research investigation reframes the idea of design methodology from an infatuation with process to a study of people as the different roles of the designer where each role constitutes a set of practices for exploration.

For design literature: This research makes a contribution to the limited discussions of designer roles in the literature, in particular the roles of the designer in design for social good where Margolin and Margolin state that the "research agenda for social design must begin by addressing a number of questions… what role can a designer play in a collaborative process of social interventions." (Margolin and Margolin, 2002: 28).

For design research: This research investigation has utilised a number of novel research methodologies. This has included the 'layering' of research methods from design practice with academic research methods to ensure appropriate investigative techniques to study design are married with rigour. Other novel research methods were employed throughout such as the use of Industry Ethnography to inform the research focus, process and allow for continuous participation in peer reviews to validate the research.

For design practice: Explorations of designer roles using analogous literature reviews has resulted in the identification and articulation of the valuable contributions designers make in social design projects. Such articulations are important for design practice to enable designers to have early conversations with stakeholders and clients on the value they are able to bring to a project at its inception[512]. These articulations allow designers to be key players in multi-stakeholder cooperations that address and find solutions for complex social issues.

This research has identified and explored seven different roles of the designer through the Dott 07 projects. It has resulted in the generation of new knowledge about design methodology by reframing design methodology research from *process* to *people*, examining this in the context of design for social good. It subsequently makes a number of contributions to the field of design, for both academia and practice, illustrating that new design knowledge can be discovered through examining design methodology as the different roles of designer, in particular where designers work toward addressing and responding to complex social challenges faced by governments, organisations and society at large.

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[512] Rather than only showing value once a project is completed.

List of references

2nd Road (2006). *The Conversation Toolkit*. Australia: 2nd Road.

Abras, C., Maloney-Krichmar, D., Preece, J. (2004). 'User-Centered Design.' In Bainbridge, W. *Encyclopedia of Human-Computer Interaction*. Thousand Oaks: Sage Publications.

Ackerman, F. (1996). 'Participants' perceptions on the role of facilitators using group support systems.' *Group Decision and Negotiation*, 5 (1). pp 93–112.

Agrrey, A. B. (1985). *The role of the textile designer in the British textile industry*. PhD thesis. UK: University of Manchester Institute of Science and Technology.

AIGA and Cheskin (2007). *An Ethnography Primer*. USA: AIGA

Alben, L. (1997). 'At the Heart of Interaction Design.' *Design Management Journal*. Summer. pp 9-27.

Alexander, C. (1964). *Notes on the synthesis of form*. Cambridge Massachusetts, USA: Harvard University Press.

Alger, J. R. M. and Hayes, C. V. (1964). *Creative Synthesis in Design*. USA: Prentice-Hall.

Alinsky, A. (1971/1989). *Rules for Radicals: A Pragmatic Primer for Realistic Radicals*. USA: Vintage Books, Random House.

Allen, T. and Thomas, A. (2000). *Poverty and Development into the 21st Century*. Oxford, UK: Oxford University Press.

Alzheimer's Society. [Online] Available at http://alzheimers.org.uk (Accessed 7 December 2009).

Alzheimer's Society (2009). 'What is dementia?'[Online] Available at http://www.alzheimers.org.uk/site/scripts/documents_info.php?categoryID=200131&documentID=106 (Accessed 22 June 2010).

Anderson, D. L. (1971/2010). *Organisational Development: The process of leading organizational change*. California, USA: Sage Publications Ltd.

Archer, B. L. (1963). 'Systematic methods for designers.' *Design.* London, UK: Council of Industrial Designers (CoID).

Archer, B. (1980). 'A View of the Nature of Design Research.' in Jacques, R. and Powell, J.

(1981) Eds. *Design, Science, Method: Proceedings of the 1980 Design Research Society Conference*. pp 30-35. UK: Westbury House.

Archer, B. (1995). 'The Nature of Research.' *Co-design, interdisciplinary journal of design*. pp 6-13.

Ardern, J. (2006). *ARK-INC project.* London, UK: Royal College of Art (RCA).

Ardern, J. (2010). [Online] *Jon Ardern.com*. Available at http://www.jonardern.com/projects/ark-inc/index.html (Accessed 7 February 2010).

Aristotle (translation Lawson-Tancred, H.) (1999). *Metaphysics*. London, UK: Penguin Books.

Arriva. [Online] Available at http://www.arriva.co.uk (Accessed 4 August 2009).

Arnstein, Sherry R. (1969). 'A Ladder of Citizen Participation.' *JAIP*, 35 (4) pp. 216-224.

Ashoka (2009). [Online] *Ashoka - Innovators for the Public.* Available at http://www.ashoka.org (Accessed 21 July 2009).

Asimow, M. (1962). *Introduction to design*. New Jersey, USA: Prentice-Hall Inc.

Aspelund, K. (2006). *The Design Process*. New York City, USA: Fairchild.

Auvine, B., Densmore, B., Extrom, M., Poole, S. and Shanklin, M. (2002). 'What do we mean by facilitation.' *Group Facilitation: A Research and Applications Journal*, 4. pp: 53- 55.

Banerjee, B. (2008). 'Designer as Agent of Change: A Vision for Catalyzing Rapid Change'. In Cipolla, C., Peruccio, P.P. (2008) Eds. *Changing the Change: Design Visions, Proposals and Tools Proceedings*. Turin, Italy: Allemandi Conference Press.

Bate, P. and Robert, G. (2007). *Bringing User Experience to Healthcare Improvement: The Concepts, Methods and Practices of Experience-based Design*. UK: Radcliffe Publishing.

Bayazit, N. (2004). 'Investigating Design: A Review of Forty Years of Design Research.' *Design Issues* 20 (1). pp 16-14.

BBC (2009). 'Urban Food Growing in Havana, Cuba'. [Online] *YouTube*. Available at http://www.youtube.com/watch?v=jRz34Dee7XY&feature=youtu.be (Accessed 10 June 2010).

BBC Radio (2010). 'Food & Farming Awards 2011.' [Online] *BBC Radio.* Available at http://www.bbc.co.uk/radio4/features/ffa/2010/finalists (Accessed 2 December).

Beck, E. (2002). 'P is for Political - Participation is not enough.' *Scandinavian Journal of Information Systems*, 17 pp 77-92.

Beckhard, R. (1969). *Organization Development Strategies and Models*. Massachusetts, USA: Addison-Wesley.

Beckman, S. L. and Barry, M. (2007). 'Innovation as a Learning Process: Embedding Design Thinking. *California Management Review,* 50 (1). pp 25- 30.

Bell, B. and Wakeford, K. (2008) Eds. *Expanding Architecture: Design as Activism*. New York: Metropolis Books.

Bellotti, V., Back, M., Edwards, W. K., Grinter, R. E., Henderson, A. and Lopes, C. 'Making Sense of Sensing Systems: Five Questions for Designers and Researchers.' *CHI Conference*. April 20-25 2002. Minneapolis, Minnesota, USA.

Benson, E. (2011). 'The Designer as Social Entrepreneur (Part 3).' [Online*]. Renourish | Design Sustainably*. Available at http://www.re-nourish.com/?l=articles_detail&id=111 (Accessed 3 August 2011).

Better by Design. [Online]. Available at www.betterbydesign.org.nz (Accessed 2 August 2007)

Bill and Melinda Gates Foundation, The. [Online] Available at http://www.gatesfoundation.org/Pages/home.aspx (Accessed 7 August 2011)

Billy Blue College of Design (2011). *Design Symposium*. Conference. 12 August. Sydney, Australia.

Binder, T., Brandt, E. and Gregory, J. (2008). 'Design participation(-s).' *CoDesign*. 4 (1).

Biriotti, M. (2006). 'About: Market Research.' [Online] *Design Council.* Available at http://www.designcouncil.org. (Accessed 9 June 2007).

BIS (2008). 'UK Renewable Energy Strategy Consultation.' [Online] *UK Renewable Energy Strategy Consultation – BERR.* Available at http://webarchive.nationalarchives.gov.uk/+/http://www.berr.gov.uk/consultations/page46797.html (Accessed 16 July, 2008).

Blaikie, N. W. H. (2000). *Designing social research: The logic of anticipation*. UK, Blackwell Publishing.

Blair, T. (2004). 'Building Schools for the Future.' [Online] Speech transcript available at http://www.number10.gov.uk/Page5353 (Accessed 21 June 2007).

Bloom, P. N. and Dees, G. (2008). 'Cultivate Your Ecosystem.' *Stanford Social Innovation Review*, Winter 2008. pp 46-53.

Blue State Digital (2007). 'Obama for America.' [Online] *Blue State Digital*. Available at http://www.bluestatedigital.com/work/case-studies/barack-obama (Accessed 10 July 2009).

Boardman, B. (1991). *Fuel poverty: from cold homes to affordable warmth*. London, UK: Belhaven Press.

Body, J., Terrey, N. and Tergas, L. (2010). 'Design facilitation as an emerging Design skill: A Practical Approach.'. *Design Thinking Research Symposium - DTRS8*. 19-20 October 2010. University of Technology Sydney (UTS) Australia.

Boland, J., Collopy, F. (2004) Eds. *Managing as designing*. California, USA: Stanford University Press.

Borja de Mozota, B. (2003). 'Design and competitive edge: A model for design management excellence in European SMEs.' *Design Management Journal: Academic Review*, 2. pp 88-103.

Borja de Mozota, B. (2006). 'The four powers of Design: A Value Model in Design Management.' *Design Management Review,* 17 (2). pp. 44-47.

Bornstein, D. (1996). *The price of a dream: The story of the Grameen Bank.* USA: University of Chicago Press.

Bornstein, D. (2007). *How to Change the World: Social Entrepreneurs and the Power of New Ideas*. USA: Oxford University Press.

Bowman-Kruhm, M. (2003). *Margaret Mead: A Biography*. USA: Greenwood Press.

Boyle, D. and Harris, M. (2009). *The Challenge of Co-production: How equal partnerships between professionals and the public are crucial to improving public services*. London, UK: NESTA and nef.

Bradwell, P., Marr, S. (2008). *Making the most of collaboration: An international survey of public service co-design*. London, UK: DEMOS and PriceWaterhouse Coopers Public Sector Research Centre.

Breslin, M. and Breslin, R. (2008). 'On the Case Study Method of Research and Teaching in Design.' *Design Issues*. 24 (1). pp. 36-40.

Bridges, W. (2004). *Transitions: Making Sense of Life's Change*s. Revised 25th Anniversary Edition. USA: Da Capo Press.

British Standards Institute. (2005). *British Standard 7000-6. Design management systems - Managing inclusive design - Guide.* UK.

Brown, D. and Harvey, D. R. (2006). *An Experimental Approach to Organization Development.* USA: Pearson Pretenice Hill.

Brown, T. (2005). 'Strategy by Design.' [Online] *Fast Company*. Available at http://www.fastcompany.com/magazine/95/design-strategy.html (Accessed 20 March 2008).

Brown, T. (2007). 'Design Thinking.' *InterSections: Design know-how for a new era*. [Online] Transcript available at http://www.designcouncil.org.uk/resources-and-events/Designers/Intersections-071/Intersections07/The-challenges-of-design-thinking/

Brown, T. (2008a). 'Design thinking.' *Harvard Business Review,* 86 (6). pp 84-92.

Brown, T. (2008b). 'What are the 10 big design challenges in the social sector?' [Online] *Design Thinking.* Available at http://designthinking.ideo.com/?p=12/#content (Accessed 6 February 2009).

Bruce, S. (1999). *Sociology: A Very Short Introduction*. Oxford, UK: Oxford University Press.

Bruce, S. & Yearly, S. (2006). *The SAGE Dictionary of Sociology*. UK: SAGE Publications Ltd.

Bryman, A. (2003). *Social Research Methods 2nd Edition*. Oxford, UK: Oxford University Press.

Buchanan, R. (1992) 'Wicked Problems in Design Thinking.' *Design Issues*. 8 (2), pp. 5-22.

Buchanan, R. (1995). 'Wicked Problems In Design Thinking.' *The Idea of Design- A Design Issues Reader.* Cambridge, USA: The MIT Press.

Buchanan, R. (2008). 'Introduction: Design and Organizational Change.' *Design Issues,* 24 (1). pp. 2-9.

Buchanan, R. and Margolin, V. (1995) Eds. *Discovering Design: Explorations in Design Studies*. Chicago, USA: University of Chicago Press.

Buchenau, M. and Fulton Suri, J. (2000). 'Experience Prototyping.*' Symposium on Designing Interactive Systems*. 17-19 August, 2000. New York, USA.

Buddy (2012). [Online] Available at http://www.buddyapp.org (Accessed 1 February 2012).

Burdick, A. (2007) 'Graduate education: Preparing designers for jobs that don't exist (yet).' [Online]. *Adobe Design Centre*. Available at

http://www.adobe.com/designcenter/thinktank/burdick.html (Accessed 16 October 2007).

Burkhard , R. A. (2005). 'Strategy Visualization: A New Research Focus in Knowledge Visualization and a Case Study.' *Proceedings of I-KNOW '05 Conference*. June 29 - July 1, 2005. Graz, Austria.

Burns, C., Cottam, H., Vanstone, C. Winhall, J. (2006). *RED Paper 02: Transformation Design*. London, UK: Design Council.

Businessweek. (1998). 'Steve Jobs: 'There's Sanity Returning.' [Online] *Businessweek* Available from http://www.businessweek.com/1998/21/b3579165.htm (Accessed 13 October 2011).

CABE (2006). 'Assessing secondary school design quality: Research report.' UK: Commission for Architecture and the Built Environment (CABE).

Cameron, D. and Clegg. N. (2010). *The Coalition: Our programme for government*. UK: HM Government. Available at www.direct.gov.uk/prod_consum_dg/groups/dg.../dg_187876.pdf (Accessed 9 October 2010).

Campbell, E. (2009). *You know more than you think you do: design as resourcefulness and self-reliance*. London, UK: Royal Society of the Arts (RSA).

Carbon Trust (2009). [Online] Available at http://www.carbontrust.co.uk (Accessed 20 May 2009).

Cascio, J. (2009a). 'Futures Thinking: The Basics.' [Online] *FastCompany.* Available at http://www.fastcompany.com/blog/jamais-cascio/open-future/futures-thinking-basics (Accessed 17 September 2009).

Cascio, J. (2009b). 'Futures Thinking: Scanning the World.' [Online] *FastCompany*. Available at http://www.fastcompany.com/blog/jamais-cascio/open-future/futures-thinking-scanning-world (Accessed 27 November 2009).

Casey, V. (2007). 'The Designers Accord' [Online] Available at http://www.designersaccord.org (Accessed 5 February 2009).

Cascio, J. (2009c). 'Futures Thinking: Mapping the Possibilities (Part 1).' [Online] *FastCompany*. Available at http://www.fastcompany.com/blog/jamais-cascio/open-future/futures-thinking-mapping-possibilities-part-1 (Accessed 11 February 2010).

Cascio, J. (2009d). 'Futures Thinking: Mapping the Possibilities (Part 2).' [Online] *FastCompany*. Available at http://www.fastcompany.com/1547923/futures-thinking-mapping-the-possibilities-part-2. (Accessed 11 February 2010).

Centre for Design Research (CfDR) Northumbria University. [Online] Available at www.cfdr.co.uk (Accessed 4 June 2007).

Change the Change (2008). *Changing the Change: Design Visions, Proposals and Tools. Conference*. 10-12 July, 2008. Turin, Italy.

Chambers, R. (1992). 'Rural Appraisal: Rapid, Relaxed and Participatory.' Discussion Paper No. 311. UK: Institute of Development Studies.

Channel 4 (2009a). '4Homes Relocation Map.' [Online] *Channel 4* Available at http://www.channel4.com/4homes/on-tv/best-and-worst/middlesbrough-named-worst-place-to-live-2007-08-06-09_p_1.html (Accessed 17 December 2009).

Channel 4 (2009b). 'Middlesbrough tops worst town poll.' [Online] *Channel 4.* Available at http://www.channel4.com/news/articles/society/middlesbrough+tops+worst+town+poll/921247 (Accessed 17 December 2009).

Chochinov, A. (2007). '1000 words: A manifesto for sustainability in design'. *Core 77.* [Online] Available at http://www.core77.com/reactor/04.07_chochinov.asp (Accessed 5 February 2009).

Christensen, C. M., Cook, S. and Hall, T. (2005). 'Marketing Malpractice: The Cause and the Cure.' *Harvard Business Review,* 83 (12). pp 74-83.

Chung, K. W. (1989). *The role of industrial design in new product strategy with particular emphasis on the role of design consultants*. PhD thesis. UK: Manchester Polytechnic.

Clarkson J. and Eckert, C. E. (2005). *Design Process Improvement: A Review of Current Practice*. Cambridge, UK: Springer.

Clarkson, J., Coleman, R., Hosking, I. and Waller, S. (2007). *Inclusive Design Toolkit.* Cambridge, UK: Kall Kwik.

Co-operative Bank (2010). [Online] Available at http://www.co-operativebank.co.uk

CoDesign Journal (2009). [Online] Available at http://www.tandfonline.com/action/aboutThisJournal?show=aimsScope&journalCode=ncdn20 (Accessed 6 April 2009).

Cognitive Media (2010). [Online] Available at http://www.cognitivemedia.co.uk (Accessed 7 May 2010)

Cook, I. and Crang, M. (1995). 'Doing Ethnographies.' [Online] *Durham University*. Available at http://dro.dur.ac.uk/202/ or http://dro.dur.ac.uk/202/01/202.pdf (Accessed 13 November 2009).

Cook, M. (2012). *The Emergence and Practice of Co-design as a Method for Social Sustainability under New Labour*. PhD. London, UK: University of East London.

Cooper-Hewitt National Design Museum. [Online] *Design for the Other 90%.* Available at http://other90.cooperhewitt.org (Accessed 4 January 2009).

Cook, M. (2012). *The Emergence and Practice of Co-design as a Method for Social Sustainability under New Labour*. London, UK: University of East London.

Cooper, R. and Press, M. (1995). *The Design Agenda: A Guide to Successful Design Management*. Chichester, UK: Wiley.

Cooper, R., Junginger, S., Lockwood, T., Buchanan, R., Chung, K. and Boland, R. (2011). *The Handbook of Design Management.* UK: Berg Publishers.

Copenhagen Co'creation Summit (2009). Conference. 29 August 2009. Copenhagen, Denmark: Danish Design Association.

Cornwall, A. (2003). 'Whose Voices? Whose Choices? Reflections on Gender and Participatory Development.' *World Development* (31) 8. pp. 1325–1342.

Cornwall, A. (2008). *Democratising engagement what the UK can learn from international experience*. London, UK: DEMOS.

Cottam, H. and. Leadbeater, C. (2002). *RED Paper01. Health: Co-creating Services*. London, UK: Design Council.

Commonground: Social change together. [Online]. Available at http://gotocommonground.com. (Accessed 15 November 2010).

Cox, G. (1995). *Cox Review of Creativity in Business: Building on the UK's Strengths*. London, UK: HM Treasury.

Crang, M. and Cook, I. (1995). *Doing ethnographies*. UK: Sage.

Cross, N (1972) Ed. *Design Participation*. London, UK: Academy Editions.

Cross, N. (1978). *Methods Guide*. Milton Keynes, UK: The Open University Press.

Cross, N. (1984). *Developments in Design Methodology*. London, UK: The Open University and John Wiley.

Cross, N. (1997). 'Descriptive Models of Creative Design: application to an example.' *Design Studies*, 18(4). pp 427-440.

Cross, N. (1999). 'Design research: A disciplined conversation.' *Design Issues*. 15(2). pp 5-10.

Cross, N. (2001). 'Designerly Ways of Knowing: Design Discipline Versus Design Science.' *Design Issues,* 17 (3). pp 49-55.

Cross, N. (2002). 'Design as a Discipline.' *The Inter-disciplinary Design Quandary Conference*. 13th February 2002. De Montfort University, UK.

Cross, N. (2006). *Designerly Ways of Knowing*. London, UK: Springer.

Cross, N. (2007). 'Forty Years of Design Research.' *Design Studies,* 8 (1). pp 3-5.

Cross, N. (2011). *Design Thinking Understanding How Designers Think and Work*. Oxford, UK: Berg Publishers.

d. school Institute of Design at Stanford. [Online] Available at http://dschool.stanford.edu. (Accessed 10 January 2009).

Danish Designers (2010). *The role of design in the 21st century*. Denmark: Danish Designers.

DDA (Danish Design Association) (2009). [Online] *Copenhagen Co'creation*. Available at http://copenhagencocreation.com (Accessed 5 November 2009). Copenhagen, Denmark: Danish Design Association.

DaSH (2007). 'What we did'. Poster. Newcastle upon Tyne, UK: DaSH.

De Certeau, M. (1986). *Heterologies: Discourse on the other*. Manchester, UK: Manchester University Press.

DECC (Department of Energy and Climate Change). [Online] Available at http://www.decc.gov.uk/ (Accessed 17 May 2009).

Dees, G. J. (1998). 'The Meaning of 'Social Entrepreneurship' [Online] Available at http://www.caseatduke.org/documents/dees_SE.pdf (Accessed 25 February 2009).

Denzin, N. K. (1988). *The Research Act: A Theoretical Introduction to Sociological Methods*. Englewood Cliffs, NJ, USA: Prentice-Hall.

Desai, V. and Potter, R. B. (2002). *The companion to development studies*. London, UK: Arnold.

Design Activism. [Online] Available at http://www.designactivism.org (Accessed 16 September 2007).

Design Activism Leeds (2008). Conference. 2-3 July 2008. Leeds, UK: Leeds Metropolitan University.

Design Activism (2009). *Leeds Festival of Design Activism: Postgraduate Research Colloquium*. 2 July 2009. Leeds, UK: Leeds Metropolitan University.

Design Council (2001). *Inspired Business: Design Success in Real Businesses*. London, UK: Design Council and Business Link.

Design Council (2005a). *Design Index: The Impact of Design on Stock Market Performance*. London, UK: Design Council.

Design Council (2005b). 'The Design Process.' [Online] Available at http://www.designcouncil.org.uk/designprocess (Accessed 15 June 2007).

Design Council (2006). *Designs of the Time: Summary programme and objectives*. London, UK: Design Council.

Design Council (2007a). [Online] Available at http://www.designcouncil.org.uk (Accessed 4 June 2007).

Design Council (2007b). *Eleven Lessons: Managing design in eleven global companies*. London, UK: Design Council.

Design Council. (2008a). 'The impact of design on business.' *Design Council Briefing*. London, UK: Design Council.

Design Council (2008b). 'The role of design in public services.' *Design Council Briefing*. London, UK: Design Council.

Design Council (2008c). [Online] *Methods Bank Wiki*. Available at http://www.methodbank.com/cgi-bin/view (Accessed 10 December 2008)

Design Council. (2008d). *The Good Design Plan: National design strategy and delivery plan 2008–11*. London, UK: Design Council.

Design Council (2009a). 'New Work | Design Case Studies.' Available at http://www.designcouncil.org.uk/Case-studies/New-Work/ (Accessed 19 August 2009).

Design Council (2009b). 'LowCarbLane | Design Case Studies.' Available at http://www.designcouncil.org.uk/Case-studies/Low-Carb-Lane (Accessed 22 August 2009).

Design Council, (2009c). 'DaSH | Design Case Studies.'. [Online] Available at http://www.designcouncil.org.uk/Case-studies/DaSH/ (Accessed 19 August 2009).

Design Council, (2009d). 'Alzheimer100 | Design Case Studies.'. [Online] Available at http://www.designcouncil.org.uk/our-work/challenges/Communities/Dott-07/Dott-07-case-studies/Alzheimer-100/ (Accessed 19 August 2009).

Design Council, (2009e). 'OurNewSchool | Design Case Studies.'. [Online] Available at http://www.designcouncil.org.uk/our-work/challenges/Communities/Dott-07/Dott-07-case-studies/Our-New-School/ (Accessed 19 August 2009).

Design Council, (2009f). 'Move Me | Design Case Studies.'. [Online] Available at http://www.designcouncil.org.uk/our-work/challenges/Communities/Dott-07/Dott-07-case-studies/Move-Me/ (Accessed 19 August 2009).

Design Council, (2009g). 'Urban Farming | Design Case Studies.'. [Online] Available at http://www.designcouncil.org.uk/our-work/challenges/Communities/Dott-07/Dott-07-case-studies/Urban-Farming/ (Accessed 19 August 2009).

Design Council (2009h). *Co-opportunity: A Day for World Builders.* Workshop. 22 September 2009. London UK: Design Council.

Design Council (2010). 'Designing Demand | Our Work.' Available at http://www.designcouncil.org.uk/our-work/support/Designing-Demand/ (Accessed 19 January 2010).

Design for Development (2009). *Design for Development: Seeing beyond the world of wealth*. Debate. 10 October 2009. London, UK: Kingston University.

Design History Society (2011). *Design Activism and Social Change Conference.* 8-10 September 2011. Barcelona, Spain.

Design Management Institute. [Online] Available at http://www.dmi.org (Accessed 1 July 2007).

Design Week (2009). 'Think Public in Alzheimer's Society service design task.' [Online] *Design Week*. 2 September 2009. Available at http://www.designweek.co.uk/think-public-in-alzheimers-service-design/3003985.article (Accessed 2 September 2009).

DESIS (Design for Social Innovation towards Sustainability). [Online]. Available at http://www.desis-network.org (Accessed10 February 2009).

Department for Education and Skills (2003). *Travelling to School: an action plan*. Nottingham, UK: Department for Education and Skills.

Department for Education and Skills (DfES) (2005*). Higher Standards, Better Schools For All More choice for parents and pupils*. UK: HM Government.

Department of Health (2004). *Better prevention Better services Better sexual health: The national strategy for sexual health and HIV*. UK: Department of Health.

Department of Health (2006*). 10 High Impact Changes For Genitourinary Medicine 48-hour Access*. UK: Department of Health.

Department of Health. (2009a). *Living Well With Dementia: A National Dementia Strategy*. UK: Department of Health.

Department of Health. (2009b). *Living Well With Dementia: A National Dementia Strategy – Implementation Plan*. UK: Department of Health.

Department of Health (2009c). [Event] *NHS Design Showcase at the Health Innovation Expo*. 18-19 June 2009. London, UK.

DeSForM (Design and Semantics of Form and Movement) (2007). 12-13 December 2007. Newcastle upon Tyne, UK: School of Design, Northumbria University.

Designer 1. (2008). *Interview for Alzheimer100*. 23 May 2008. London, UK.

Designer 2. (2008). *Interview for Alzheimer100*. 24 April 2008. London, UK.

Designer 3 (2008). *Interview for DaSH*. 16 June 2009. London, UK.

Designer 4 (2008). *Interview for DaSH*. 31 March 2008. Newcastle upon Tyne, UK.

Designer 5 (2008). *Interview for OurNewSchool*. 11 June 2008. London, UK.

Designer 6 (2008). *Interview for OurNewSchool*. 1 May 2008. London, UK.

Designer 7 (2008). *Interview for New Work*. 27 May 2008. Newcastle upon Tyne, UK.

Designer 8 (2008). *Interview for New Work*. 8 May 2008. Newcastle upon Tyne, UK.

Designer 9 (2008). *Interview for Move Me*. 7 May 2008. Newcastle upon Tyne, UK.

Designer 10 (2008). *Interview for Move Me*. 6 May 2008. Newcastle upon Tyne, UK.

Designer 11 (2008). *Interview for LowCarbLane.* 29 April 2008. London, UK.

Designer 12 (2008). *Interview for LowCarbLane.* 26 March 2008. Newcastle upon Tyne, UK.

Designer 13 (2008). *Interview for Urban Farming*. 13 May 2008. London, UK.

Designer 14 (2008). *Interview for Urban Farming*. 9 May 2008. Newcastle upon Tyne, UK.

Designer 14 (2010). [Personal communications]. 1 February 2010. London, UK.

Designers Accord (2007). [Online] Available at http://www.designersaccord.org (Accessed 5 February 2009).

Devins, D., Johnson, S, Gold, J. and Holden, R. (2002). 'Management development and learning in micro-businesses.' Research Report prepared for *Research and Evaluation Unit Small Business Service*. Leeds Metropolitan University, UK: Policy Research Institute.

DIEC (2006). [Online] *Design Innovation Education Centre*. Available at: http://www.onenortheast.co.uk/diec.cfm (Accessed 21 June 2007).

DIUS (2008). *Innovation Nation*. UK: Department for Innovation, Universities & Skills (DIUS).

DMI (2008). *Design Thinking: New Challenges for Designers, Managers and Organisations*. Conference. 14-15 April 2008. Essec Business School, Cergy-Pointoise, France: Design Management Institute (DMI).

Dormer, P. (1993) *Design since 1945*. London, UK: Thames and Hudson.

Don, M. (2008). 'Cuba - Alberto's Huerto, Havana.' [Online] *Around the World in 80 Gardens*. BBC. Programme 1, Number 5. Available at http://www.youtube.com/watch?v=jRz34Dee7XY (Access 1 June 2009).

Dorst, K. (2008). 'Design research: a revolution-waiting-to-happen.' *Design Issues* 29, (1). pp 4-11.

Dott 07 (2007). [Online] *Designs of the Time 2007*. Available at http://www.dott07.com (Accessed 3 June 2007).

Dott 07 Festival (2007). 16-26 October 2007. NewcastleGateshead UK.

Dott 07 Management Team (2008). *Interview for Dott 07.* 12 March 2008. Newcastle upon Tyne, UK.

Dott Debates (2007). 18-23 October 2007. NewcastleGateshead UK.

Dott Cornwall (2010a). 'Dott Cornwall Design Methods.' [Online]. Available at http://www.dottcornwall.com/design-matters/design-methods (Accessed 21 January 2010)

Dott Cornwall (2010b). *Inspired: Designs in our time.* Conference. 25-26 March 2010. Mowgan Porth, Cornwall UK.

Dott Cornwall (2010c). *Open Dott.* Workshop. 23 February 2010. Cornwall, UK

Dott Cornwall (2011). [Online] Available at http://www.dottcornwall.com/design-matters/design-methods (Accessed 7 March 2011)

Drysdale, I. (2012). [Electronic communications]. 8 March 2012.

DTI (2003). *Energy White Paper: Our energy future - creating a low carbon economy.* UK: The Stationary Office (TSO)

Dubberly, H. (2004). *How do you design? A compendium of models.* California, USA: Dubberly Design Office.

Dubhthaigh, R. and Barter, T. (2006). *Food for Thought: A service based approach for embedding innovation.* London, UK: Innovation RCA, Royal College of Art.

Dudley, E and Mealing, S. (2000) Eds. *Becoming Designers: Education and influence.* Exeter, UK: Intellect Books.

Dunleavy, P. (2003). *Authoring a PhD: How to plan, draft, write and finish a doctoral thesis or dissertation.* UK: Palgrave Macmillan.

Dunne, A. (1997). *Hertzian tales: an investigation into the critical and aesthetic potential of the electronic product as a post-optimal object.* PhD thesis. UK: Royal College of Art (RCA).

Dunne, A. and Gaver, W. (1997). 'The Pillow: Artist-Designers in the Digital Age.' [Online] Available from http://www.cms.gold.ac.uk/media/18dunne-gaver.pillow.1997.pdf (Accessed 15 February 2010)

Dunne, A. and Raby, F. (2007). 'Critical Design FAQ' [Online]. Available at http://www.dunneandraby.co.uk/content/bydandr/13/0 (Accessed 20 May 2009)

Durling, D. (2002). 'Discourses on research and the PhD in Design.' *Quality Assurance in Education*. 10(2). pp 79-85.

Early, C. (2008). 'Urban Jungle.' [Online] *The Guardian.* Available at http://www.guardian.co.uk/environment/2008/mar/26/cityfood (Accessed 18 December 2009)

Easterby-Smith, M., Thorpe, R. and Lowe, A. (2002). *Management Research*. London UK: Sage.

EDF (The EDF Group). [Online] Available at http://www.edf.com/the-edf-group-42667.html (15 May 2009)

Edwards, C. (2007). *Futures Thinking (and how to do it)*. London, UK: DEMOS.

Enabling Concepts. [Online] Available at http://navig8the.net/clients/EC02/index.html (Accessed 6 August 2007)

Engine (2007). 'Dear Architect' [Online] Available at www.enginegroup.co.uk/assets/pdf/Dear_architect.pdf (Accessed 21 June 2007)

Engine and Walker Technology College (2007) [Online] *OurNewSchool*. Available at http://www.ournewschool.org

Engine Service Design (2008). [Online] Available at http://www.enginegroup.co.uk (Accessed 10 January 2008)

Emilson, A., Seravalli, A., Hillgren, P. (2011). 'Dealing with dilemmas: Participatory Approaches in Design for Social Innovation'. *Swedish Design Research Journal*, 1 (11). pp 23 – 29.

Eisenhardt, K. (1989). 'Building Theories from Case Study Research.' *Academy of Management Review,* 14 (4). pp 532-550.

European Commission (2009). [Online] *Design for All*. Available from http://ec.europa.eu/information_society/activities/einclusion/policy/accessibility/dfa/index_en.htm. (Accessed 22 December 2009)

ExperiencePoint (2012). [Online]. Available at http://www.experiencepoint.com/sims/DesignThinker (Accessed 4 January 2012)

Fairey, S. (2012). 'Obama.' [Online] *Obey Giant*. Available from http://obeygiant.com/headlines/obama (Accessed 5 January 2012)

Fast Co.Design (2011). [Online] *Fast Company*. Available at http://www.fastcodesign.com. (Accessed 5 January 2011).

Faud-Luke, A. (2009). *Design Activism: Beautiful Strangeness for a Sustainable World*. London, UK: Earthscan.

Fifteen London. [Online] Available at http://www.fifteen.net (Accessed 3 February 2012).

Frascara, J., Meurer, B., van Toorn, J., Winkler, D. and Strickler, Z. *User-centred graphic design: mass communications and social change.* London, UK: Taylor & Francis

Frascara, J. (2002) Ed. *Design and the Social Sciences*. London, UK: Taylor and Francis Books Limited.

French, W. L., Bell, C. H. and Zawacki, R. A. (2005). *Organizational development and transformation: Managing Effective Change*. NYC, USA: McGraw Hill.

Frias-Pena, J. and O'brien, C. (2003). 'Industrial Design and Innovation in Mexican Enterprises.' [Online] Available at http://www.idemployee.id.tue.nl/g.w.m.rauterberg/conferences/CD_doNotOpen/ADC/final_paper/083.pdf (Accessed 15 July 2010)

Frias-Pena, J. (2005). *The strategic role of industrial designers in developing innovative products*. PhD thesis. UK: University of Nottingham.

Megchun, B. I. C., Frias-Pena, J. and Hands, D. J. (2008). 'An investigation into how small, medium sized enterprises in Mexico value and utilise design within organisational activity.' *Design Thinking: New Challenges for Designers, Managers and Organizations*. DMI Education Conference. 14-15 April, 2008, Paris La Défense, France

Fetterman, D. M. (1998/2009). *Ethnography: step-by-step: Volume 17 of Applied social research methods series*. USA: SAGE.

Florida, R. (2002). *The Rise of the Creative Class: And How It's Transforming Work, Leisure and Everyday Life*. USA: Basic Books.

Folkmann, M. N. (2010). 'On the Threshold to a New Design Perception.' [Online] *Danish Centre for Design Research*. Available at http://www.dcdr.dk/uk/Menu/Update/Webzine/Articles/On+the+Threshold+to+a+New+Design +Perception (Accessed 1 July 2010)

Frayling, C. (1993/4). *Research in Art and Design*. London, UK: Royal College of Art Research Papers series.

Fuelfor. [Online] Available at http://www.fuelfor.net/fuelfor/index.html (Accessed 5 April 2009)

Fuller, R. B. (1969). *Operating Manual for Spaceship Earth*. New York, USA: Simon & Schuster.

Fulton Suri, J. (2008). 'Informing Our Intuition: Design Research for Radical Innovation. *Rotman Magazine*. pp 53-57.

Fulton Suri, J. and Howard, S. G. (2006). 'Going Deeper, Seeing Further: Enhancing Ethnographic Interpretations to Reveal More Meaningful Opportunities for Design.' *Journal Of Advertising Research*. September 2006.

Gallos, J. V. (2006). *Organisation Development*. California, USA: Jossey-Bass.

Gaver, B., Dunne, T. and Pacenti, E. (1999). 'Cultural probes.' *Interactions*, 6(1) pp. 21-29.

Gazette Live (2008). 'Middlesbrough Town Meal.' [Online] *Gazette Live.* Available at http://www.gazettelive.co.uk/videos-pictures/news-photos-video/2009/09/28/middlesbrough-town-meal-84229-24799674/ (Accessed 19 December 2009).

Gilmore, D. (2002). 'Business: Understanding and overcoming resistance to ethnographic design research'. *Interactions*, 9(3). pp 29-35.

Glanville, R. (1999). 'Researching design and designing research.' *Design Issues* 15(2). pp 80-91.

Glaser, B. G. and Strauss, L. A. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago, USA: Aldine Publishing Company.

Golsby-Smith, T. (2007). 'The second road of thought: how design offers strategy a new toolkit.' Journal of Business Strategy, 28 (4). pp 22-29.

Google (2011). [Online] *Google Technology-Driven Philanthropy.* Available at http://www.google.org (Accessed 7 August 2011)

Gormley, I. (2010). 'Design has a role to play on the world stage.' [Online] *Design Week*. 1 July 2010. Available at http://www.designweek.co.uk/design-has-a-role-to-play-on-the-world-stage/3015271.article (Accessed on 1 July 2010)

Goulding, C. (2002). *Grounded Theory: A Practical Guide for Management, Business and Market Researchers*. London, UK: Sage.

Grant, J. (2000). *The New Marketing Manifesto: The 12 Rules for Building Successful Brands in the 21st Century*. UK: Texere Publishing.

Graty, C. (2008). 'Cafe Culture.' [Online] Available at http://alzheimers.org.uk/site/scripts/documents_info.php?documentID=708&pageNumber=2. (Accessed 27 June 2009)

Gregory, S. A. (1966). *The design method.* UK: Butterworths.

Grenfell, M. (2004). *Pierre Bourdieu: Agent Provocateur*. London, UK: Continuum International Publishing Group Ltd.

Graphic Design Festival Breda (2008). Conference. 13 June 2008. Breda, Netherlands.

Guldbransen, M. (2006). *How companies embed non-quantifiable product qualities through their product development process*. PhD thesis. UK: Cranfield University.

Hammersley, M. and Atkinson, P. (1983/2007). *Ethnography*. London, UK: Routledge.

Han, Q. 'Paper Prototyping' [Online] *Design Generalist*. Available at http://designgeneralist.squarespace.com (Accessed 13 May 2011)

Han, Q. (2010). *Practices and Principles in Service Design: Stakeholder Knowledge and Community of Service*. PhD thesis. Dundee, Scotland: University of Dundee.

Handy, C. (1976/1999). *Understanding Organizations*. London UK: Penguin Books.

Hanington, B. (2003). 'Methods in the Making: A Perspective on the State of Human Research in Design.' *Design Issues*, 19(4) pp 9-18.

Harris, K. (2011). [Electronic communication]. 20 September 2011.

Harrison, Z. (2010). 'Design, A Viable Tool for Social Innovation?*'* [Online] *Center for Cross-cultural Studies*. Available at http://www.centercrosscultural.org/2010/09/16/design-a-viable-tool-for-social-innovation. (Accessed 10 May 2011)

Hart, C. (1998). *Doing a literature review: Releasing the social science research imagination*. London, UK: Sage Publications.

Harvard Business School (2005). *Strategy: Create and Implement the Best Strategy for Your Business.* Massachusetts, USA: Harvard Business School Press.

Hayes, R. (1990). 'Design: Putting Class into 'World Class'.' *Design Management Journal*, 1 (2). pp 8-14.

Heads Together (2010). [Online] Available at http://www.headstogether.org. (Accessed 4 February 2010).

Hee, B. and Sangiorgi, D. (2010). 'Project Introduction Text: DOTT07.' [Online] *Sustainable Everyday Project* Available at http://www.sustainableeverydayexplorations.net/project-introduction-text-dott07/ (Accessed 23 August 2010).

Heermann, Barry. (1994). *Facilitator's guide to Team Spirit*. Dayton, USA: Expanded Learning Institute.

Helen Hamlyn Centre. [Online] Available from http://www.hhc.rca.ac.uk (Accessed 10 May 2009)

Heller, S., Lee, S, Perry-Zucker, A. (2009) Eds. *Design for Obama: Posters for Change: A Grassroots Anthology*. USA: Taschen.

Heskett, J. (2001). 'Past, Present and Future in Design for Industry.' *Design Issues*, 17 (1). pp 18-26.

Heskett, J. (2002). *Toothpicks and logos: Design in everyday life*. New York, USA: Oxford University Press.

Hitt, M. A., Freeman, R. E., Harrison, J. S. (2001). *The Blackwell handbook of strategic management*. Oxford, UK: Wiley-Blackwell.

Hollins, B. (2006/2009). 'What is service design?' [Online] *Design Council* Available at http://www.designcouncil.org.uk/About-Design/Design-Disciplines/Service-design-by-Bill-Hollins/ (Accessed June 5 2007)

Holm, L. A. and Johannson, U. (2005). 'Marketing and Design: Rivals or Partners?*' Design Management Review*, 16 (2).

Holness, A. (2000). *The analysis of design methods by a comparative study of award-winning industrial architecture since (1970-1990)*. PhD thesis. Newcastle upon Tyne, UK: School of Design, Northumbria University.

House of Commons (2007). *Sustainable Schools: Are we building schools for the future? Seventh Report of Session 2006–07*. London, UK: House of Commons Education and Skills Committee.

Howard, J. (2004). 'Toward Participatory Ecological Design of Technological Systems.' *Design Issues*, 20(3). pp 40-53.

Humantific. [Online] Available at http://www.humantific.com (Accessed 10 December 2009)

Humantific (2009). 'Understanding Social SenseMaking.' [Online] Accessed 19 February 2009. http://www.humantific.com/understanding-social-sensemaking/

Iansiti, M. (1993). 'Real Word R&D: Jumping the Product Generation Gap.' *Harvard Business Review*. 71(2). pp 138-147.

Ibrahim, M. (1999). *The role of the industrial designer in Malaysian small and medium industries.* PhD thesis. UK: University of Northumbria at Newcastle.

Icsid (2009a). [Conference] *Icsid Design Education 2050.* 22 November 2010. Singapore

Icsid (2009b). [Conference] *Icsid World Design Congress*. 23-27 November 2009. Singapore.

IDEO (2010). [Online] Available at www.ideo.com (Accessed 7 July 2007)

IDEO and The Rockefeller Foundation (2009). *Design for Social Impact*. USA: The Rockefeller Foundation.

In With For (2011). [Online] Available at http://www.inwithfor.org (Accessed 7 January 2011)

Illich, I. (1975). *Tools for Conviviality*. London, UK: Harper & Row Publishers Inc.

Inns, T. E. (2007/2009). *Designing for the 21st Century: Interdisciplinary Questions and Insights*. UK: Gower Publishing Ltd.

Inns, T. (2009). *Interdisciplinary Discovery Through Design*. Workshop 28 September 2009. London, UK.

InterSections 07. 25-26 October 2007. Conference. NewcastleGateshead UK.

International Service Design Northumbria (ISDn) Conference (2006). 31 March 2006. Newcastle upon Tyne, UK: School of Design, Northumbria University

International Service Design Northumbria (ISDn) Conference (2008). 4 April 2008. Newcastle upon Tyne, UK: School of Design, Northumbria University

Luck, R. (2003). 'Dialogue in participatory design.' *Design Studies* 24: 523-535.

Jacques, R. and Powell, J. (1981) Eds. *Design: Science: Method*. UK: Westbury House.

Jégou, F. and Manzini, E. (2008) Eds. *Collaborative services: Social innovation and design for sustainability*. Milan, Italy: Edizioni POLI.design.

Jégou F., Liberman, J., Girardi, S. and Bernagozzi, A. (2008). 'Design for Social Innovation: Enabling replication of promising initiatives for sustainable living in Brussels and Paris.' Carla, C. and Peruccio, P. P. (Eds). *Changing the Change*. Italy: Allemendi Conference Press.

Jenkins, J. (2008). 'Designers as Organisational Ecologists: Creating the right environment for design.' Unpublished paper. Sydney, Australia.

Jones, J.C. (1971/1992). *Design Methods: Seeds of Human Futures*. 2nd Edition. UK: Wiley-Interscience.

Jones, P. (2002). 'Design Facilitation for Teams: Managing and Planning Team Interaction.' Unpublished paper. Available at: redesignresearch.com/fac-paper.htm (Accessed 10 February, 2009).

Jones, P. (2009). 'Design 1.0, 2.0, 3.0, 4.0: The Rise of Visual SenseMaking.' *NextD*. [Online] Available at www.humantific.com/wp-content/uploads/2009/03/NextD_Design_4.0.pdf (Accessed 3 January 2010)

Julier, G. (2007). *The Culture of Design*. London, UK: Sage Publications.

Julier, G. (2008). 'Design Activism as a Tool for Creating New Urban Narratives.' In Cipolla, C. and Peruccio, P.P. (Eds). *Changing the Change: Design, Visions, Proposals and Tools Proceedings*. Italy: Allemandi Conference Press.

Junginger, S. (2008). 'Product Development as Vehicle for Organizational Change.' *Design Issues, Special Issue: Organizational Change*, 24 (1). pp 26-35.

Junginger, S. (2006). 'Change in the Making: Organizational Change Through Human-Centered Product Development.' PhD thesis. Pittsburgh, USA: Carnegie Mellon University.

Kaasgaard, K. (2010). 'Why designers sometimes make me cringe.' *Interactions* 17(1) pp 56-57.

Kaner, S., Lind, L., Toldi, C., Fisk, S. and Berger, D. (2007*). Facilitator's Guide to Participatory Decision-Making*. USA: Jossey-Bass Business & Management.

Kaplan, R. S. and Norton, D. P. (2000). 'Having Trouble with Your Strategy? Then Map It.' *Harvard Business Review*, 78 (5). pp 167-176.

Kelley, T. (2005). *The Ten Faces of Innovation: IDEO's Strategies for Defeating the Devil's Advocate and Driving Creativity Throughout Your Organization*. USA: DoubleDay.

Keltner, J. (1989). 'Facilitation: Catalyst for group problem solving.' *Management Communication Quarterly,* 3(1). pp 8-32.

Kimbell and Seidel (2007). [Workshop] *Design for Services*. 2 July 2007. Oxford Business School, Oxford, UK.

Kimbell, L., Seidel, V. (2008) Eds. *Designing for Services. Multidisciplinary Perspectives: Proceedings from the Exploratory Projects on Designing for Services in Science and Technology-based Enterprises.* Said Business School, University of Oxford: UK.

Kimbell, L. (2011). 'Why I'm joining the Young Foundation as head of social design.' [Online] *Design leads us where exactly?* 21 December 2011. Available from http://designleadership.blogspot.com (Accessed 21 December 2011).

Kingston University (2009). *Design for development: Seeing beyond the world of wealth.* Workshop. 10 October 2009. OXO Tower London, UK.

Kotler, P., Armstrong, G., Wong, V. and Saunders, J. A. (1996/2008). *Principles of marketing.* USA: Pearson Education, Prentice Hall.

Korea Institute of Design Promotion (2011). [Online] Available at http://www.global.designdb.com. (Accessed 12 February 2011).

Koskinen, I., Zimmerman, J., Binder, T., Redstrom, J. and Wensveen, S. (2011*). Design Research Through Practice: From the Lab, Field, and Showroom*. Massachusetts, USA: Elsevier.

Krum, G. (2007). 'Student Deign Review.' [Online] *I.D. Magazine*. Available at http://www.id-mag.com/article/Student_Design_Review/ (Accessed 2 February 2010).

Kuhn, S., Muller, M.J. (1993). 'Participatory design.' *Communications of the ACM*, 36 (6). pp 24-28.

Kusz, J. P. (2005). 'When "Good" Design Means Responsible Design.' *Design Management Review.* 16 (3). pp. 29-36.

Lancaster University (2009). *Sustainability, Innovation & Design Conference*. 15-16 June 2009. Lancaster University, UK

Lantra (2007). The Sector Skills Council for the environmental and land-based sector. UK: Sector Skills Agreement North East England.

Laurel, B. (2003). *Design Research: Methods and Perspectives*. USA: MIT Press.

Lawson, B. (1980/2005). *How Designers Think: The Design Process Demystified*. Oxford, UK: Architectural Press.

Lawson, B. (2004). *What Designers Know*. Oxford, UK: Architectural Press.

Leadbeater, C. (1997). *The rise of the social entrepreneur* [Online] *DEMOS*. Available at http://www.demos.co.uk/files/theriseofthesocialentrepreneur.pdf?1240939425 (Accessed 11 July 2009).

Lee, Y. (2008). 'Design participation tactics: the challenges and new roles for designers in the co-design process.' *CoDesign,* 4 (1). pp 31-50.

Leeds Festival of Design Activism (2010)*.* Conference. 2 July 2010. Leeds, UK: Leeds Metropolitan University

Lester, R. K., Piore, M. J. and Malek, K. M (1998). 'Interpretive management: What general managers can learn from design.' *Harvard Business Review*, 76 (2). pp 86-96.

Liedtka, J. (2000). 'In Defense of Strategy as Design.' *Californian Management Review*, 42 (3). pp 8-30.

Liedtka, J. (2004). 'Strategy as Design' *Rotman Management Alumni Magazine.* Winter 2004. pp 12-15. Canada: Rotman School of Management, University of Toronto.

Liedtka, J. (2006). 'If Managers Thought Like Designers.' *Rotman Magazine*, Spring/Summer. Canada: Rotman School of Management, University of Toronto.

Lievesley, M. and Yee, J. S. R. (2006). 'The Role of the Interaction Designer in an Agile Software Development Process.' *CHI 2006 Conference*. April 22–27, 2006. Montréal, Québec, Canada.

liftshare.com (2012). [Online] Available at http://www.liftshare.com (Accessed 8 February 2012).

Light, P. C. (2009). 'Social Entrepreneurship Revisited.' [Online] *Stanford Social Innovation Review*. Available at http://www.ssireview.org/articles/entry/social_entrepreneursh (Accessed 10 July 2009).

live|work (2008a). [Online] *Servicedesign.org* Available at http://www.servicedesign.org (Accessed 2 July 2007).

live|work (2008b). *Service Design Capability ™.* London, UK: live|work.

live|work (2009). [Online] Available at http://www.livework.co.uk (Accessed 10 June 2009).

live|work (2010). [Online] *Make it work*. Available at http://www.livework.co.uk/our-work/sunderland-make-it-work (Accessed 11 November 2010).

Lockwood, T. (2009). *Design Thinking: Integrating Innovation, Customer Experience, and Brand Value.* NY, USA: Allworth Press.

London School of Economics et al. (2007). *Dementia UK*. London, UK: Alzheimer's Society.

Lonsdale, S. (2007). 'Green mortgage could save you money.' *The Telegraph*. London, UK: Telegraph Media Group.

Lorenz, C. (1994) 'Harnessing Design as a Strategic Resource.' *Long Range Planning,* 27 (5). pp 73-84.

Luck, R. (2003). 'Dialogue in participatory design.' *Design Studies*, 24 pp 523-535.

Luckman J. 1967. 'An Approach to the Management of Design.*' Operational Research Quarterly*, 18 (4). pp 345-358.

Madison, D. S. (2005). *Critical ethnography: method, ethics, and performance*. USA: Sage.

Mahroum, S., Atterton, J., Ward, N., Williams, A. M., Naylor, R., Hindle, R. and Rowe, F. (2007). *Rural Innovation*. London UK, NESTA.

MakeTools. [Online] Available at http://maketools.com (Accessed 17 August 2009).

Malinowski, B. (1992). *Argonauts of the Western Pacific: An Account of Native Enterprise and Adventure in the Archipelagoes of Melanesian New Guinea*. London, UK: Routledge.

Manzini, E. (1995). 'Prometheus of the Everyday: The Ecology of the Artificial and the Designer's Responsibility.*'* In Buchanan, R. and Margolin, V. (Eds). *Discovering Design: Explorations in Design Studies*. Chicago, USA: University of Chicago Press.

Manzini, E. (2001). 'Scenarios of sustainable ways of living: Local and global visions'. [Online] *Sustainable Everyday Project*. Available at http://www.sustainable-everyday.net/manzini (Accessed 7 June 2008).

Manzini, E. (2003). 'Scenarios of sustainable well-being.' *Design Philosophy Papers* (1).

Manzini, E. (2004). 'Scenarios of sustainable ways of living: Local and global visions.' [Online] *Sustainable Everyday Project*. Available at: http://www.sustainable-everyday.net/manzini (Accessed 30 July 2008).

Manzini, E. (2005). 'Enabling solutions: Social innovation, creative communities and strategic design'. [Online] *Sustainable Everyday Project*. Available at http://www.sustainable-everyday.net/manzini (Accessed 7 June 2008).

Manzini, E. (2006a). 'Creative communities, collaborative networks and distributed economies. Promising signals for a sustainable development.' [Online] *Sustainable Everyday Project*. Available at: http://www.sustainable-everyday.net/manzini (Accessed 30 July 2008).

Manzini, E. (2006b). 'Design for sustainability: How to design sustainable solutions'. [Online] *Sustainable Everyday Project*. Available at http://www.sustainable-everyday.net/manzini (Accessed 7 June 2008).

Manzini, E. (2008). 'A New Design Knowledge: Introduction to the Conference Changing the Change'. [Online] *Sustainable Everyday Project*. Available at http://www.sustainable-everyday.net/manzini (Accessed 7 June 2008).

Manzini, E. (2009a). 'New Design Knowledge'. *Design Studies,* 30 pp. 4 – 12. UK: Elsevier Ltd.

Manzini, E. (2009b). 'Design for social innovation and sustainability. Ezio Manzini.' [Online] *Slow TV | The Monthly*. Available at http://www.themonthly.com.au/design-social-innovation-and-sustainability-ezio-manzini-2103 (Accessed 20 July, 2011).

Manzini, E. (2010). *Dott Cornwall think tank: Inspired*. Keynote presentation. 25-26 March 2010. Mawgan Porth, Cornwall UK.

Margolin, V. (1998). 'Design for a Sustainable World.' *Design Issues*, 14 (2). pp 83-92.

Margolin, V. and Margolin. S. (2002). 'A "Social Model" of Design: Issues of Practice and Research'. *Design Issues*, 18 (4) pp. 24 – 30. MIT Press.

Margolin, V. (2007a). 'A Call for Social Design.' *Best-Practice Medical Design for 2020 Conference*. 14 June 2007. Haifa, Israel: Technion.

Margolin, V. (2007b). 'Design, the Future and the Human Spirit.' *Design Issues*, 23 (3) pp 4-15. MIT Press.

Martin, R. (2004). 'The Design of Business.' *Rotman Magazine*, Winter. Canada: Rotman School of Management, University of Toronto.

Martin, R. (2005). 'Embedding Design into Business. *Rotman Magazine,* Fall. Canada: Rotman School of Management, University of Toronto.

Martin, R. L. and Osberg, S. (2007). 'Social Entrepreneurship: The Case for Definition.' *Stanford Social Innovation Review*, Spring 2007.

Martin, R. (2009). *The Design of Business: Why Design Thinking is the Next Competitive Advantage*. USA: Harvard Business School Press.

Marzuki, I. (1999*). The role of the industrial designer in Malaysian small and medium industries*. PhD thesis. UK: University of Northumbria.

Matsui, H. (2009). [Online] *Hideaki Matsui*. Available at http://www.hideakimatsui.com/ (Accessed 10 February 2010).

Mattinson, J. (2003). Sex *Life: An Agenda for a New Sexual Health Landscape*. Newcastle-upon-Tyne, UK: Centre for Design Research, Northumbria University.

Mayo Clinic Centre for Innovation. [Online] Available at http://centerforinnovation.mayo.edu/sparc.html (Accessed 8 September 2010).

Mau, B (1998). 'Incomplete Manifesto for Growth.' [Online] Available at http://www.brucemaudesign.com/4817/112450/work/incomplete-manifesto-for-growth (Accessed 16 November 2009).

Mau, B. 'What is Massive Change?' [Online] Available from http://www.massivechange.com/about (Accessed 3 February 2010).

McDonald, S. (2005). 'Studying actions in context: A qualitative shadowing method for organizational research.' *Qualitative Research*, 5(4). pp: 455-473.

McFadzean, E. and Nelson, T. (1998). 'Facilitating problem-solving groups: a conceptual model.' *Leadership and Organization Development Journal*, 19 (1). pp 6-13.

McGuirk (2011). 'Mr Cameron, it's time to get the designers in.' [Online]. *The Guardian.* Available at http://www.guardian.co.uk/artanddesign/2011/oct/11/government-planning-designers-finland (Accessed 11 October 2011).

McLean, G. N. (2006). *Organisation Development: Principles, processes, performance.* California, USA: Berrett-Koehler Publishers Inc.

McNiff, J. and Whitehead, J. (2006). *All You Need to Know About Action Research*. London, UK: Sage Publications.

MEC, (2010). 'Middlesbrough Environment City: Background Information Fact Sheet.' [Online] *Middlesbrough Environment City*. Available at http://www.menvcity.org.uk

Megchun, B. I. C., Frias-Pena, J. and Hands, D. J. (2008). 'An investigation into how small, medium sized enterprises in Mexico value and utilise design within organisational activity.' *Design Thinking: New Challenges for Designers, Managers and Organisations*. Conference. 14-15 April 2008. Essec Business School, Cergy-Pointoise, France: Design Management Institute (DMI).

Merholz, P. (2007). 'Peter Merholz asks Jess McMullin about the designer as facilitator.' [Online] *Adaptive Path*. Available at http://www.adaptivepath.com/idea/essays/archives/000822.php (Accessed 10 February 2009).

Michel, R. (2007) Eds. *Design Research Now: Essays and Selected Projects.* Germany: Board of International Research in Design.

Michlewski, K. (2006). *Towards an Understanding of the Role the Culture of Designers can Play in Organisations*. PhD thesis. Newcastle upon Tyne, UK: Northumbria University.

Michlewski, K. (2010). 'Uncovering Design Attitude: Inside the Culture of Designers.' *Organization Studies,* 29. pp 373-392.

Middlesbrough Council (2009). [Online] *Middlesbrough Council.* Available at http://www.middlesbrough.gov.uk (Accessed 7 March 2009).

Middlesbrough Council (2010a). [Online] *Middlesbrough Council: Geographic and demographic context.* Available at http://www.middlesbrough.gov.uk/ccm/navigation/children-and-family-care/strategic-needs-assessment/general-information-about-middlesbrough/geographic---demographic-context/ (Accessed 10 February 2010).

Middlesbrough Council (2010b) [Online] *Middlesbrough Council: 2007/8*. Available at http://www.middlesbrough.gov.uk/ccm/navigation/council--government-and-democracy/mayor-and-political-structures/mayor/biography/2007-08-/ (Accessed 10 February 2010).

Middlesbrough Healthy Towns (2010c). [Online] *Middlesbrough Healthy Towns*. Available at http://www.borohealthytown.com (Accessed 10 February 2010).

Middlesbrough Partnership (2010). 'Middlesbrough Sustainable Community Strategy 2008 – 2023.' [Online] *Tees Valley Unlimited*. Available at http://www.teesvalleyunlimited.gov.uk (Accessed 10 February 2010).

Miles, M. B. and Huberman, A. M. (1994). *Qualitative data analysis*. Thousand Oaks, CA, Sage.

Miliband, E. (2009). 'Ed Miliband announces the UK Low Carbon Transition Plan' [Online] 15 July 2009. Available at http://www.youtube.com/watch?v=w44s_e08YIA (Accessed 16 July 2009).

Millman, D. and Bainbridge, M. (2008). 'Design Meets Research' [Online] *AIGA*. Available at http://www.aiga.org/design-meets-research (Accessed 22 February 2008).

MindLab. [Online] Available at http://www.mind-lab.dk/en/about (Accessed 7 January 2010).

Mintzberg, H. (1987a). 'The Strategy Concept I: Five Ps for Strategy.*' California Management Review*, 30 (1). pp 11-24.

Mintzberg, H. (1987b). 'Crafting Strategy.' *Harvard Business Review*, 65 (4). pp 66-75.

Mintzberg, H. (1994). *The rise and fall of strategic planning*. USA: Prentice Hall.

Mintzberg, H. (1999). 'Organigraphcs: Drawing how companies really work.' *Harvard Business Review*, 77 (5). pp 87-94.

Mintzberg, H. and Quinn, J. B. (1998/2002). *Readings in the Strategy Process*. UK: Prentice-Hall International Inc.

Mitchell, G. D. (1979). *A new dictionary of sociology*. London, UK: Taylor & Francis.

Moggridge, B. (2006). *Designing Interactions*. Massachusetts: MIT Press.

Mok, C. (2003). 'Time for Change.' [Online] *AIGA*. Available at http://www.aiga.org/time-for-change. (Accessed 7 June 2007).

Mollerup, P. (1992). *Good Enough is not Enough*. Copenhagen, Denmark: Danish Design Centre.

More Associates. [Online] Available at http://www.moreassociates.com (Accessed 10 August 2009).

Morley, E and Silver, A. (1977). 'A film director's approach to managing creativity.*' Harvard Business Review*. Mar/Apr, (55) 2. pp 59-70.

Morelli, N. (2002). 'Designing Product/Service Systems: A Methodological Exploration.' *Design Issues*. 18 (3). pp 3-17.

Morelli, N. (2007). 'Social Innovation and New Industrial Contexts: Can Designers "Industrialize" Socially Responsible Solutions?' *Design Issues*, 23 (4) pp. 3-21.

Mulgan, G. (2007). *Social Innovation: What it is, why it matters and how it can be accelerated*. London, UK: Skoll Foundation.

Mulgan, G. (2009). 'Strengths, weaknesses and a way forward?' [Online] Available at http://www.socialinnovationexchange.org/designforsi/blog?page=1 (Accessed 2 May 2011).

Mulgan, G. and Albury, D. (2003). *Innovation in the Public Sector*. Version 1.9 October 2003. London, UK: Strategy Unit.

Muller, M. J. (2007). '*Participatory design: The third space in HCI.*' In Jacko, J. A and Sears, A. (2007). *The human-computer interaction handbook: fundamentals, evolving technologies, and emerging applications*. New Jersey, USA: Erlbaum.

Murray, R., Caulier-Grice, J. and Mulgan, G. (2010*). The Open Book of Social Innovation*. London, UK: NESTA.

Myerson, J. (2008). *Intersections: Pressing the Pause Button*. London, UK: Design Council.

NEA (2008). [Online] *National Energy Action*. Available at http://www.nea.org.uk (Accessed 17 May 2009).

nef (2007). 'Measuring Real Value: A DIY Guide to Social Return on Investment.' [Online] *New Economic Foundation*. Available at http://www.scribd.com/doc/19678244/NEF-Measuring-Real-Value-Social-Return-on-Investment. (Accessed 17 June 2009).

Neilsen, J. (1993). *Usability Engineering*. San Francisco, USA, Morgan Kaufmann.

NESTA (2008). [Online] *NESTA: Innovation in the UK*. Available at http://www.nesta.org.uk (Accessed 20 June 2008).

NESTA, (2009a). [Online] *NESTA – Big Green Challenge*. Available at http://www.nesta.org.uk/areas_of_work/public_services_lab/big_green_challenge (Accessed 20 July 2009)

NESTA (2009b). *Public Services Lab* [Online] Available at http://www.nesta.org.uk/areas_of_work/public_services_lab/reboot_britain/assets/features/buddy (Accessed 2 February 2012).

NESTA (2009c). [Online] *Public Services Lab – Buddy.* Available at http://www.nesta.org.uk/areas_of_work/public_services_lab/reboot_britain/assets/features/budd y (Accessed 3 February 2012).

NESTA and Innovation Unit (2011). *Prototyping public services: An introduction to using prototyping in the development of public services.* London, UK: NESTA.

NESTA and thinkpublic (2011). *Prototyping framework: A guide to prototyping new ideas.* London, UK: NESTA.

Netherlands Design Institute (1999). *Presence: Elders Online*. Amsterdam: Netherlands Design Institute.

New Designers (2010). Event. 17 July 2010. London UK.

Newbury, D. (1996). 'Knowledge and research in art and design.' *Design Studies*, 17 (2) pp 215-219.

NextD (2007) Ed. 'Beautiful Diversion: Response to Nussbaum's Are Designers The Enemy Of Design?' [Online] *NextD Journal: ReReThinking Design*. Available at http://www.issuu.com/nextd/docs/beautiful_diversion (Accessed 21 July 2007).

NHS. (2009). 'The ebd approach (experience based design)' [Online] *NHS Institute of Innovation and Improvement.* Available at http://www.institute.nhs.uk/quality_and_value/experienced_based_design/the_ebd_approach_(e xperience_based_design).html (Access date 24 June 2009).

Niederman, F., Beise, C., and Beranek, P. (1996). 'Issues and Concerns About Computer-Supported Meetings: The Facilitators' Perspectives.' *MIS Quarterly*, 20 (1). pp. 1-22.

Nonaka, I. (1991). 'The knowledge-creating company.' *Harvard Business Review*. 69(6). pp. 96-104.

Norman, D. (1986). *The Design of Everyday Things*. New York, USA: Basic Books.

Norris, K. W. (1963). *The Morphological Approach to Engineering Design*. Oxford, UK: Pergamon.

Nussbaum, B. (2008). 'Design and Innovation blog' [Online] *Businessweek.* Available at http://www.businessweek.com/innovate/NussbaumOnDesign (Accessed 13 March 2008).

O'Reilly, K. (2005a). *Ethnographic methods*. New York, USA: Routledge.

O'Reilly, T. (2005b). 'What Is Web 2.0: Design Patterns and Business Models for the Next Generation of Software.' [Online] *O'Reilly Media Inc*. Available at http://oreilly.com/web2/archive/what-is-web-20.html (Accessed 28 October 2008).

One NorthEast (2007a). [Online] *Design Innovation and Education Centre (DEIC)*. Available at http://www.onenortheast.co.uk/diec.cfm (Accessed 20 June 2007).

One NorthEast (2007b). [Online] *One North East*. Available at http://www.onenortheast.co.uk (Accessed 23 June 2007).

One NorthEast (2009). *Design and Innovation*. [Online] Available at http://www.onenortheast.co.uk/page/design.cfm (Accessed 7 January 2009).

OpenIDEO (2011). [Online] Available at http://www.openideo.com. (Accessed 17 August 2011).

Options UK (2007). *A new sexual health service for Gateshead*. Newcastle upon Tyne, UK: Options UK.

Options UK (2009). [Online] Available at http://www.options.co.uk/uk (Accessed 13 March 2009).

Origin (2009). *Dott 07 Project Update*. Unpublished report. London, UK: Origin.

Oxford American Dictionary (2006). [Online] *Oxford University Press: OUP USA*. Available at http://www.oup.com/us/ USA: Oxford University Press.

Oxford American Dictionary (2009). *Oxford American Dictionary and Thesaurus*. USA: Oxford University Press.

Oxford English Dictionary (2009). *Oxford English Dictionary*. UK: Oxford University Press.

OXO. (2009). 'OXO- Tools you hold on to.' [Online] Available from http://www.oxo.com/about_whoweare.jsp (Accessed 22 December 2009).

Pacey, E. (2010). 'Nesta report sets out the principles of co-production.' [Online] *Design Week.* Available at http://www.designweek.co.uk/nesta-report-sets-out-the-principles-of-co-production/3008380.article (Accessed 7 January 2010).

Papanek, V. (1971/1985). *Design for the Real World: Human Ecology and Social Change*. USA: Thames and Hudson.

Parker, S. (2009). *Social Animals: Tomorrow's Designers in Today's World*. London, UK: Royal Society of the Arts (RSA).

Parker, S. and Heapy, J. (2006). *Journey to the Interface*. London, UK: DEMOS and PriceWaterhouseCoopers.

Participle (2008). [Online] Available at http://www.participle.net (Accessed 19 October 2008).

Patton, M. Q. (1987). *How to use qualitative methods in evaluation*. California, USA: Sage.

Peel, D. (2000). 'The teacher and town planner as facilitator.' *Innovations in Education and Training International*, 37 (4). pp 372-280.

Peer Insight (2007). [Online] Available at: http://peerinsight.com (Accessed 19 November 2007).

Phills, J. A., Deiglmeier, K. and Miller, D. T. 'Rediscovering Social Innovation.' *Stanford Social Innovation Review*, Fall 2008.

Pierce, V., Cheesbrow, D. and Braun, L. M. (2000). 'Facilitator Competencies.' *Group Facilitation: A Research and Applications Journal*, 2. pp 25- 32.

Pilloton, E. (2008). '(Anti)Manifesto: A Call To Action For Humanitarian (Product) Design' [Online] *Project H Design*. Available at http://www.projecthdesign.org (Accessed 27 November 2009).

Pine, J. and Gilmore, J. (1999). *The Experience Economy*. Boston, USA: Harvard Business School Press.

Polaine, A., Aebersold, R., Bossart, R. and Mettler , A. 'Case Studies: Blueprint+.' [Online] *Service Design Tools*. Available at http://www.servicedesigntools.org/tools/35 (Accessed 11 February 2010).

Powerhouse Museum (2011). *Design-led Solutions to Wicked Problems*. Conference. 9 August 2011. Sydney, Australia.

Pickard, L. (2004). *The effectiveness and cost- effectiveness of support and services to informal Carers of older people: A review of the literature prepared for the Audit Commission*. London, UK: Personal Social Services Research Unit LSE Health and Social Care London School of Economics.

Pine, J. and Gilmore, J. (1999). *The Experience Economy*. Boston, USA: Harvard Business School Press.

Polanyi, M. (1967). *The Tacit Dimension*. New York, USA, Anchor Books.

Politecnico di Milano. [Online] Available at http://www.english.polimi.it (Accessed 10 June 2007).

Porras, J. and Roberts, P. (1992). 'Organisation development.' Dunnette, M. and Hough, L. (Eds). *Handbook of Industrial and Organisational Psychology*. pp. 719 -822. London, UK: Consulting Psychologists Press.

Press, M. and Cooper, R. (2003). *The Design Experiences: The role of design and designers in the twenty-first century*. UK: Ashgate Publishing Limited.

Pricewaterhouse Coopers (2007). *Department for Children Schools and Families Evaluation of Building Schools for the Future - 1st Annual Report.* UK: Pricewaterhouse Coopers LLP.

Project H Design. [Online] Available at http://www.projecthdesign.org (Accessed 28 November 2009).

Project Stakeholder 1 (2008). *Interview for Alzheimer100*. 13 February 2008. Newcastle upon Tyne, UK.

Project Stakeholder 2 (2008). *Interview for Alzheimer100*. 5 February 2008. Hebburn, UK.

Project Stakeholder 3 (2008). *Interview for Alzheimer100*. 5 February 2008. South Shields, UK.

Project Stakeholder 4 (2008). *Interview for DaSH*. 14 February 2008. Gateshead, UK.

Project Stakeholder 5 (2008). *Interview for DaSH*. 30 January 2008. Gateshead, UK.

Project Stakeholder 6 (2008). *Interview for DaSH*. 23 January 2008. Gateshead, UK.

Project Stakeholder 7 (2008). *Interview for OurNewSchool*. 31 January 2008. Newcastle upon Tyne, UK.

Project Stakeholder 8 (2008). *Interview for OurNewSchool*. 31 January 2008. Newcastle upon Tyne, UK.

Project Stakeholder 9 (2008). *Interview for New Work*. 5 February 2008. Newcastle upon Tyne, UK.

Project Stakeholder 10 (2008). *Interview for New Work*. 30 January 2008. Newcastle upon Tyne, UK.

Project Stakeholder 11 (2008). *Interview for Move Me*. 5 March 2008. Newcastle upon Tyne, UK.

Project Stakeholder 12 (2008). *Interview for Move Me*. 28 March 2008. Scremerston, UK.

Project Stakeholder 13 (2008). *Interview for LowCarbLane*. 15 February 2008. Newcastle upon Tyne, UK.

Project Stakeholder 14 (2008). *Interview for Low Carb Lane*. 7 February 2008. Newcastle upon Tyne, UK.

Project Stakeholder 15 (2007). *Interview for Urban Farming*. 20 December 2007. Middlesbrough UK.

Project Stakeholder 16 (2007). *Interview for Urban Farming*. 27 March 2008. Newcastle upon Tyne, UK.

Project Stakeholder 17 (2008). *Interview for Urban Farming*. 20 December 2007. Middlesbrough UK.

Pryke, M., Rose, G. and Whatmore, S. (2003). *Using Social Theory: Thinking through research.* London, UK: Sage Publication.

Pugh, S. (1990). *Total Design: integrated methods for successful product engineering.* Wokingham, UK: Addison-Wesley.

Radarstation (2005). *Radarstation*. London, UK: Radarstation.

Radarstation (2011). [Online] Available from http//:www.radarstation.co.uk (Accessed 15 July 2011).

Randall, M. (2009). 'Design Ignites Change: Design as Social Educator.' [Online] Available at http://www.commarts.com/Columns.aspx?pub=2506&pageid. (Accessed 20 July 2009).

Rao, P. (2012). *Connecting the dots: A design approach to services for the poor*. PhD thesis. Newcastle upon Tyne, UK: School of Design, Northumbria University.

Rasmussen, L. B. (2003). 'The facilitation of groups and networks: capabilities to shape creative cooperation.' *AI and Society: Artificial Intelligence*, 17 (3-4). pp 307-321.

Rawsthorne, A. (2008). 'Using Design to Crack Society's Problems.' [Online] *FastCompany* Available at http://www.fastcompany.com/magazine/130/mission-critical.html (Accessed 2 November 2008).

Rawsthorne, A. (2009). 'Nurturing the Inner Entrepreneur' [Online] *The New York Times*. Available at http://www.nytimes.com/2009/08/17/fashion/17iht-DESIGN17.html (Accessed 16 August 2009).

Read, H. (1943). *Education through art*. London, UK: Faber and Faber.

RED (2004-2006). [Online] Available at http://www.designcouncil.info/mt/RED. (Accessed 6 June 2007).

Rhea, D. (2004). 'What's the difference between IDEO and Cheskin?' [Online] *Cheskin Added Value*. Available at http://www.cheskin.com/blog/?p=247 (Accessed July 2009).

Rhea, D. (2009). 'Design Research History.' [Online] *Cheskin: Fresh Perspectives*. Available at http://www.cheskin.com/blog/?p=764 (Accessed 25 July 2009).

Richardson, V. (2009). 'Designs of the Year: Not about design.' [Online] *Blueprint Magazine – Architecture and Design*. Available at http://www.blueprintmagazine.co.uk/index.php/design/designs-of-the-year-not-about-design/ (Accessed 25 March 2009).

Richardson, H. (2010). 'School buildings scheme scrapped.' [Online] *BBC News: Education & Family*. 5 July 2010. Available from http://www.bbc.co.uk/news/10514113 (Accessed 5 July 2010).

Robinson, L. (2002). 'Participatory Rural Appraisal: A brief introduction.*' Group Facilitation: A Research and Applications Journal*, 4. pp 45-52.

Robson, C. (1995/2002). *Real world research: A resource for social scientists and practitioner-researchers*. UK: Wiley-Blackwell.

Roth, S. (1999). 'The State of Design Research.' *Design Issues*, 15 (2). pp 18-26.

Rowe, P. (1996). *Design Thinking*. Massachusetts, USA: Seventh Printing.

RSA (2009). *RSA debates: Design, cities and citizenship in the 21st century*. Event. 21 September 2009. London UK: Royal Society of the Arts.

Ryle, G. (1949). *The Concept of Mind*. UK: Penguin Books.

Saco and Gonclaves (2008). 'Service Design: An Appraisal'. *Design Management Review*, 19 (1). pp 10-19.

Saffer, D. (2010). *Designing Interactions: Creating Innovative Applications and Devices*. California, USA: New Riders.

Sanders, E. B. N. (1992). 'Converging Perspectives: Product Development Research for the 1990s.' *Design Management Journal*, 3 (4). pp 49-54.

Sanders, E. B. N. (1999). 'Postdesign and Participatory Culture'. *Useful and Critical: The Position of Research in Design Conference*. 9-11 September 1999. Tuusula, Finland: University of Art and Design Helsinki (UIAH).

Sanders, E. B. N. (2000). 'Generative Tools for CoDesigning.' [Online] Available from http://www.maketools.com/papers.html (Accessed 3 August 2009).

Sanders, E. (2001). 'A New Space for Design.' P*roceedings of ICSID 2001 Seoul: Exploring Emerging Design Paradigm*. October 7-1. Seoul, Korea.

Sanders, E. B. N. (2002). 'Ethnography in NPD Research How 'applied ethnography' can improve your NPD research process.' [Online] *Visions Magazine*. Available from http://www.pdma.org/visions/print.php?doc=apr02/applied.html (Accessed 24 February 2008).

Sanders, E. (2005). 'Information, Inspiration and Co-creation.' *The 6th International Conference of the European Academy of Design*. 29 March 2005. Germany.

Sanders, E. (2006). 'Design Serving People.' *Copenhagen Cumulus Working Papers*. 15 May 2008. Finland: University of Art and Design Helsinki.

Sanders, E. B. N. and Simmons, G. (2009). 'A Social Vision for Value Co-creation in Design.' [Online] *Open Source Business Resource: Value Co-Creation*. Available from http://www.osbr.ca/ojs/index.php/osbr/article/view/1012/973 (Accessed 1 March 2010).

Sanders, E. and Stappers, P. J. (2008). 'Co-creation and the new landscapes of design'. *CoDesign*, 4 (1) pp 5-18.

Sanders, E. B. N. and Williams, C. T. (2001). 'Harnessing People's Creativity: Ideation and Expression through Visual Communication.' In Langford, J. and. McDonagh, P. D. (Eds). *Focus Groups: Supporting Effective Product Development*. New York, USA: Taylor and Francis.

Sangiorgi, D & Clark, B 2004, 'Toward a participatory design approach to service design.' Paper presented at *Participatory Design Conference*. 27-31 July 2004. Toronto, Canada.

Sangiorgi, D. (2008). 'Service Design as the design of Activity Systems' *International Service Design Northumbria (ISDn) 3 Conference*. 2-3 April 2008. Newcastle upon Tyne, UK: School of Design Northumbria University.

Sanoff, H. (2000). *Community Participation Methods in Design and Planning*. New York, USA: John Wiley & Sons, Inc.

Sanoff, H. (2006). 'Multiple views of Participatory Design.' *Middle East Technical University Journal of the Faculty of Architecture*, 23(2). pp. 131-143.

Stanos, F. (2009). 'Faculty & Research Working Paper: A Positive Theory of Social Entrepreneurship.' *INSEAD Social Innovation Centre*. France: INSEAD.

Sawhney, R. and Prahalad, D. (2010). 'The Role of Design in Business.' [Online] *Businessweek* Available at http://www.businessweek.com/innovate/content/jan2010/id20100127_743970.htm (Accessed 5 February 2010).

Schaeper, J. (2007). OurNewSchool presentation. *Dott Debates: Sustainability, Schools and Schooling Debate*. 28 October 2007. NewcastleGateshead, UK.

Schein, E. (1969). *Process Consultation: Its role in organizational development*. Massachusetts, USA: Addison-Wesley Publishing Company.

Schensul, L., Schensul, J. J. and LeCompte, D. (1999). *Essential ethnographic methods: observations, interviews, and questionnaires*. Oxford, UK: Rowman Altamira.

Schon, D. (1983/ 1991). *The Reflective Practitioner: How professionals think in action*. London, UK: Ashgate.

Schulman, S. (2010). 'Design Thinking is Not Enough.' [Online] *In With For*. Available at http://www.inwithfor.org/2010/01/design-thinking-is-n'ot-enough (Accessed 10 May 2011).

Schwarz, R. (2002). *The Skilled Facilitator: A Comprehensive Resource for Consultants, Facilitators, Managers, Trainers and Coaches*. San Francisco, USA: Jossy-Bass.

Scrivener, Bell and Woodcock (2000) Eds. *Collaborative Design*. London, UK: Springer-Verlag.

Seidel, V. (2000). 'Moving from Design to Strategy: The Four Roles of Design-Led Strategy Consulting.' *Design Management Journal*, 11(2). pp. 73-79.

Senge, P. (1990a). 'The Leader's New Work: Building Learning Organisations.' *Sloan Management Review,* 32 (1). pp 7-23.

Senge, P. M. (1990b). *The fifth discipline: The art and practice of the learning organization*. New York, USA: Doubleday.

Senge, P., Kleiner, A., Roberts, C., Ross, R. B. and Smith, B. J. (1994). *The Fifth Discipline Fieldbook*. New York, USA: Doubleday Dell Publishing.

Sennett, R. (2008). *The Craftsman*. UK: Penguin Books.

ServDes: Service Design and Innovation Conference (2010). 1-3 December 2010. Linköping, Sweden.

Service Design Network. [Online]. Available at http://www.service-design-network.org. (Accessed 7 May 2009).

Service Design Thinks 1 (2009a). Event. 3 September 2009. London, UK.

Service Design Thinks 2: Service Design at Scale (2010a). Event. 19 November 2010. London, UK.

Service Design Thinks 3: Service Design from Scratch (2010b). Event. 30 March 2010. London, UK.

Servicedesigning.org. [Online]. *Servicedesigning.org: By service designers for service designers*. Available at http://www.servicedesigning.org

Sevaldson, B. (2010). 'Discussions & Movements in Design Research: A systems approach to practice research in design.' *FORMakademisk*, 3(1). pp 8-35.

Severson, K. and Moskin, J. (2006). 'Meals That Moms Can Almost Call Their Own.' *New York Times*. New York, USA: New York Times Company.

Shostack, L. G. (2001). 'How to Design a Service.' *European Journal of Marketing*. 16 (1) pp 49-63.

Shostack, L. G. (1984). 'Designing Services that Deliver.' *Harvard Business Review*, 62 (1) pp 133-139.

Said Business School. [Online] Available at http://www.sbs.ox.ac.uk (Accessed 30 July 2007).

Sibbet, D. (2010). *Visual Meetings: How Graphics, Sticky Notes and Idea Mapping Can Transform Group Productivity*. USA: John Wiley and Sons.

Sidekick Studios (2011). [Online] Available at http://sidekickstudios.net (Accessed 2 February 2012).

Sidekick Ventures (2012). [Online] Available at http://sidekickventures.net/our_story (Accessed 2 February 2012).

SILK Innovation Lab (2007). [Online] Available at http://socialinnovation.typepad.com/silk (Accessed 10 November 2009).

Silverman, D. (2001). *Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction*. Second edition. London, UK: Sage.

Simon, A., Sohal, A. and Brown, A. (1994). 'Generative and case study research in quality management.' *International Journal of Quality & Reliability Management*, 13(1). pp. 32-42.

Sinek, S. (2010). 'How Great Leaders Inspire Action.' [Online] *TED: Ideas Worth Spreading*. Available from http://www.ted.com/talks/simon_sinek_how_great_leaders_inspire_action.html (Accessed 7 July 2011).

Singleton, B. (2008). 'Edge Services: Designing for Inconspicuous Consumption.' In Feijs, L., Kyffin, S., and Young, R. (Eds). *DesFORM: Design and semantics of form and movement*. Netherlands: Koninklijke Philips Electronics.

Singleton, B. and Ardern, J. (2008). 'ARK-INC: An alternative view of what 'designing for sustainability' might mean.' In Cipolla, C. and Peruccio, P.P. (Eds). *Changing the Change: Design, Visions, Proposals and Tools Proceedings*. Italy: Allemandi Conference Press.

Singleton, B. (2012). *On Craft and Being Crafty: Human Behaviour as the Object of Design*. PhD thesis. Newcastle upon Tyne, UK: School of Design, Northumbria University.

Simon, H. (1996). *The Sciences of the Artificial*. Third Edition. USA: Massachusetts Institute of Technology.

Skoll Foundation (2009). [Online] Available at http://www.skollfoundation.org/ (Accessed 21 July 2009).

Smith, A., Watkiss, P., Tweddle, G., McKinnon, A., Browne, M., Hunt, A., Treleven, C., Nash, C., Cross, S. (2005). *The Validity of Food Miles as an Indicator of Sustainable Development: Final report*. UK: Defra.

Smith, S., Regan, A. and Ramsay, B. (2007). *Evaluation of Dott*. UK: Wood Holmes Group.

Smith, T. (2009). 'Confessions of a Service Design Researcher.' *Touchpoints*, 3. pp 9-13.

SocialDesignBlog (2009). [Online] Available at http://www.socialdesignblog.org (Accessed 5 February 2009).

Spencer, N. R. (2008). *An Investigation into the Experience of Designing*. PhD thesis. Newcastle upon Tyne, UK: School of Design, Northumbria University.

Stanford Social Innovation Review. [Online] *Stanford Social Innovation Review: Socially Responsible Business*. Available at http://www.ssireview.org (Accessed 6 May 2010).

Stanworth, J. and Gray, C. (1991). *Bolton 20 years on: the small firm in the 1990s*. London, UK: Paul Chapman.

STBY (2011). [Online]. Available at http://www.stby.eu (Accessed 30 January 2011).

Stevens, J., Moultrie, J. and Crilly, N. (2008). 'Designing and design thinking in strategy concepts: frameworks towards an intervention tool.' *International DMI Education Conference Design Thinking: New Challenges for Designers, Managers and Organizations*. 14-15 April 2008. ESSEC Business School, Cergy-Pointoise, France: Design Management Institute (DMI).

Storey, D. J. (1994). *Understanding the small business sector*. London, UK: International Thomson Business Press.

Strategic Design and Public Policy Conference (2010). Glen Clove, New York, USA. 9 – 11 June 2010. Available at https://sites.google.com/site/strategicdesignandpublicpolicy/home

Strickler, Z. (1999). 'Elicitation methods in experimental design research.' *Design Issues*, 15(2) pp 27-39.

Superflux (2012). [Online]. Available at http://www.superflux.in (Accessed 5 February 2012).

Sustainable Everyday Project. [Online] Available at http://www.sustainable-everyday.net (Accessed 15 June 2007).

Sure Start. [Online] *Sure Start Children's Centres*. Available at http://www.direct.gov.uk/en/Parents/Preschooldevelopmentandlearning/NurseriesPlaygroupsReceptionClasses/DG_173054 (Accessed 14 August 2010).

Sylver, B. (2009). 'Spend it Wisely: A Market Research Primer for Designers.' [Online] *Core 77*. Available at http://www.core77.com/blog/featured_items/spend_it_wisely_a_market_research_primer_for_designers_by_brianna_sylver_13355.asp (Access date 2 May 2009).

Szebeko, D. (2008). 'Designing healthcare environments.' [Online] *Health Service Journal*. 22 June 2009. Available from http://www.hsj.co.uk/designing-healthcare-environments/1885902.article. (Accessed 30 June 2009).

Szebeko, D. and Tan, L. (2010). 'Co-designing for society.' *Australasian Medical Journal AMJ* 3, (9). pp 580-590.

Szebeko, D., Britton, E., Smith, J. and Tan, L. (2011). 'Prototyping public services: Using prototyping to design services for families with complex needs.' London, UK: Unpublished paper.

TACSI (The Australian Centre for Social Innovation) (2011). *Project Paper 03: Family by Family: Developed in, with and for families in South Australia.* South Australia, Australia: The Australian Centre for Social Innovation.

Tan, L. (2007-2010). *Letters to Australia* [Online]. Available at http://www.letterstoaustralia.blogpost.com

Tan, L. (2008). 'Design in Public Sector Services: Insights into the Designs of the Time (Dott 07) public design commission projects.' In Cipolla, C. and Peruccio, P.P. (Eds). *Changing the Change: Design, Visions, Proposals and Tools Proceedings*. Italy: Allemandi Conference Press.

Tan, L. (2009a). [Electronic communications]. 1 September 2009.

Tan, L. (2009b). 'Dott 07 (Designs of the Time 2007): Designer as enabler of small, local, open and connected.' London, UK: Unpublished paper.

Tan, L. (2009c). 'Perspectives on the changing role of the designer: Now and to the future.' *Icsid Design Education Conference*. 22 November 2009. Singapore: Icsid.

Tan, L. (2010). 'The different roles of the designer and their value: Researcher, Strategist & Facilitator.' *Bbtween 3*. Sydney, Australia: Billy Blue College of Design.

Tan, L. (2011a). 'Design for Social Innovation.' [Online] *Object Magazine*. October 2011. Available at http://object.com.au/object-magazine/current-issue. Sydney, Australia: Object Centre for Design.

Tan, L. (2011b). 'Design Thinking for Education.' [Online] *Object Magazine*. October 2011. Available at http://object.com.au/object-magazine/current-issue. Sydney, Australia: Object Centre for Design.

Tan, L., Marsh, N. and Nel, J. (2011c). 'Service Designing: A Network for Service Designers, by Service Designers.' *Touchpoints: The Journal of Service Design*, (3) 1. Germany: Service Design Network.

Tan, L., Singleton, B., Singleton, J. and Smart, M. (2009). 'Design and sexual health (DaSH): Using design and market research methodologies.' London, UK: Unpublished paper.

Tassi, R. (2009). *Service Design Tools: Communication Methods supporting design process.* [Online]. Available at http://www.servicedesigntools.org (Accessed 20 January 2010).

Teachernet (2008). [Online] *About BSF.* Available at http://www.teachernet.gov.uk/management/resourcesfinanceandbuilding/bsf/aboutbsf/ (Accessed 25 May 2008).

TEDx Montreal (2010). *Design for Health*. Conference. 1 October 2010. Montreal, Quebec.

Tellis, W. (1997). 'Application of a Case Study Methodology' *The Qualitative Report*. (3) 3. September, 1997. Available at http://www.nova.edu/ssss/QR/QR3-3/tellis2.html (Accessed 2 March 2010).

Temple, M. (2010*). Design Council Review 2010*. London, UK: Department for Business Innovation & Skills.

Thackara, J. (2006). *In the Bubble, Designing in a Complex World*. USA: MIT Press.

Thackara, J. (2007a). *Interview for Dott 07*. 13 July, 2007. Newcastle upon Tyne, UK.

Thackara, J. (2007b). *Wouldn't it be great if...* London, UK: Dott 07.

Thackara, J. (2010). 'Transforming public services.' [Online] *Design Council*. Available at http://www.designcouncil.org.uk/our-work/insight/public-services-revolution-or-evolution/service-design-in-the-media/transforming-public-services/ (Accessed 17 December 2010).

Thorpe, A. (2008). [Online] *Design Activism*. Available at http://designactivism.net (Accessed 9 August 2009).

Thorpe, A. (2008). 'Design as Activism: A Conceptual Tool.' In Cipolla, C. and Peruccio, P.P. (Eds). *Changing the Change: Design, Visions, Proposals and Tools Proceedings*. Italy: Allemandi Conference Press.

Thorpe, A. (2009a). 'Design for development: Seeing beyond the world of wealth.' Panel Discussion. 10 October 2009. London, UK.

Thorpe, A. (2009b). 'The context of 'low product': How designers can help articulate a new social language.' [Online] *Core Jr.* Available at http://core77.com/blog/featured_items/_the_context_of_low_product_how_designers_can_help _articulate_a_new_social_language_by_ann_thorpe_13623.asp (Accessed 30 May 2009).

The Amazings (2011). [Online] Available at http://theamazings.org (Accessed 3 February 2012).

The Australian Centre for Social Innovation (TACSI). [Online] Available at http://www.tacsi.org.au. (Accessed 30 December 2010).

The Economist (2009). 'Global heroes: A special report on entrepreneurship.' *The Economist.* 14 March 2009. Also available at http://www.economist.com/node/13216025?story_id=13216025 (Accessed 14 March 2009).

Thinkplace (2011). [Online]. Available at http://thinkplace.com.au (Accessed 2 March 2011).

thinkpublic (2007). *The Real Work Experience Launch Event Report: 16.11.07.* Available from http://www.therealworkexperience.com/documents/RealWorkExperienceLaunchEventReport.p df (Accessed 4 November 2009). London, UK: thinkpublic.

thinkpublic (2009). 'The story of co-design by thinkpublic' [Online] Available at: http://www.youtube.com/user/thinkpublic#p/u/4/HWgJlwTDIRQ (Accessed 15 December 2009).

thinkpublic (2010). [Online] *Experience Based Design.* Available at http://thinkpublic.com/case-studies/case-study-experience-based-design (Accessed 11 November 2010).

thinkpublic: the social design agency. [Online] Available at http://thinkpublic.com (Accessed 10 November 2010).

thinkpublic (2011*). Prototyping Framework: How to use prototyping to develop better public services. A guide to prototyping new ideas.* London, UK: NESTA and thinkpublic.

Timebank (2009). [Online] *Timebank UK* Available at http://www.timebank.org.uk. (Accessed 25 June 2009).

Toffler, A. (1984). *Future Shock.* USA: Random House Publishing Group.

Tonkinwise, C. (2010). 'Politics Please, We're Social Designers.' [Online] *Core 77*. Available at

http://www.core77.com/blog/featured_items/politics_please_were_social_designers_by_cameron_tonkinwise__17284.asp (Accessed 10 May 2011).

Tryhorn, C. (2009). 'Watchdog clears TV show that branded Middlesbrough UK's worst place to live.' [Online] *The Guardian*. Available at

http://www.guardian.co.uk/media/2009/aug/03/location-location-location-kirstie-allsopp-ofcom (Accessed 4 August 2009).

UNICEF (2001). *A league table of teenage births in rich nations*. Florence, Italy: UNICEF Innocenti Research Centre.

United Nations (2000). 'Millennium Development Goals.' [Online] Available at: http://www.beta.undp.org/undp/en/home/mdgoverview.html (Accessed 4 February 2009).

United National Development Programme (UNDP) (2000). [Online] Available at http://www.beta.undp.org/undp/en/home/mdgoverview.html (Accessed 5 February 2009).

United Nations (2008a). *Participatory Governance and the Millennium Development Goals (MDGs)*. New York, USA: Department of Economic and Social Affairs, United Nations.

United Nations (2008b). *The United Nations Today*. New York, USA: United Nations.

Uscreates (2010). [Online] Available at http://www.uscreates.com (Accessed 19 February 2010).

V&A (2008). *Think Tank: The Future Designer Conference*. London, UK: V&A Museum.

Viljoen, A. (2005) (Ed). *Continuous Productive Urban Landscapes: Designing Urban Agriculture for Sustainable Cities*. UK: Architectural Press.

van Veggel, R. J. F. M. (2005). 'Where the two sides of ethnography collide.' *Design Issues*, 21 (3). pp 3-16.

Van Zyl, R. (2008). 'Buchanan's design thinking matrix: implications for SMEs.' *International DMI Education Conference: Design Thinking New Challenges for Designers, Managers and Organisations*. 14-15 April 2008. ESSEC Business School, Cergy- Pointoise, France: Design Management Institute (DMI).

Valtonen, A. (2005). 'Six decades - and six different roles for the industrial designer.' *Nordes Conference In the Making*. 29-31 May 2005. Copenhagen, Denmark. Available at http://www.tii.se/reform/inthemaking/proceedings.htm

Viljoen, A. (2005) (Ed). *Continuous Productive Urban Landscapes: Designing Urban Agriculture for Sustainable Cities*. UK: Architectural Press.

Villiers-Stuart, P. and Stibbe, A. (2009). *The Handbook of Sustainability Literacy: multimedia version*. Brighton, UK: University of Brighton.

Visionarc (2010). [Online] Available at www.visionarc.org (Accessed 28 November 2010).

Vitae (2009). *Communicating to the Public: Vitae Poster Competition*. Event. 22 April 2009. Leeds, UK.

Von Hippel, E. (2005). [Online] *Democratizing Innovation*. Available at http://web.mit.edu/evhippel/www/democ1.htm (Accessed 8 April 2010).

Wahl, D. C. and Baxter, S. (2008). 'The designer's role in facilitating sustainable solutions.' *Design Issues*, 24 (2). pp: 72-83.

Waite, M. and Hawker, S. (2009) Eds. *Oxford Paperback Dictionary and Thesaurus*. Oxford, UK: Oxford University Press.

Walker Technology College (2009). [Online] Available at http://www.walker.newcastle.sch.uk (Accessed 21 June 2009).

Walters, H. (2010). 'The Value of Design.' [Online] *Bloomberg/Businessweek*. Available at http://www.businessweek.com/innovate/content/feb2010/id2010021_071409.htm?chan=innovation_special+report+--+the+value+of+design+2010_special+report+--+the+value+of+design (Accessed 5 February 2010).

Ward, A. and Dekker, J. (2009). 'Managing Design in SMEs.' *Design Management Review,* 20 (3). pp. 46-53.

Ward, A. (2010). 'Emerging themes across Dott projects.'[Online] *Dott Cornwall*. Available at http://www.dottcornwall.com/design-matters/design-articles/emerging-themes-across-dott-projects. (Accessed 17 December 2010).

Weaver, R. G. and Farrell, J. D. (1997). *Managers as facilitators: a practical guide to getting work done in a changing workplace*. San Francisco, USA: Berrett-Koehler Publishers.

Weick, K. E. (1995) *Sensemaking in Organisations*. London, UK: Sage Publications.

Weick, K., Sutcliffe, K. M. and Obsfeld, D. (2005). 'Organizing and the Process of Sensemaking.' *Organization Science,* 16 (4). pp 409-421.

Westwood, S. (2010). *Dementia Pilot Projects Evaluation: Interim Report on Dementia Adviser Pilot*. UK: Oxfordshire County Council.

Wildman, G., Downs, C. and VanPatter, GK. (2006). 'i-Gitators in Action: Can Service Innovation (Design) Save the World?' [Online] *NextDesign Leadership Institute*. Available at http://www.droom.zaacht.com/wp-content/uploads/2007/10/nextd_9_3.pdf (Accessed 2 August 2007).

Winograd, T. (1996) Ed. *Bringing design to software*. Boston, USA: Addison-Wesley.

Whittington, R. (1993). *What is strategy - and why does it matter?* London, UK: Routledge.

Wilkinson, M. (2000). *Exploration into the strategic role of designers and academics in shaping collaborative new product development across supply chains, toward a new methodology*. PhD thesis. UK: University of East London.

Winhall, J. (2006). 'Is Design Political?' [Online]. *Core 77*. Available from http://www.core77.com/reactor/03.06_winhall.asp. (Accessed 10 July 2008).

Winkler, D. (1997). 'Design Practice and Education: Moving Beyond the Bauhaus Model.' In J. Frascara (Ed). *User-Centered Graphic Design: Mass Communications and Social Change*. London & Bristol PA: Taylor & Francis Ltd. pp 129-135.

Wood Holes Group (2008). *Design Council & One North East: Evaluation of Design of the times (Dott 07)*. Newcastle upon Tyne, UK: Wood Holmes Group.

Work Worth Doing. [Online] Available at http://workworthdoing.com (Accessed 16 September 2008).

World Wildlife Fund (2011). 'Food | Changing the way we live.' [Online] Available at http://www.wwf.org.uk/what_we_do/changing_the_way_we_live/food/ (Accessed 17 January 2011).

Writing Across Boundaries (2009). Workshop. 30-31 March 2009. Durham University, UK.

Writing Across Boundaries (2010). Workshop. 29-30 March 2010. Durham University, UK.

Yaneva, A. (2009). *Made by the Office for Metropolitan Architecture. An Ethnography of Design*. Rotterdam, Netherlands: 010 Publishers.

Years Ahead. [Online] Available at: http://www.yearsahead.org.uk. (Accessed 3 January 2011).

Yee, J. S. R. (2006). *Developing a Practice-Led Framework to Promote the Practise and*

Understanding of Typography Across Different Media. PhD thesis. Newcastle upon Tyne, UK: Northumbria University, School of Design.

Yee, J. S. R (2009). 'Capturing tacit knowledge: documenting and understanding recent methodological innovation used in Design Doctorates in order to inform Postgraduate training provision.' *EKSIG 2009: Experiential Knowledge, Method & Methodology Conference*. 19 June 2009. London UK: London Metropolitan University.

Yee, J. S. R., Meredith, P. and Tan, L. (2009). 'The emergent roles of a designer in the development of an e-learning service.' *DeThinking Service, ReThinking Design: First Nordic conference on service design and innovation.* 24-26 November 2009. Oslo, Norway.

Yin, R. K. (1994). *Case Study Research and methods*. London, UK: Sage.

Yin, R. (2003). *Case study research: Design and methods*. Fourth Edition. UK: Sage.

Yom-Tov, O. (2011). 'Designers on the inside.' *Service Design 2012 Conference.* 3 May 2011. Sydney, Australia: UX Australia. Available at http://uxaustralia.com.au/servicedesign-2011/designers-on-the-inside (Accessed 7 February 2012).

Yoon, C. S. (1996). 'Participatory Communication for Development.' In Bessette, G. R. and Rajasunderam, C. V. (Eds). *Participatory Development Communication: A West African Agenda*. Canada: International Development Research Centre.

Young, R. (1996). 'No Guru No Method.' *International Conference on Art and Design Research*. Helsinki, Finland: The University of Art and Design.

Young, R., Cooper, A. and Blair, S. (2001). 'Redesigning Design Education - the Next Bauhaus? A contextual discussion document for a new Design Praxis.' *ICSID Conference: Exploring Emerging Design Paradigm*. October 12 – 13, 2001. Seoul, Korea: Korea Design Center.

Young, R. (2008). 'An integrated model of designing to aid understanding of the complexity paradigm in design practice.' *Futures*, 40 (6). pp 562-576.

Young, R. (2010). 'Development in service design practice'. In K. Alexiou, Johnson, J., and Zamenopoulos, T. (Eds). *Embracing complexity in Design*. pp: 161-176. London and New York: Routledge.

Yunus, M. (2009). 'A Framework for a Better Future.' *Talking Without Borders Lecture*. 29 May 2009. London, UK: British Council.

Zeisel, J. (1981/1993). *Inquiry by design: tools for environment-behavior research*. UK: Cambridge University Press.

Zimmerman, A. L. and Evans, C. J. (1993). *Facilitation: From discussion to decision*. East Brunswick, NJ, USA: Nichols Publishing.

Appendix

Accompanying material for PhD thesis

**UNDERSTANDING THE DIFFERENT ROLES OF THE DESIGNER
IN DESIGN FOR SOCIAL GOOD.
A STUDY OF DESIGN METHODOLOGY
IN THE DOTT 07 (DESIGNS OF THE TIME 2007) PROJECTS.**

By Lauren Tan

Appendix Contents

Appendix 0

Prologue

Prologue

"Sometimes questions are more important than answers."
—*Nancy Willard (in Moorhead, 1988), The Meaning of Life*

In 1999 I began a Bachelor of Design degree (Visual Communication) at the University of Technology, Sydney. Fresh out of high school, I was ready to focus on exploring creativity, something that was limited to one subject once a week during art class at school. As I began University life, most of my friends would quickly find their place in the creative world and they were the lucky ones. For some of us, the four year course would become a test of perseverance, emotions, shaky confidence, critiques, long hours, unsatisfactory marks and continual questions of whether design could extend beyond the realms of designing chairs, posters, clothing and interiors. The Bauhaus arts and craft-based education model and ethos presided heavily over the course and encouraged designers to be the sole creator of beautiful, tangible artefacts. While I believed it was important that design create tangible artefacts, beautiful things, graphics and spaces, from what I could see, being taught to nurture our creativity was something that was bigger than those things, and something which could have an additional and far greater contribution to society.

In the final year of my degree I started an internship at a commercial graphic design studio. It was my first observation of how a designer's contribution could extend beyond that of the look of things and help solve 'wicked'[1] business problems. For more than half my time during my internship I worked on packaging design for fast moving consumer goods (FMCG). One FMCG product of our client's was failing to meet sales targets and we were informed our client was to "write off a million dollars in technology" invested in manufacturing to take the products off the supermarket shelves.

Back at the studio, the design team agreed this was a huge waste and proposed an idea to keep these products on the shelves. We had been tweaking the packaging design of a similar type of product by the same company. This product had a strong brand presence and was doing very well in terms of supermarket sales. We proposed a packaging re-design of the failing FMCG. It would be integrated into the range that was selling well and leverage its brand value to increase sales. The client agreed to let us go ahead with the redesign. Three months later, and a few months after my internship I found the product in their new packaging on the

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[1] 'Wicked problems' are described as a "class of social system problems which are ill-formulated, where the information is confusing, where there are many clients and decision makers with conflicting values, and where the ramifications in the whole system are thoroughly confusing." (Rittel in Buchanan, 1992: 11).

supermarket shelves. In fact, the products are still sold in all major Australian supermarkets today, 10 years since our client first informed us that they were thinking of ceasing production. This was my first observation of how design could solve business problems. It fundamentally changed my view of design, demonstrating how design used strategically could help organisations. This observation led me to explore design in new and different situations, in particular; business and organisational contexts.

After my design degree, I completed a Master of Business (Organisational Strategy and Marketing) degree at the University of Sydney. I used this time to explore if design had a place in another context i.e. business and organisational life. In both degrees, I became increasingly aware that one of the key barriers between the two disciplines was the different vocabulary they both used. Boland and Collopy (2004) say that design must develop a new vocabulary if it is to transcend disciplinary boundaries, and there are so many cases in practice where I observed this as a barrier. A common vocabulary is needed for other disciplines to understand design, and then for design to understand other disciplines. Vocabulary doesn't just mean words, but the forms, techniques and articulations specific to a discipline for example "dance companies have their own vocabularies of movement" (Oxford American Dictionary, 2009). A good example of where design does little to share a vocabulary with business is the evaluation of design by numbers. While many designers I came across in this research investigation expressed their concern for this issue[2], and the co-sponsor for this research conducted studies that found that businesses that used design saw clear return on their investments[3], much of the discourse among industry and in academic design research has only recently begun to focus on this issue in particular social return on investment[4].

While this research investigation does not attend to this issue of evaluating design, its

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[2] In 2010, myself, a designer and former policy advisor hosted a roundtable event in London to bring attention to and attempt to devise action on this very issue. We gathered all the Founders and Directors of London's Service Design community in SoHo to share their current knowledge and activity in this area. Our intention after the round table was to search for funding to investigate this area and while the interest and energy was present, the initiative was abandoned due to personal circumstances (for example for myself moving from the UK back home to Australia).

[3] In the Design Council's 2005 report *Design Index: The Impact of Design on Stock Market Performance,* the Design Council found that over a 10 year period from 1994 to 2005 "share prices of companies using design effectively have outperformed the FTSE All-Share index by 200 per cent." (Design Council, 2005a)

[4] My personal experience at conferences has observed a lack of interest in evaluating design and using numbers to illustrate the success of design. There is also an absence in the design literature of using the vocabulary of business to evaluate design, with a few exceptions such as in the Design Council's (2005a) *Design Index*; Lovlie, Downs and Reason (in Lockwood, 2009: 174-183) who discuss meaningful measurement of design for services; and Saffer who dedicated part of a chapter in his book *Designing fo Interaction* on 'Metrics and Return on Investment (ROI) (Saffer, 2010: 59).

underlying intention is to begin to start articulating the value of design and designers in a way that all stakeholders of design are able to understand. In my Discussion Chapter, I speak about the Designer as 'Articulator of Value' as a future role for the designer. Throughout the thesis, I discuss how the value of the designer emerged from the case study analysis. I have no doubt that designers will intuitively and tacitly know what is documented here but through my research, I now know that their thoughts, knowledge and value has never been properly articulated before in a way that has given deep thought, reflection and communication. I believe that this is a key contribution of this thesis for designers. It may not present anything a designer does not already know, but it does provide a better articulation of what they do already know. This articulation will hopefully give designers a vocabulary to speak to wider audiences and show their value in contexts that extend beyond the traditional areas of design[5].

After I completed my Mater of Business degree, I went to work for management consultancy. Their roots are in Strategic Conversation™ facilitation, which uses conversation to develop high-level organisational strategy. Their methodology is similar to that of design and the company was interested in integrating Design Thinking, practice and methodology into work we were doing with clients, in particular helping organisations focus on the customer experience and using this to inspire new opportunities and design new services. We ran demonstrator design projects within the organisations to illustrate the different approach of design in a business and organisational context and the kind of outputs and outcomes that could result. With one particular client, they were keen to join us 'on the road' to speak face-to-face with their customers. We observed how our clients were transformed hearing the stories of their customers. Some of these stories were heart-breaking, others heartfelt, and our clients became personally involved and professionally changed by them. At the coal-face of the customer our clients were seeing the impact on people of the products and services they had designed. This began my interest in the approach of doing design projects *with* clients rather than only doing projects *for* them. I would later discover this had a name called Co-design. When clients were part of the design process, learning-by-doing and hearing first-hand customer experiences and stories, their work was given new meaning and they were being transformed. But how sustainable was this project approach within the consultancy business model that is largely adopted by design businesses? And when the design project ends, did these experiences and stories remain with our clients? Did they continue to take the same approach? What was it like for them to continue to use what they had learnt back in their own organisations that had entrenched orthodoxies which differed greatly from design? I

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[5] I should mention that many designers I do know, and all who participated in this research, have already successfully reached new and different audiences.

had gathered many observations and a mountain of questions.

One of my observations was how ideas within organisations came about, and how they were implemented with very little to no design. An idea often came from the top and went straight to piloting. From what I could see, piloting was where businesses tested that they had the resources to deliver a product or service. But what about first testing if an idea was good or not? The latter is what designers call prototyping and without this businesses seemed like they were taking big risks. Prototyping both lets us see if an idea is possible and allows these ideas to be tested with potential users in the context in which they are intended to be used. Feedback is gathered to iterate ideas, that is, to develop and improve them, reducing the risks of costly errors during the implementation. A small investment early in the process can in the long-term save costs and errors later on, not to mention a lot of effort and emotions on the part of both the organisation and the customer. But despite this, prototyping was neither an activity, nor in the vocabulary of any of our client organisations. From what I observed, organisations make their decisions in isolation from the real world, and things are often put together under one roof and are expected to magically work together. There is often no design, that very little thoughtful consideration in evaluating the quality of the idea, and how that idea might work in context, that is how all the separate elements of an idea work together to create a positive and seamless experience for customers, and also employees. An airport is a classic example of an ad hoc set-up of different parts of a service that are simply expected to work together. Check-in desks, security gates, customs desks, waiting areas and boarding gates are set up, people are employed and they are all put in one space where travellers are expected to navigate their way through an airport labyrinth. Who is the designer of this system? John Chris Jones showed this gap in a model[6] that outlines different levels of designing from the level of components, to product, to systems to community. He says "many of the unsolved problems of designing occur at the systems level of the hierarchy" (Jones, 1970/1992: 31-32) and I have often asked in my presentations, "who designs on the level of systems?" Should that be the role of the designer? Maybe. The only problem is that the level designers enter an organisation (usually at a project level) does not permit us to work across the necessary silos to design the system. But if no one is doing it, should we take the proactive step? How does this fit with how we have been commissioned? And do we have the right resources and accountability to work on this level?

So far, my experience and practice has raised many such questions. Others included:

- How do we create more customer-orientated organisations that not just use

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[6] This model is illustrated and outlined in more detail in *Chapter 2: Literature Review*.

marketing-speak but have a genuine focus on their customers and develop their products and services from this perspective;

- How much influence does this customer-centred ethos have on the individual transformation of people who work in organisations? Does this customer-focus bring new meaning to their work?

- How sustainable is doing projects *with* our clients, rather than *for* them, when our dominant business model is consultancy?

- What is the difference between piloting and prototyping and why are organisations not prototyping when it could save them lots of money?

- Why are services not designed? How could services be expected to deliver great experiences for all by putting everything into one space and expecting it to work?

But the final question that pushed me to stop work and begin PhD research was through an experience I had working with an Aboriginal lobby group concerned with native title rights[7]. In 2006-7 2nd Road were asked to undertake pro-bono work with this Aboriginal lobby group to help develop a more coherent vision for the organisation. The group comprised of representatives from many communities throughout Australia and for each community there were different priorities making the vision of the lobby group fragmented. This was especially detrimental when the group faced the media and/or sought funding because they had no shared voice. Most of our work was in workshops and my involvement on the project raised the question of design's and the designer's contribution in addressing and helping to tackle complex social issues. The lobby group told us that their vision was to increase the well-being of indigenous communities throughout Australia. But what was well-being exactly? And by how much should it be improved? How could design, and myself as a designer help here? Little did I know that things were already happening in the UK concerning the use of design in similar contexts. An encounter online with the Design Council and the Dott 07 websites showed that while things were happening in practice, very little research was being done to capture, understand and reflect on this

A PhD research programme offered by the Design Council in partnership with Northumbria University was timely. From what I could see, the PhD offered a platform to re-discover design through academic design research. I could explore answers to the questions raised from my experiences in practice, and I could observe, capture, reflect and communicate how design was being used in new contexts, beyond its traditional spheres, to create positive change. Dott 07 hinted at answers to all these questions.

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[7] Native title gives indigenous people and communities the rights over land.

In 2007 I moved from Sydney, Australia to Newcastle upon Tyne, England to begin this journey. I would investigate Dott 07 and design for services and social issues. This thesis captures the research, learnings, experiences and knowledge gained throughout this exploration. It has been an amazing journey and one of the absolute highlights was being able to encounter my co-sponsors, my university colleagues, all the Designers who have in some way, share or form contributed to this research, the Project Stakeholders who went on their own journeys to discover design, and the team at Dott 07 who made one of the most innovative and fascinating programmes of design projects happen over the year of 2007.

Michael Polanyi (1967: 4) once wrote that "we can know more than we can tell." This thesis captures a lot of things I have come to know since 2007. But there are so many things outside the boundaries of the research investigation that could not be included, and lots more that I am not able to articulate in words but can demonstrate in practice.

However, for all the questions I had about design when I left Australia, this research journey has certainly answered all of them. And more. But as in life, I have since found new questions. While this PhD journey comes to a close, one of the most important things it has taught me is to continually ask questions, seek answers and has grown my appreciation to never stop learning. I am reminded by author William Bridges of the context of which this research must be seen, and life learning in general:

> "Even though we are all likely to view an ending as the conclusion of the situation it terminates, it is also– and it is too bad that we don't have better ways of reminding ourselves of this– the initiation of a process. We have it backwards. Endings are the first, not the last, act of the play." (Bridges, 2004: 132)

Appendix 1

Initial Project Application (IPA)

School of Design

APPLICATION FOR INITIAL PROJECT APPROVAL OF RESEARCH DEGREE PROGRAMME

IMPORTANT: This form must be completed in full by the research student in consultation with the Supervision team. A signed paper copy together with an electronic copy either on disk (or by e-mail) should be submitted to the School Research Administrator.

Other documentation to support this application should be attached - e.g. a supporting letter from the collaborating establishment (if there is academic collaboration); Intellectual Property Rights issues; confidentiality issues; ethical approval for the research (if appropriate); and confirmation of (enhanced) Disclosure from the Criminal Records Bureau (where this is appropriate).

SECTION 1

Student's First Name:	Lauren
Student's Surname/Family Name:	Tan
Type of Programme:	PhD
Mode of Study:	Full Time
Name of School	School of Design
Name of Collaborating Establishment, if any:	Design Council

Provisional Title of Research Programme:

Understanding the role of Design Practice in public design commission projects and their broader relevance to Service Design contexts.

Students are required to provide a brief background to the proposal; a clear statement of the aims and objectives of the research programme; an indicative methodology; and a description of the distinctiveness of the research proposal and (for PhD students) a statement of the original contribution to knowledge the research programme is likely to make (*approximately 1000 words*):

Introduction

The changing context for design in society

Two decades ago, the output of services eclipsed that of goods in developed economies (Peer Insight, 2007b). Today, services in these economies, "account for over 70 per cent of output" [1] (DTI, 2006) and an increasing level of importance and attention has been given to the conception, development and delivery of services (Schlesinger and Heskett, 1991; Horn, 2005; Heapy and Parker, 2006; Hollins, 2006; Peer Insight, 2007a, 2007b).

Consequently, a growing number of design practices[2] and designers have shifted their primary focus from designing products, to designing services[3] (Hollins, 2006). To encapsulate this emerging discipline, the name Service Design has been given to this activity (Hollins, 2006; Kimbell, 2006; Design Council, 2007; Live | work, 2007). Service Design is viewed as designing for the business service sector eg. finance, banking, insurance products etc. and designing for the public service sector eg. education, medical, transport services etc. (Siodmok, 2006). The activity of designers in service development has further been encouraged by the public sector reform[4] led by Tony Blair since 1997, which set the agenda for "re-designing of system[s] around the user"[5] (Blair in Winhall, 2006; NHS, 2000) and the Cox Report (2005) which called for a greater role of designers in the business and public sectors.

Change presents opportunities to explore

In 2005, the Design Council and Regional Development Agency, OneNorthEast made an argument[6] for the "role and value of design in business, public and community life in North East England" (Design Council, 2006) through the inauguration of the Designs of the Time (Dott) programme. Dott is a ten-year programme, to be initiated every two years in a different region of the UK. Each Dott consists of a suite of public commission projects utilising design-led interventions[7] (i.e. Design processes, methods, tools and the roles of designers) to "involve the public in designing

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[1] In the UK, "the service economy now accounts for 72 percent of our gross domestic product." (Demos, 2006). In the USA, "Services now dominate the US economy, accounting for 82% of US output (GDP) and 85% of employment." (Peer Insight, 2007b).

[2] Design practices (plural) refers to design studios. Not to be confused with design practice, which denotes processes, methods, tools and roles of designers.

[3] For example, design studios such as live | work, IDEO, Uscreates, ThinkPublic, radarstation, Plot and Zest Innovations are all involved and/or solely focused on work in services.

[4] As evident in the National Health Service (NHS) where The Health Secretary, Alan Milburn, stated in 2000, "We have got to change the way the whole system works to genuinely centre it around the patient" (NHS, 2000).

[5] One of the most unique things about design is its focus on the user as seen in Alben, 1997; Design Council, 2007; Experentia, 2007; Thackara, 2007.

[6] The Design Council and OneNorthEast demonstrated this argument through the commitment of funding and resources in 2005.

[7] Thackara's (2007) comment on use of design-led interventions are for their delivery of "designed outcome[s] and not just a concept. That there is a kind of sense that the project is informed or shaped by the users of the thing, and thirdly that there is a design quality to the whole package, that gives it life, and a quality that is not a kind of PowerPoint presentation from a management consulting company or a glossy booklet to be read by just managers and clients."

solutions to local problems" (Design Council, 2006). The first Dott, Dott 07, was undertaken in North East England between 2005 and 2007, and evidence for the "role and value of design" (Design Council, 2006) in the public commission projects, is now sought.

The focus of this PhD will be in the exploration of design practice and its contribution to services. Drawing upon case studies and insights of the Dott 07 public commission projects will help illustrate the embryonic discipline[8] through building theories around, and articulating the practices of design in service development.

Preliminary studies, over the past three months, have contributed significantly to mapping the territory and providing a direction for the PhD. In addition to an overview of relevant literature, topic scoping has also pursued conversations with designers[9] to help identify key knowledge gaps and topical issues in the emerging discipline. A review of these conversations and insights has illustrated that designers lack a widely shared and easily articulated explanation for the role and value they have been contributing to services[10]. This has been prevalent despite the fact that designers have been making significant contributions to services, for example creating ways in which grassroots activities can be connected to a policy (Literature has also contributed to shaping this observation such as, Jones, 1960; Heapy and Parker, 2005; Young, 2005; Thackara, 2007; Thackara in Taylor, 2007).

Statement of Intent

Aims

The aim of this research is to build an understanding of the role of design practice in Dott 07 public commission projects, for transferability to the broader context of Service Design. The Dott 07 public commission projects present an opportunity to investigate this through utilising a Grounded Theory approach, whereby the "discovery of theory from data" (Glaser and Strauss, 1967) will be congruent with the embryonic state of the discipline.

Objectives

- To identify and review relevant cross-disciplinary literature concerning service development.
    - Including identifying and reviewing literature on specific methods and practices of design that has been increasingly applied to service development (eg. The adaptation and application of Interaction design methods have been found to be widely used).
- To determine appropriate qualitative and quantitative criteria, to analyse and evaluate outcomes from the Dott 07 public commission projects.
    - This will be used to undertake an overall review of the Dott 07 public commission projects
- To generate data, from qualitative research of the Dott 07 public commission projects, in the form of case studies.
    - To correlate findings from these case studies to identify the commonalities of design practice (i.e. Methods, tools, processes and roles of designers) employed.

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[8] Kimbell (2006) states, "What is rarely present in these disciplines' research into the emerging service economy is an understanding of the design aspects of services – how they are designed (design as process), the ways organizations go about designing services (design as function) and the nature of the processes, physical and digital artifacts, and experiences which together enact and constitute services (design as outcome)."

[9] This included designers at Uscreates, ThinkPublic, live | work, Engine, radarstation and Zest Innovations.

[10] Common themes in conversation with designers included challenges in articulating the value of design, selling design and explaining the potential of design in services.

- To derive emerging modes of practice and associated theories in Service Design from the understanding of the commonalities.
- To synthesise reflections and aspects of learning in relation to the derived criteria from the Dott 07 public commission projects, to inform future Dott programmes, especially Dott09.
- To draw up recommendations and a description of further research, e.g. how the benefits of the practice of design can be sustained and scaled after design interventions occur in service development.

- To identify a community of interest[11] and to establish a peer review group[12] to ensure an original contribution to knowledge in the design research and service design practitioner fields.
  - This will determine the relevance and utility of emerging modes of practice and associated theories to the broader context of Service Design

Proposed methodology

As Service Design is an emerging discipline (Hollins and Hollins, 1991; Hollins, 2006; Kimbell, 2006; Design Council, 2007; Live | work, 2007), research methodologies and approaches lie in congruence with a Grounded Theory approach (Glaser and Strauss, 1967). A hybrid of strategic choices (Robson, 1993) has been decided upon to ensure that "the discovery of theory from the data" (Glaser and Strauss, 1967) is gathered and analysed with academic rigour. The hybrid methodology will combine literature reviews (Hart, 1998), case study reviews (Yin, 2003) and Action Research (McNiff and Whitehead, 2006). The case study reviews will adopt two research tactics of Grounded Theory, which are Theoretical Sampling and Comparative Analysis (Glaser and Strauss, 1967). Grounded Theory will also allow for the analysis and inclusion of other sets of data from secondary sources if appropriate (Glaser and Strauss, 1967) eg. the evaluation of Dott 07 made by the Wood Holmes Group and an audit of Dott 07 communications (PR and press etc).

Building an understanding of the discipline

PhD topic scoping and Theoretical Sampling

An overview of relevant literature in Service Design has identified that a majority of it exists in contemporary media such as on the Internet i.e. Blogs (Experentia, 2007; Designing for Services, 2007 etc.) and in social interactions (i.e. dialogues) such as conferences (ISDN 1 and 2, 2005, 2006; CMU's Emergence Conference, 2006, 2007). Due to the limited availability of Service Design literature[13], Theoretical Sampling (Glaser and Strauss, 1967) was undertaken at the formative stages of the PhD programme to map the territory for relevant and topical issues, and identify some knowledge gaps in the discipline.

Literature search and review

A broader and in depth literature review (Hart, 1998) will be undertaken around Service Design and related areas (eg. Interaction Design, systems thinking, Design methods research). An overview of services, as seen by other disciplines such as branding, marketing and IT (eg. IBM's Almaden Research Centre) will also be explored to identify the broader context of service development.

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[11] "Communities of interest" is used to describe the design practices, designers, stakeholders and the potential stakeholders of Service Design

[12] Peer review group will comprise of expert and research practitioners within relevant fields.

[13] The Design Council are currently working on developing a body of knowledge around Service Design in the public sector.

Building evidence for the potential, value and role of design in services

Responsive Evaluation as the Evaluation Model for Dott 07 case studies

In order to complete a review of the Dott 07 public commission projects, standard indicators will need to be determined as measures of success. Designers currently find the use of metrics (qualitative and quantitative), to assess the success of their projects, challenging[14]. A Responsive Evaluation approach (House, 1978) will be used to determine a set of Dott 07 success indicators. This will involve semi-structured interviews (Robson, 1993), on metrics and/or indicators, with designers and communities of interest of the Dott 07 public commission projects. In the public/social sector Collins (2006) states that, "What matters is not finding the perfect indicator, but settling upon a consistent and intelligent method of assessing your output results."

Qualitative research and case studies

Qualitative research methods in the form of semi-structured interviews (Robson, 1993) will provide the data for seven case studies (Yin, 2003) of the Dott 07 public commission projects. These will be undertaken six months after the Dott 07 Showcase Festival (16-28 October 2007), to ensure a higher degree of objectivity towards the practices of design, reflections and learnings pertinent to each public commission project. Each case study will investigate the triangulation of content, process and context[15] (Young, Cooper and Blair, 2001; Young, 2005). The seven case studies will be compared and contrasted, through Comparative Analysis methods (Glaser and Strauss, 1967), for emerging modes of practice and associated theories in Service Design. Correlation of case study results will also inform the overall evaluation of Dott 07 (i.e. How strong was the evidence for design, and its contribution to services, made in Dott 07).

Ensuring relevance and applicability of Grounded Theory to design practice

Action Research for verification and iterations of research findings

The emergent modes of practice and associated theories will engage the peer review group for verification (McNiff and Whitehead, 2006). The aim of this peer review group is to ensure an original contribution to knowledge in the design research and Service Design practitioner fields. The peer review group will allow for identification of receptivity of findings, applicability to design practice, and relevance to the broader context of Service Design. Glaser and Strauss's (1967) "four highly inter-related properties" for applying Grounded Theory will be used. These properties view the theory's application in terms of fit, understanding, generality and control (Glaser and Strauss, 1967). Review of emergent modes of practice and associated theories will take into account feedback gathered from the peer review group, and subsequent iterations and further verification will occur. Platforms such as workshops, panel discussions etc. will allow for presentation of ideas (which may take form in models/ frameworks/ reports/ toolkits etc.) and exchange of dialogue eg. Intersections Conference 2007(to validate nature and relevance of research question), ISDN 3 (to validate research methods) and subsequent events for the peer review group to validate research findings.

Thesis Write up

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[14] This was a topical issue for design practices such as radarstation and Zest Innovations. Zest Innovations stated that metrics are bespoke to projects. They have used both quantitative and qualitative metrics (e.g. Market share results and anecdotes).

[15] These areas reference the content-based model of Design, which name Levels of Design as D1 (design in context), D2 (designing context) and D3 (design of the context).

Contribution to knowledge

Changing contexts (social/economic/technological/ecological) greatly influence design's role in society, especially in relation to the content and processes of design practice. Many initiatives to demonstrate the value and role of design in these changing contexts have been launched, acting as experimental ecosystems for designers to work and play in (eg. Dott 07 and the Designing for Services project at Said Business School, Oxford University).

The original contribution to knowledge of the PhD programme will be in reviewing the design practices utilised in the Dott 07 public commission projects, to identify their applicability and relevance to design practice and the broader Service Design context. The research will investigate emerging modes of practice and associated theories of design to service development through acknowledging the triangulation of content, process and context in the Dott 07 public commission projects.

Word Count

Currently approx 1796

SECTION TWO

Comment on student's Personal Development Plan (including timetable for its completion, as agreed with the supervision team):

Training needs are being supported, see TNA

Please attach a copy of the completed Training Needs Analysis, signed by the student and Principal Supervisor

If the student is studying for any other award entailed by research training, this must be declared here:

N/A

Proposed timetable for research in each year including required 'milestones' (i.e. Mid Point Progression (for PhD studies); completion of the active research; plan for 'writing up' the research submission/making the submission). *Append a Gantt chart or flowchart if desired.*

Please see attached Timeline

Identify what resources will be required to undertake the proposed research programme and indicate who will meet the costs of these. *(Resources might include: costs for conducting field work; data collection; purchase of software, etc; purchase of specialist equipment; and costs associated with the training programme)*

- Access to basic IT facilities at the Centre for Design Research. Costs met by the University.
- Access to the Northumbria University Library. Costs met by the University
- Work from and visits to the Design Council. Costs met by the Design Council
- Train travel costs between London and Newcastle. Costs met by the Design Council
- Travel, accommodation and conferences/seminars. Costs shared by the University and the Design Council.

(Note: The Design Council will meet the costs up to the agreed amount)

How does this proposal stand with regard to the University Ethics in Research Policy? Please give details. Does the proposal require formal ethical approval?

This proposal abides by the University's Ethics in Research Policy and does not require formal ethical approval.

Will the research programme involve working with children or vulnerable adults?

No

SECTION THREE

Principal Supervisor : Professor Robert Anthony Young
Post Held: Associate Dean Research and Consultancy
School: Design
Academic Qualifications: BA(Hons) PhD
Design Methods and Practices

Experience of supervision of *registered* research degree candidates (*enter numbers of students supervised*):

a) Currently supervising 0… (MPhil) and 6 (PhD) UK University candidates
b) Previously supervised to completion …1… (MPhil) and 12… (PhD) UK University candidates

Supervisor : Dr Andrea Mae Siodmok
Post Held: Head of Design Knowledge
School: Design Council UK
Academic Qualifications: BA (Hons) PhD
Design Methods and Contemporary Influences on Design

Experience of supervision of *registered* research degree candidates (*enter numbers of students supervised*):

a) Currently supervising …0… (MPhil) and …0…(PhD) UK University candidates
b) Previously supervised to completion …0… (MPhil) and …0… (PhD) UK University candidates

Supervisor 2 (*Full Name*):
Post Held:
School:
Academic Qualifications (*including subject expertise*):

Experience of supervision of *registered* research degree candidates (*enter numbers of students supervised*):

a) Currently supervising … (MPhil) and … (PhD) UK University candidates
b) Previously supervised to completion … (MPhil) and … (PhD) UK University candidates

Statement by supervision team

We, the supervisors, support the proposed research programme outlined above.

It will be assumed that the Principal Supervisor will have responsibility for the overall management and quality assurance of the student's supervision and progression, unless stated otherwise.

Signature of Principal Supervisor:	Date:
Signature of First Supervisor:	Date:
Signature of Second Supervisor:	Date:

ASSESSMENT BY SCHOOL RESEARCH COMMITTEE

Following receipt of the attached report from the School Assessor(s) and all supporting documentation, including, where appropriate, confirmation of ethical approval for the research and enhanced Disclosure from the Criminal Records Bureau, this application was considered by SRC on (*date*):

Application and research programme approved by SRC on (*date*):

Application not approved by SRC (*reason(s)*):

Signature of Chair of School Research Committee:	Date:

FOR PHD STUDENTS ONLY

SRC member nominated by SRC to Chair PhD student's subsequent Mid-Point Progression Review Panel

Name:	

PhD Timeline

PhD Scoping

Literature Review

Develop Evaluation model for DoI07

Qualitative research and Case studies

Verifying emerging theories

Thesis Write-Up

2007 2008 2009 2010 2015

Predicting (one extension to align with the actual IPR submission date)

Bibliography

Alben, L. (1997) *At the Heart of Interaction Design*. Design Management Journal. Volume 8. No. 3. USA.

Barter, T. (2007). Personal Communication. 11 July 2007. London, United Kingdom.

BBC News (2000). *New Era for Patient-centred NHS*. BBC.co.uk. http://news.bbc.co.uk/1/hi/health/847284.stm Sunday 23 July. United Kingdom.

Belk. N. (2007). Personal Communication. 20 August, 2007. Newcastle, United Kingdom.

Bernard, R. H. (2000) Social Research Methods: Qualitative and Quantitative Approaches. Sage. London, United Kingdom.

Boje, D.M. (2001). Narrative Methods for Organizational & Communication Research. Sage Publications. United Kingdom.

Boland, R. J. and Collopy, F. (Ed) (2004). Managing As Designing. Stanford University Press. California, USA.

Buchanan, R. (1995). *Wicked Problems In Design Thinking*. The Idea of Design- A Design Issues Reader. The MIT Press. Cambridge, Massachusetts, USA.

Burns, C. Cottam, H. Vanstone, C. Winhall, J. (2005). *RED Paper 02: Transformation Design*. Design Council. London, United Kingdom.

Collins, J (2006). Good to Great and the Social Sectors. Random House Business Books. USA.

Cook, M. and Stanton, Z. (2007). Personal Communication. 8 August 2007. London, United Kingdom.

Cox, Sir G. (2005). Cox Review of Creativity in Business: building on the UK's strengths. HM Treasury. United Kingdom.

Dubhthaigh, R (2007). Personal Communication. 9 August, 2007. London, United Kingdom.

Design Council (2007). Design Council Online. http://www.designcouncil.org.uk. London, United Kingdom.

Design Council (2006). Designs of the Time 2009 Application Pack. Design Council. London, United Kingdom.

Designs of the Time (2007). Designs of the Time. http://www.Dott 07.com. United Kingdom.

DTI (2006) *Economics Paper No.17. UK Productivity and Competitiveness Indicators 2006*. United Kingdom.

Experientia, International Design Experience Consultancy (2007). Experientia: Putting People First Blog. http://www.experientia.com/. Italy.

Glaser, B. G. and Strauss, L. A. (1967) The Discovery of Grounded Theory: Strategies for Qualitative Research. Aldine Publishing Company. Chicago, USA.

Gropius, W. (1943). Scope of Total Architecture. Harper and Brothers Publishers. USA.

Hart, C. (1998). Doing a Literature Review. Sage. London, United Kingdom.

Heapy, J. and Parker, S. (2006). The Journey to the Interface. Demos. London, United Kingdom.

Hollins, B. (2006) *Service Design*. Design Council. http://www.designcouncil.org.uk. London, United Kingdom.

Hollins, B. and Hollins, G. (1999). Total Design: Managing the design process in the service sector. Financial Times/ Prentice Hall. United Kingdom.

Horn, P. (2005). *The New Discipline of Services Science.* BusinessWeek Online. January 21, 2005. http://www.businessweek.com/technology/content/jan2005/tc20050121_8020.htm?chan=search. USA.

House, E.R. (1978). *Assumptions Underlying Evaluation Models*. Educational Researcher. Vol.7, No.3. March. USA.

Almaden Services Research (2007). IBM Almaden Research Center. http://www.almaden.ibm.com/asr/. USA.

Jones, J.C. (1970). Design Methods: Seeds of Human Futures. Wiley-Interscience. Great Britain.

Kimbell, L. (2007) Designing for Services Blog. http://www.designingforservices.typepad.co.uk/. United Kingdom.

Kimbell, L. (2006). *Designing for Services in Science and Technology-based Enterprises*. Oxford Said Business School and the Arts and Humanities Research Council. United Kingdom.

Lee, S. (2007). Personal Communication. 8 August, 2007. London, United Kingdom.

Lester, R. Piore, M. and Malek K. (1998). *Interpretive Management: What General Managers Can Learn From Design*. Harvard Business Review. March/April. USA.

Liedtka, J. (2000). *In Defence of Strategy as Design*. California Management Review. Vol. 42. No. 3. Spring. Berkley, USA.

Live|work (2007). Live|work :: Service Innovation and Design. http://www.livework.co.uk/. United Kingdom.

Margolin, V. (1989). Design Discourse. History Theory Criticism. The University of Chicago Press. Chicago and London.

McNiff, J. and Whitehead, J. (2006). All You Need to Know About Action Research. Sage Publications. London, United Kingdom.

Mintzberg, H. and Quinn, J. B. (1998). Readings in the Strategy Process. Prentice-Hall International Inc. UK.

Nonaka, I. (1991). *The Knowledge Creating Company*. Harvard Business Review. November-December. USA.

Patterson, A. (2001). *Managing Upwards.* New Design Magazine. November/December. United Kingdom.

Reason, B and Winhall, J. (2007). Personal Communication. 8 August. London, United Kingdom.

Peer Insight (2007a). Peer Insight LLC. www.peerinsight.com. USA.

Peer Insight (2007b). *Seizing the White Space: Innovative Service Concepts in the United States*. Tekes. Helsinki.

RED (2006). RED Recipes: A Scrapbook 2004-2006. Unpublished. London, United Kingdom.

Robson, C. (1993) Real World Research. Blackwell Publishers. Oxford, United Kingdom.

Schlesinger, L. and Heskett, J. (1991). *The Service-Driven Service Company*. Harvard Business Review. September-October 1991. USA.

Siodmok, A. (2006). *Signposts for the Next Decade*. International Service Design Northumbria Conference. 31 March. Newcastle, United Kingdom.

Spohrer, J. (2007). Spohrer on Services Blog. http://forums.thesrii.org/blog?blog.id=spohrer. USA.

Taylor, D. (Ed) (2007). *Who Designs Your Life? Dott 07*. Blueprint Magazine. June 2007. United Kingdom.

Teboul, J. (2006). *Service is Front Stage: Positioning Services for Value Advantage.* INSEAD Business Press. France.

Thackara, J. (2005) In the Bubble: Designing in a Complex World. The MIT Press. USA.

Thackara, J. (2007). Personal Communication. 13 July, 2007. Newcastle, United Kingdom.

Yin, Robert K. (1994). Case Study Research and Methods. Sage. London.

Young, R. (2005). *Developing an Integrated Model of Designing to Aid Understanding of the Complexity Paradigm in Design Practice*. International Conference on Complexity Science, Embracing Complexity in Design. November. Paris.

Young, R., Cooper, A. and Blair, S (2001). *Redesigning Design Education - the Next Bauhaus? A contextual discussion document for a new Design Praxis*. ICSID Conference 'Exploring Emergent Design Paradigms. 7-1 October. Korea.

Young, R. and Lievesley, M. (2007). *Services Systems: The Practical Application of the Service Design Approach to Designing Better Customer Experiences.* Contact Centre Conference. March. United Kingdom.

Winhall, J. (2006). *Designing Future Public Services*. Emergence Conference. 8-10 September 2006. Carnegie Mellon University. USA.

Appendix

NORTHUMRIA UNIVERSITY

ETHICS IN RESEARCH

All members of the University (staff or students) who conduct research are required to abide by the University's Ethics in Research Policy. In particular, if the research project involves using or collecting data on human participants, or using biological samples, before the research project is allowed to commence approval must be obtained from the:

- ♦ University Ethics Committee, or School Research Committee
- ♦ Local Research Ethics Committee (LREC),
- ♦ Multi-centre Research Ethics Committee (MREC), if applicable,
- ♦ Consent forms signed by the participants (or their legal guardian)

Ethical approval and consent forms also apply to undergraduate and postgraduate students.

If the student or researcher is employed in a professional or voluntary capacity in a health, social care or educational environment, this does not give them implied ethical permission to conduct research on patients, or give them access to data and information without first having their research proposal reviewed by the relevant independent ethical review body. This also applies to staff seconded to the University from other organisations and staff holding an honorary contract.

The researcher must also be able to demonstrate that all the requirements of the Department of Health Research Governance Framework (April 2002) are fully met.

Researchers must ensure that all data collected during the course of their research is stored securely, and fulfils any legal requirements such as the Data Protection Act (1988). This is particularly important when handling confidential personal information relating to human participants. Confidentiality of personal data is essential. All data must be encoded or anonymised if possible. This applies to both paper and electronic records.

All the data and documentation collected in the course of academic or research work belongs to the University. Any researchers who leave the employment of the University and wish to retain data or copies of data for personal use must get permission from their line manager and the Dean of their School. If this involves personal data the request will be refused unless it is evident that future use has been granted with the terms of the consent.

TRAINING NEEDS ANALYSIS & LEARNING PLAN FOR PGR SKILLS TRAINING

PGR Student's name: Lauren Tan

Principal Supervisor's name: Robert Young

Academic School: School of Design

Start date: 4 June 2007

Mode: Full-time

Skills analysis

Skills areas	Proposal(s) for attaining skill or evidence of attaining skill	Completion date
(A) Research Skills and Techniques - to be able to demonstrate:		
1. the ability to recognise and validate problems	IPA write up and presentations given thus far are evidence of recognition and validation of problems.	September 2007
2. original, independent and critical thinking, and the ability to develop theoretical concepts	Evidence of this provided in presentations given to Design Council and Northumbria University to articulate progress and thinking of PhD and research.	August 2007
3. a knowledge of recent advances within one's field and in related areas	Previous education and work experience across design and business disciplines have been gained. Fieldwork with designers in London and Newcastle has also been undertaken for PhD scoping.	Ongoing
4. an understanding of relevant research methodologies and techniques and their appropriate application within one's research field	Research Principles lecture series provided overview of research methods and techniques. Further reading in relevant texts shall deepen understanding of specific academic research methodologies and techniques.	October 2007
5. the ability to critically analyse and evaluate one's findings and those of others	Research Principles lecture series provided overview of analysing and evaluating of existing literature. Participation in lecture series over Blackboard shall further inform and deepen analysis and evaluation skills.	July 2007
6. an ability to summarise, document, report and reflect on progress	Projects in the lecture series shall be undertaken to gain practice and experience in this.	November 2007

(B) Research Environment – to be able to:

1. show a broad understanding of the context, at the national and international level, in which research takes place	Have identified and read through a wide variety of design research texts, including books, unpublished work, blogs, conference material etc. This shall be a continuing activity throughout the PhD programme.	Ongoing
2. demonstrate awareness of issues relating to the rights of other researchers, of research subjects, and of others who may be affected by the research, e.g. confidentiality, ethical issues, attribution, copyright, malpractice, ownership of data and the requirements of the Data Protection Act	Have already met some of these issues in discussion with other researchers. Plan to undertake greater awareness of confidentially issues when it comes to conducting interviews for the case studies. Have had experience in design research eg. Protocol development and confidentiality issues etc. in previous work experience.	October 2007
3. demonstrate appreciation of standards of good research practice in their institution and/or discipline	Have undertaken design research previously in design and business practices.	Ongoing
4. understand relevant health and safety issues and demonstrate responsible working practices	Have referred to university website. Will need to discuss further with Principal Supervisor	September 2007
5. understand the processes for funding and evaluation of research	Yes to funding, but would like to know specifics about the PhD evaluation eg. Assessment panel etc.	October 2007
6. justify the principles and experimental techniques used in one's own research	I have already had to demonstrate this in the approach I took for PhD scoping and in initial application for PhD.	Ongoing
7. understand the process of academic or commercial exploitation of research results	Some knowledge and keen to understand more about taking academic research into commercial world.	Ongoing

(C) Research Management – to be able to:

1. apply effective project management through the setting of research goals, intermediate milestones and prioritisation of activities	Presentation updates and fieldwork undertaken with designers are evidence of effective project management.	Ongoing
2. design and execute systems for the acquisition and collation of information through the effective use of appropriate resources and equipment	Previous experience in design research has given me awareness of collating, documenting and using research.	Ongoing
3. identify and access appropriate bibliographical resources, archives, and other sources of relevant information	Have already undertaken a general overview of all information sources eg. Literature, media, internet, conferences, interviews etc.	Ongoing
4. use information technology appropriately for database management, recording and presenting information	Some knowledge. Would benefit from training in QSRN6 and NVivo.	September 2007
(D) Personal Effectiveness – to be able to:		
1. demonstrate a willingness and ability to learn and acquire knowledge	My supervision team and colleagues have observed this.	Ongoing
2. be creative, innovative and original in one's approach to research	This has and will be evident in the knowledge and new processes I develop.	Ongoing
3. demonstrate flexibility and open-mindedness	The Postgraduate Research community I am involved in frequently discusses many design-related issues.	Ongoing
4. demonstrate self-awareness and the ability to identify own training needs	Regular review of training needs will be ongoing.	Ongoing
5. demonstrate self-discipline, motivation, and thoroughness	I am recognised by my colleagues as motivated, passionate about design and able to manage my workload effectively.	Ongoing

6. recognise boundaries and draw upon/use sources of support as appropriate	In addition to the Internet and Library access, the Centre for Design Research's community network serves to support and inform one another. Access to Design Council's knowledge pools and people will also be key areas for me to draw upon.	Ongoing
7. show initiative, work independently and be self-reliant	I look for opportunities for new leads and new contacts as part of my investigation process.	Ongoing

(E) Communication Skills – to be able to:

1. write clearly and in a style appropriate to purpose, e.g. progress reports, published documents, thesis	Previous education and work in design and business fields has given me experience in writing reports, theses and presentations.	Ongoing
2. construct coherent arguments and articulate ideas clearly to a range of audiences, formally and informally through a variety of techniques	Presentations, written and visual communications of the PhD process and findings have already been presented and shall be ongoing.	Ongoing
3. constructively defend research outcomes at seminars and viva examination	Presentations have sought to engage discussions that have proven to be catalysts for my PhD progress.	Ongoing
4. contribute to promoting the public understanding of one's research field	Language use has always been a key concern of mine, and I am also interested in engaging individuals with my work through other activities around the core PhD documentation process eg. PhD blog, developing an informal design PhD network.	Ongoing
5. effectively support the learning of others when involved in teaching, mentoring or demonstrating activities	I am keen to be involved in teaching when the appropriate opportunity presents itself.	October 2007

(F) Networking and Teamworking - to be able to:

1. develop and maintain co-operative networks and working relationships with supervisors, colleagues and peers, within the institution	I enjoy engaging people who are interested in my work, and I am interested in what others are investigating.	Ongoing

and the wider research community		
2. understand one's behaviours and impact on others when working in and contributing to the success of formal and informal teams	Previous education and work has given me a lot of experience in working and collaborating in teams.	Ongoing
3. listen, give and receive feedback and respond perceptively to others	I am open to having a dialogue around my research as demonstrated by my presentation discussions.	Ongoing

(G) Career Management - to be able to:

1. appreciate the need for and show commitment to continued professional development	I very much see the PhD is a catalyst for my career.	Ongoing
2. take ownership for and manage one's career progression, set realistic and achievable career goals, and identify and develop ways to improve employability	I have already undertaken a strategy document for my PhD programme.	Ongoing
3. demonstrate an insight into the transferable nature of research skills to other work environments and the range of career opportunities within and outside academia	Previous experience, in a company that operated on selling its intellectual property, has given me an awareness of the transferability of research in commercial world.	Ongoing
4. present one's skills, personal attributes and experiences through effective CVs, applications and interviews	Updates of CV and also start of formal Personal Development Plan needs to occur.	September 2007 and ongoing

List of courses/seminars/modules/activities to be completed/attended

Course/seminar/module/activity to be completed/attended	Description of course/seminar/module/activity to be completed/attended	Date

		June-July 2007
Research Principles lecture series	Introduction to research degrees	
Designing for Services, Said Business School, Oxford University	One day presentations for Designing for Services project	2 July 2007
London Design Festival	Series of design events in London	15-25 September 2007
Mapping Design Activism, Leeds Metropolitan University	One-day Symposium on socially responsible design practices	14 September 2007
BB15002: MA Design Group		From September 2007
Dott 07 Festival	Showcase and exhibition of Dott 07	16-28 October 2007
Intersections Design Conference, Northumbria University	Emerging and new design practices	25-26 October 2007
……		

Timeline showing proposed and actual research undertaken, and next steps.
(A short-term timeline has been submitted to the Supervision Team to show research to be undertaken between December 2008-March 2009).
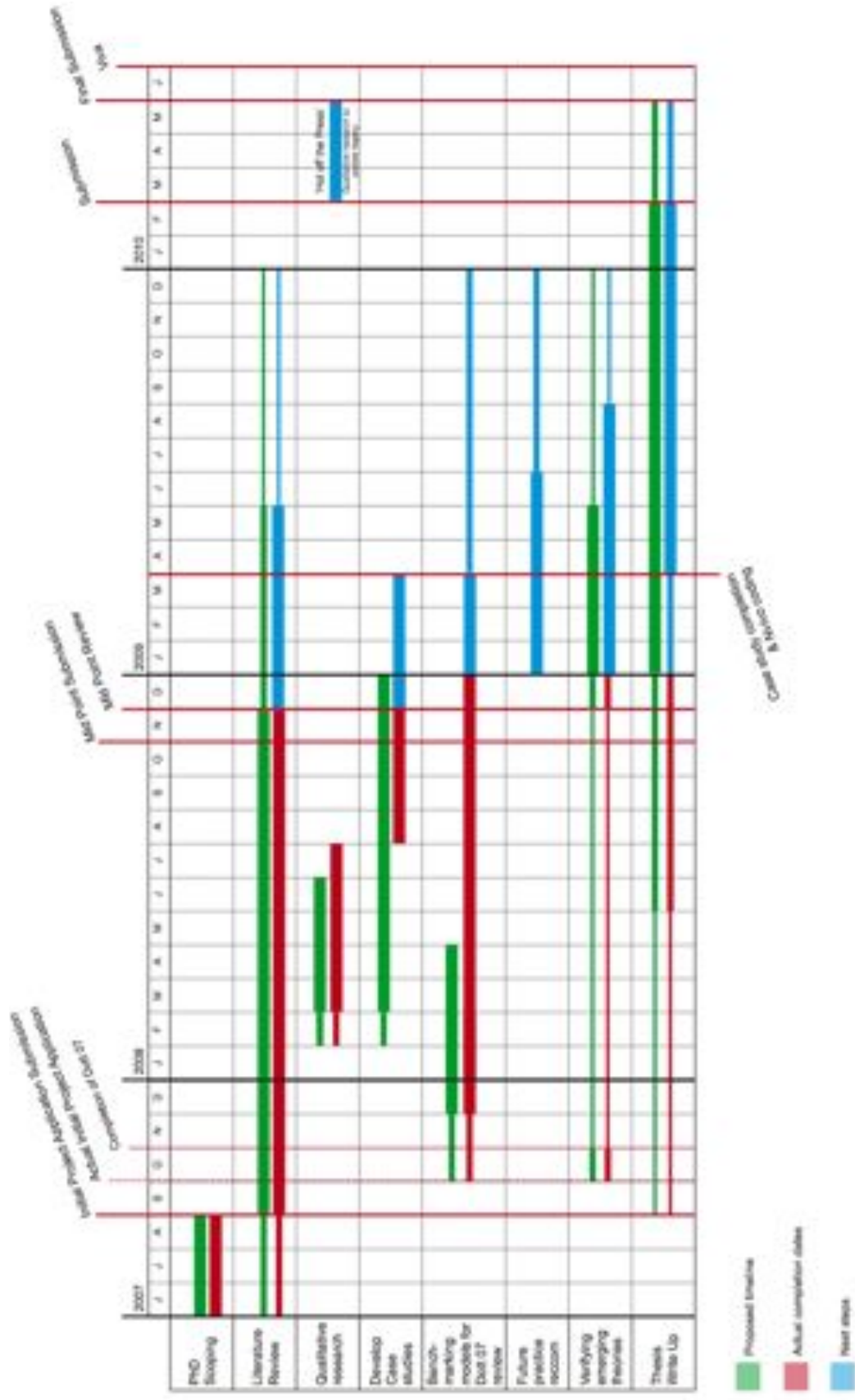
Appendix 2

Mid Point Progression (MPP)

Please note that the Appendix of the MPP is not included here but can be provided upon request

Northumbria University

School of Design

RESEARCH DEGREE PROGRAMME MID POINT PROGRESSION

PART A - to be completed by Student and Principal Supervisor

Section 1 – Student Details

Student's Name	Lauren Tan
Type of Programme	PhD
Mode of Study	Full-time
Title of Research	Understanding the role of design practice in public design commission projects and its relevance to service design contexts
Start Date	4 June 2007
Standard Duration Date	4 June 2010
Maximum Duration Date	4 June 2010

Section 2 – Supervision Team

Principal Supervisor	Robert Young
Second Supervisor	Andrea Siodmok
Third Supervisor	N/A

Section 3 – PGR Training Programme

Is the student making satisfactory progress on his/her Training Needs Analysis and supporting studies?   Please give brief details:

Details of attendance on the PGR Training Programme:
- Endnote
- Nvivo

Section 4 – Summary of Progress

The student should provide:

    a) an **abstract** of the Mid-Point Progression report (not exceeding the space on this page).

    b) A full report (approximately **4000 words**), which should be attached to this form).

This research programme investigates the role of design practice in public life through the study of seven publicly commissioned projects under the Designs of the Times (Dott 07) programme, initiated by the Design Council, London and regional development agency, One NorthEast between 2005 and 2007. Changing contexts greatly expand design's role in new and different areas. Investigation and appropriate articulations of this emerging role is needed to enable better understanding of the potential role for design in public life. This report outlines six key areas of the research progamme to date. These are as follows:

1. The context of which design and Designers are increasingly called to participate in a multiplicity of roles;
2. Dott 07's public commissions projects as a stimulating vehicle to investigate design practice in emerging areas of design;
3. The research methodology used to guide the investigation:
4. The research design used to implement the investigation has adopted a hybrid of research methods. Additions to the research design has incorporated design practice research methods to gain deeper insights and understandings to this emerging area of design;
5. Indicative patterns and reflections of design practice which have been identified to date;
6. Finally, the original contribution to knowledge this research programme seeks.

In the spirit of Grounded Theory (Glaser and Strauss, 1967), this report is heavily weighed on research methodology and design, rather than subject matter content. This is because in Grounded Theory theories emerge from the data, and analysis and coding has yet to be completed. Indicative findings have, however, been conveyed in this report, and expanded upon in the Appendices. The report is completed with a research timeline and Training Needs Analysis to ensure completion of the PhD by its end date, supported by acquiring and maintaining appropriate skills and resources.

Please note: The following report may not follow a conventional MPP Report form, but the researcher strongly supports the format used to bring clarity to the progression made between the IPA and the mid-point of this research programme. Italicised text present key excerpts from the IPA, with the content of the MPP report underneath to show the research development.

Student's Signature: [signature]	Date: 20 November 2008 And 14 January 2009

Section 5 - Supervisor's assessment

Principal Supervisor's Signature:	Date:

PART B - MID POINT PROGRESSION REVIEW PANEL

Section 6 - MPP Panel composition

Name: Position:	
Name: Position:	
Name: Position:	
Date of the Review Panel meeting:	

Section 7 - Report of the Review Panel

This is a formal review of the research student's progress and a key milestone for PhD students. The Panel needs to consider the following points:

Please tick the appropriate box	Yes	No
Has the programme been conducted satisfactorily to date?		
Has the student demonstrated sufficient understanding of the subject for continued registration for a PhD (i.e. theoretical knowledge, specific expertise, breadth of knowledge)?		

Having considered the written report, does it outline sufficient progress and indicate the research objectives to be achieved prior to submission of the final thesis?		
Has the student presented the research in a clear and acceptable form (i.e. followed standard presentation, acknowledged work of others)?		
Has ethical consideration has been taken into account?		
Can the programme be completed within the available timescale?		
Is the supervision team satisfactory for study at PhD level?		
Does the programme contain material or level of study appropriate to PhD?		

Brief details of the student's progress on the approved research programme:

Section 8 – Details of revision/amendment(s) required

Concerning content of research programme:
Concerning supervision arrangements:
Any other matters:

Section 9 – Recommendation of the Mid Point Progression Panel

The student should be permitted to proceed to PhD	**Yes**
	No
The student should re-write and re-submit the progress report to the School Research Committee	**Yes**
	No

The student should **not** be permitted to proceed to PhD and registration for MPhil only is recommended	**Yes**

Chair of Review Panel
Name:
Date
Signature:

Section 10 Completion of outstanding revisions/amendments:

I confirm that the required revisions/amendments have now been completed satisfactorily

Chair of Review Panel
Name:
Date
Signature:

PART C - Endorsement of Panel's Recommendations by SRC

This formal review of student progress is a <u>key milestone</u> for PhD students. It enables the School Research Committee to determine whether:

- the programme has been conducted satisfactorily to date;

- the programme can be satisfactorily completed within the available time;

- the programme meets the level required for the award of PhD and is likely to lead to a contribution to knowledge or understanding;

- the research training and supporting studies are being completed;

- ethical consideration has been taken into account

Section 11 – Approval of Mid Point Progression by School Research Committee

The MPP Panel's recommendation (Section 9 above) has been considered and is endorsed. Further comment:	
Chair of School Research Committee Name: Signature:	Date

The student should receive formal notification from the School Research Committee within one month of the MPP review taking place.

MID-POINT PROGRESSION REPORT

Please note: Italicised text present key excerpts from the IPA, with the content of the MPP report underneath to show the research development

1. The expanding context for design in society

Two decades ago, the output of services eclipsed that of goods in developed economies[1] (Peer Insight, 2007b). Consequently, a growing number of design practices[2] and designers have shifted their primary focus from designing products, to designing services[3] (Hollins, 2006).

Emerging areas of design reflect influences in the social, political, economic and technological arenas. Silverman (1993) identifies such areas of sensitivity[4] in helping frame and understand a research topic. It is the synthesis of these influences that have enabled the emergence of a role for design practice in public life. A brief overview of key influences[5] is given below.

Policy

Tony Blair's reform in the UK public sector, around the personalisation of public services, saw many Designers apply design-led practices to designing health and education services around the citizen[6] (RED, 2006a; 2006b). Other programmes launched by Blair highlight the importance of strategic uses of design[7]. The £5 billion Building Schools for the Future programme, aims to transform learning in every

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1 Today, services in these economies, "account for over 70 per cent of output" 1 (DTI, 2006)

2 Design practices (plural) refers to design studios. Not to be confused with design practice, which denotes processes, methods, tools and roles of designers.

3 For example, design studios such as live | work, IDEO, Uscreates, ThinkPublic, radarstation, Plot and Zest Innovations are all involved and/or solely focused on work in services.

4 These areas of sensitivity include the historical, cultural, political and contextual (Silverman, 1993: 5; 2001: 9)

5 This list is not exhaustive. Many other influences have been identified in contributing to emerging areas of design, such as generational characteristics of Designers and a rise in concepts such as social innovation.

6 One of the biggest areas Designers have been working in is in health, where Blair declared the need for the "re-designing of systems around the user"6 (Blair in Winhall, 2006; NHS, 2000). Design consultant ices such as Thinkpublic and Uscreates have been working extensively with the National Health Service (NHS).

7 The intent of BSF is to encourage "… local authorities to move from patch and mend spending on schools to rebuild and renewal, with a more strategic approach to funding, design, procurement and management of buildings." (Partnerships for Schools, 2004)

secondary school throughout Britain by the procurement of design services and new buildings[8] (Partnerships for Schools, 2004).

The rise in awareness of climate change and the UK Government's 2016 target for "zero-carbon homes" (Department for Communities and Local Government, 2007) has brought considerations for environmental sustainability as a core value to design. Where "Eighty percent of a product, service, or system's environmental impact is determined at the design stage" (Thackara, 2005: 17), Designers have found increased responsibility in conception and development of products and services. Emerging areas of design seek to challenge and change, current modes of production and consumption[9] (Hawkins, Lovins and Lovins, 2000; Thackara, 2005; Manzini, 2008; Designer 11, 2008; Designer 12, 2008) to lessen the impact of society on the environment.

Economy

Alongside public sector reform, the creative economy in the UK has become of paramount importance in recent years. This has been especially demonstrated by Government reports and recommendations such as the Cox Report (2005) and the highly influential, yet heavily disputed (Markusen, 2006; Peck, 2005), Creative Class theories of Richard Florida (2002). Creativity's close relationship with design has helped carve out a role for design and Designers in business, Government and society.

Business

Concepts in business have also identified roles for Designers in new and emergent areas. Shostack (1977, 1982, 1984) published a series of articles in the Harvard Business Review discussing the fact that like products, services could, and should be designed[10]. Her articles record the very first known uses of "service design" and the "service designer" (Shostack, 1984) and offer practical tools, such as blueprinting (Shostack, 1982), familiar to design practice, to help businesses design and improve services.

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8 In the Government's key case study, it cites design as an enabler of transforming education. "Blyth Community College is a very good example of design which has enabled a school to drive home their educational plans." (Government Fact Sheet, 2004)

9 For example in the work of product design consultancy, DIY Kyoto

10 Shostack encouraged the deliberate conception and development of services rather than having them happen on an ad hoc basis

In 1998, Pine and Gilmore coined the phrase 'Experience Economy' to identify that people now seek meaningful experiences over pure functionality of goods and services. Pine and Gilmore (1998) identify Designers as having an important role here, laying out 5 design principles for shaping exceptional experiences (Pine and Gilmore, 1998: 102-5).

Innovating around the customer experience has further seen a rise in Designers contributing to an organisational context[11] (2nd Road, 2006). Design helps re-frame the conception and development of products and services by designing and developing them around the customer, using design-led approaches in research, development and testing.

Technological

Technology-driven services have also been on the rise and Designers have been exploring new roles in these areas. The launch of the Internet in the 90's, fundamentally changed the way companies did business, seeing Designers and design play more strategic roles with their clients (Hunter, 2008; Designer 11, 2008). Since the 1960s and 70's technology-based companies such as Apple[12] and IBM, have evolved from being technology hardware providers to service providers (Pine and Gilmore, 1998: xi). Service has become of such paramount importance that companies such as IBM, have established a Service Research and Innovation Community[13] (SRIC) to work on establishing a Service Science[14] (Horn, 2005) to encapsulate the interdisciplinary approach.

Client demand

While these broad influences shape new roles for Designers, client demand (Designer 5, 2008; Designer 11, 2008), as experienced by the design consultancies, has simultaneously contributed to the emergence of Designers participating in new and different areas of business, Government and society.

Enabling Designers

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11 Such as has been done in practice at consultancies such as Cheskin, 2nd Road, Ziba Design etc.

12 The Apple iPod is one of the most cited case studies on technology-driven services. The popularity of the iPod is often said to be due to the service of iTunes which has provided radically different ways of purchasing, sharing and listening to music.

13 http://www.ibm.com/university/ssme

14 Or as IBM phrase, Service Science, Management, and Engineering (SSME) (IBM, 2008)

A synthesis of these key influences has created enabling conditions for emerging areas of design where Designers have moved away from designing and developing products to making valuable contributions to services, in both the public and private sectors. The broad intent, at commencement of this research programme was to undertake research that would further support and enable Designers to work in new and different areas[15]. The following report demonstrates how a research programme in-progress might catalyse the argument for Designers to take on new and expanded roles in business, Government and society.

2. Dott 07 as an opportunity to explore emerging areas of design

In 2005, the Design Council and Regional Development Agency, OneNorthEast made an argument[16] for the "role and value of design in business, public and community life in North East England" (Design Council, 2006) through the inauguration of the Designs of the Time (Dott) programme[17]… The focus of this PhD will be in the exploration of design practice and its contribution to services. Drawing upon case studies and insights of the Dott 07 public commission projects will help illustrate the embryonic discipline[18] through building theories around, and articulating the practices of design in service development.

The Dott 07 programme aimed to "improve national life through design" (Design Council, 2006) by promoting and showcasing of the value and process of design in national life[19]. This was largely demonstrated through the public commissions projects that sat at the heart of Dott 07 (Ibid). The study of design practice in this research programme, will use seven Dott 07 public commission projects as case

15 For example in services, business, the developing world etc.

16 The Design Council and OneNorthEast demonstrated this argument through the commitment of funding and resources in 2005.

17 Dott is a ten-year programme, to be initiated every two years in a different region of the UK. Each Dott consists of a suite of public commission projects utilising design-led interventions (i.e. Design processes, methods, tools and the roles of designers) to "involve the public in designing solutions to local problems" (Design Council, 2006).

18 Kimbell (2006) states, "What is rarely present in these disciplines' research into the emerging service economy is an understanding of the design aspects of services – how they are designed (design as process), the ways organizations go about designing services (design as function) and the nature of the processes, physical and digital artifacts, and experiences which together enact and constitute services (design as outcome)."

19 Its three main objectives, as stated in its publication titled Dott Summary: Programme and Objectives (2006) were to: Promote better understanding of design for the industry's growth; Deliver "tangible improvements" to products and services and;Develop the region through creating better networks between business and universities, promoting the region and encouraging inward investment (Design Council, 2006).

studies to identify the role of design practice in public life. These projects introduced teams of designers, independent consultants and other creative talent, to local communities to tackle complex issues in health, education, energy, movement and food. Each project utilised "design-led interventions" (Thackara, 2007) to engage communities in "designing solutions to local problems" (Design Council, 2006). The public design commission projects offer an opportunity to explore practices in an emerging field of design. These seven projects were named as follows:

- Alzheimer 100 (health)
- Design for Sexual Health (DaSH) (heath)
- Low Carb Lane (energy)
- Move Me (movement)
- New Work (movement)
- Our New School (education)
- Urban Farming (food)

    For more detail on each project, please see Appendix 1.

The openness of the programme's mission, has surfaced as a point of discussion in both empirical[20] and literary sources (Wood Holmes Group, 2008). Dott 07's broad strategy was a result of Dott 07 being the first, in a proposed ten-year programme of Dott's[21], and that Dott 07 was supported and funded in such a way that mitigated risk (Ibid). The Wood Holmes Group Evaluation Report (2008) cites the broad strategy of Dott 07 as both an advantage, where it gave flexibility to design teams to push boundaries with design-led interventions, and a disadvantage, where project stakeholders found the openness disconcerting[22] (Wood Holmes Group, 2008: 48-49). The broadness of Dott 07's strategy resulted in many different project intents, varying influences on stakeholders and a variety of outputs[23] from the projects. This has led the research programme to widen its investigation from the contributions design practice has in designing and developing services, to the contributions it has in public life.

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20 Interviews with the Dott 07 Management team which comprised of the National Director for Dott, Dott 07's Programme Director and Executive Producer,

21 Following Dott 07, other programmes are to be initiated every 2 years in a different region of the United Kingdom.

22 Further evidence of this was found in the semi-structured interviews that formed the key part of the qualitative research.

23 These outputs included: A film; An event; A design brief; New and improved communication tools and; Service concepts.

Preliminary studies (eg. Literature searches),… conversations and insights have illustrated that designers lack a widely shared and easily articulated explanation for the role and value they have been contributing to services[24]. This has been prevalent despite the fact that designers have been making significant contributions to services, for example creating ways in which grassroots activities can be connected to a policy.

To date, this has remained a prevalent issue for the design industry[25]. The following lists key issues facing emerging areas of design participating in public life (For an expansion on each point please see Appendix 2).

- Characteristics of the design industry pose challenges in terms of a deficit in credibility[26];
- Inadequate naming of the emerging area as Service Design[27] (Cook and Szebeko, 2008; Saco and Goncalves, 2008);
- The Design industry has always struggled with evaluating design, which is heavily linked to building credibility with clients;
- Clients lack an understanding about potential uses of design in their context[28];
- The lack of codification of design methodology[29];
- Academia and practice have had a long history of siloed ways of working. Though this is seen to be changing (Banerjee, 2008: 6-7) where many doctoral research programmes have sought to engage with practice[30] (Frayling, 1993/4; Bayazit, 2004: 27-8);
- The design industry currently lacks a coherent vocabulary of design (Saco and Gonclaves, 2008; Boland and Collopy, 2004; Kimbell and Sidel, 2008).

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24 Common themes in conversation with designers included challenges in articulating the value of design, selling design and explaining the potential of design in services.

25 This is reflected in the analysis of the visual case studies and also in conversation with industry on the lack of time they currently experience to do adequate reflection and draw on learnings.

26 For example, being small in size, being led by very young Designers, limited case studies, limited metrics to measure and evaluate design, disparate vocabularies and language barriers that limit descriptions of their practices in ways that are relevant and suited to the public sector.

27 Other names for Service Design have included Transformation Design, Social Innovation and Participatory Design

28 This is mainly driven by preconceived ideas of design as "prettification" (Postrel in Saco and Goncalves, 2008) and solely concerned with the making of products.

29 Clients are used to codifications of methodologies and Designers commonly display an indifference to codification of what they do eg. In conversation with industry, some Designers have expressed an indifference to the importance of codifying methodology.

30 For example The Designing for Services Project (2007) at Oxford University, practice and work-based PhDs currently being undertaken by several Designers in London.

- Designers are often pigeon-holed as management consultants and market research by clients, and have found it difficult to articulate what sets their practices apart[31].

In summary, emerging areas of design lack appropriate articulations of design practice in public life[32], and the evolution of the research programme seeks to respond to these issues.

Research Aims

The aim of this research is to build an understanding of the role of design practice in Dott 07 public commission projects, for transferability to the broader context of Service Design.

The broad aim, to understand the role of design practice in the Dott 07 public commission projects, has not changed throughout the course of this research programme. However, a shift in the research question from design in public services to design in public life has transpired to encapsulate the disparate languages used to describe activities of design. The disparate use of language demonstrates the need for more appropriate articulations of design practice in public life to wider, non-design audiences. Schon's 1983 study of "Design as a reflective conversation with the situation" (Schon, 1995) highlights the "language of designing" (Ibid: 80) as:

> "His words do not describe what is already there on the paper but parallel the process by which he makes what is there." (Ibid)

What is demonstrated here is that the Designer does not speak of what is actually happening in the situation, but uses situated language accompanied by his/her design activity to explain what s/he is doing. Intimate understanding of this can only be interpreted through observation (Schon, 1995: 81) and participation. From looking at Schon's 1983 study, there may also be value in external research and reflection on design practice. In other words, it is the mode of design research which Christopher Frayling (1993-4) calls research *into* design[33]. The historical and external investigation of Dott 07 will work towards overcoming issues of situated vocabularies

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31 Such has been identified in the Designing for Services project at Oxford University and also in conversation with industry.

32 What it is, what it does, what is can do, what value it generates, how it is done etc

33 Frayling (1993-4) identified two other modes of design research, these being *through* design and *for* design.

and help demystify practices of design currently participating in public life. More appropriate articulations will enable designers to work and contribute to broader areas in society. Some of these articulations could include:

- Case study work to demystify practices of design in public life, strengthen understanding for non-Design audiences and demonstrate value;
- Uses of appropriate language to describe design-led activities and;
- Better codifications of design methodology.

Much literature has already presented many opportunities for design in public life (such as the Danish Design Centre, 1992; and Whiteley, 1997). But the need to (re)articulate such messages for persuasive communication with non-design audiences, is important for future commissioning and procurement of design in new and different areas.

3. Research Methodology

The Dott 07 public commission projects present an opportunity to investigate this through utilising a Grounded Theory approach, whereby the "discovery of theory from data" (Glaser and Strauss, 1967) will be congruent with the embryonic state of the discipline… A hybrid of strategic choices (Robson, 1993) has been decided upon to ensure that "the discovery of theory from the data" (Glaser and Strauss, 1967) is gathered and analysed with academic rigour. The hybrid methodology will combine literature reviews (Hart, 1998), case study reviews (Yin, 2003) and Peer Reviews (McNiff and Whitehead, 2006).

The inquiry into the Dott 07 public design commission projects is framed by the research philosophy of Grounded Theory (Strauss and Glaser, 1967). It has been found that a Grounded Theory approach is well suited to the nature of the subject of inquiry[34]. Grounded Theory's correspondence with the subject of inquiry is seen best where Grounded Theory is both a strategy for doing research and a style of analysing the data (Robson, 2002: 190). In a similar way, design is known and

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34 Both in terms of the areas of design as being emergent and the nature of undertaking a design-led approach to research and problem-solving. Bruce Archer attempts to connect the nature of design and science by saying, "Design, like Science, is a way of looking at the world and imposing structure upon it […] Design research… is not equitable with scientific research. It is designerly enquiry, not Design Research, that is equitable with scientific research. Design Research can, and does, employ the methods of scientific research and scholarly enquiry in its pursuits, as well as, more rarely, the methods of designerly enquiry itself" (Archer, 1980: 35)

described as an activity of designing the 'thing' and also designing the process (Thackara, 2007; Designer 1, 2008). Comparative Analysis, where data collection and coding happens in an iterative process (Glaser and Strauss, 1967), is also similar to activities of design such as reflections-in-practice (Schon, 1995) to move the design process forward (Designer 14, 2008) and the activity of prototyping. Finally, Grounded Theory's concern for fit to practice[35] (Glaser and Strauss, 1967: 237) parallels findings in the data collection whereby Designers respond and adapt design practice to suit the people and situation involved (Designer 14, 2008; Designer 6, 2008).

For a more detailed summary of research objectives proposed in the IPA and its developments please see Appendix 3.

Theoretical Sampling and Sensitivity

Due to the limited availability of Service Design literature[36], Theoretical Sampling (Glaser and Strauss, 1967) was undertaken at the formative stages of the PhD programme to map the territory for relevant and topical issues, and identify some knowledge gaps in the discipline[37].

In addition to Theoretical Sampling (Glaser and Strauss, 1967), (which was used to help understand the emerging area of design and construct the research design), Theoretical Sensitivity (Ibid) in Grounded Theory recognises the researcher's own knowledge and insights into the area of inquiry[38]. Theoretical Sensitivity has been in continual employment during the research process (Ibid: 46). Use of previous experience as a design practitioner has helped catalyse thinking and understanding of the subject area. Conversations with industry have also formed an important part of gaining knowledge and shaping thinking[39]. As profiled at the start of this report,

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35 "The theory must closely fit the substantive area in which it will be used." (Glaser and Strauss, 1967: 237)

36 The Design Council are currently working on developing a body of knowledge around Service Design in the public sector.

37 At this early stage of the research, identifying knowledge gaps was partly informed by reflection on previous design practice and also in conversation with industry and the Design Council. These conversations helped shape the PhD topic and increase relevance to practice.

38 This has been in design-led interventions in large organizations.

39 Glaser and Strauss describe theoretical sensitivity as helping "conceptualize and formulate a theory as it emerges from the data. Once started, theoretical sensitivity is forever in continual development… First, it involves the sociologist's ability to have theoretical insight into his areas of research, combined with an ability to make something of his insights." (Glaser and Strauss, 1967: 46)

historical, political and contextual sensitivity (Silverman, 2001) is also an important source to shape the research topic.

Qualitative research

Qualitative research methods in the form of semi-structured interviews (Robson, 1993) will provide the data for seven case studies (Yin, 2003) of the Dott 07 public commission projects. These will be undertaken six months after the Dott 07 Showcase Festival (16-28 October 2007), to ensure a higher degree of objectivity towards the practices of design, reflections and learning pertinent to each public commission project. Each case study will investigate the triangulation of content, process and context[40] (Young, Cooper and Blair, 2001; Young, 2005). The seven case studies will be compared and contrasted, through Comparative Analysis methods (Glaser and Strauss, 1967), for emerging modes of practice and associated theories in Service Design. Correlation of case study results will also inform the overall evaluation of Dott 07.

Qualitative research has progressed significantly for the PhD programme. Literature reviews (Hart, 1998), desk research and semi-structured interviews (Robson, 2002) have been undertaken[41]. The combination of data collected will be used toward the development of case studies. Yin (1994) states that case study research, "Investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident." (Yin, 1994: 13). The investigations will be valuable in helping understand and demystify the practices of design utilised in Dott 07 to build stronger arguments for an increased uptake of design in public life.

An Evaluation Model for Dott 07 case studies

In order to complete a review of the Dott 07 public commission projects, standard indicators will need to be determined as measures of success. A Responsive Evaluation approach (House, 1978) will be used to determine a set of Dott 07 success indicators. This will involve semi-structured interviews (Robson, 1993), on

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40 These areas reference the content-based model of Design, which name Levels of Design as D1 (design in context), D2 (designing context) and D3 (design of the context).

41 Evidence of these can be seen in the Appendix and in the list of researcher activities and presentations attached to this report.

metrics and/or indicators, with designers and communities of interest of the Dott 07 public commission projects[42].

Due to the heterogeneity of the Dott 07 projects, no evaluation model for assessing the case studies has been developed to date. The Dott programme's loose aims and objectives resulted in each project being approached differently with different intents[43], issues[44] and outputs[45]. Furthermore, questions on evaluation and measuring design were incorporated into the qualitative research phase of the research. It was hoped that this would provide insights for developing an evaluation model for Dott 07. But the raison d'être of the programme was a "safe-fail" approach (Wood Holmes Group, 2008) resulting in little use evaluation criteria by all project stakeholders and sponsors. The external evaluators for Dott 07 also reported difficulties in evaluating the programme and its projects (Ibid, 2008).

This research programme has utilised a Grounded Theory (Glaser and Strauss, 1967) which lies in congruence with the subject of inquiry. It adopts strategies in Theoretical Sampling (Ibid), Theoretical Sensitivity (Ibid) and Qualitative Research to help move the investigation forward, but it has found it challenging to develop a Responsive Evaluations Model (House, 1978) to review the Dott 07 programme as a whole.

If evaluation models are to exist, they would need to be done on a case-by-case basis. The qualitative research Discussion Guides did not predict or interrogate case-by-case evaluations. In place of an evaluation model, statements of project legacies (both visible and embedded) have been made[46] and opportunities to benchmark the projects based on the approaches and methods used is to be explored[47]. Furthermore, while evaluation of design is a key issue for design practice, it has emerged that this is not to be the focus of this particular research programme.

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42 In the public/social sector Collins (2006) states that, "What matters is not finding the perfect indicator, but settling upon a consistent and intelligent method of assessing your output results."

43 Some projects had the intent of designing new services, while other projects were about profiling an issue.

44 These five big issues were: Health, education, energy, food and movement.

45 As seen earlier in this report

46 This has been in various presentations (see table of activities undertaken and completed at the end of this report) and also in the visual case studies.f

47 For example the spectrum currently being developed where designers worked with or for people in design projects. Please see February 09 in 'Proposed Next Steps and Timeline' for further description of this exploration.

4. Research Design

Literature search and review

A broader and in depth literature review (Hart, 1998) will be undertaken around Service Design and related areas (eg. Interaction Design, systems thinking, Design methods research). An overview of services, as seen by other disciplines such as branding, marketing and IT (eg. IBM's Almaden Research Centre) will also be explored to identify the broader context of service development.

Literature has been a tricky landscape to navigate. Pre-data collection, literature in Service Design and Design Methods was explored with very little clarity as to what was being looked for[48]. Conversations with industry and the commencement of qualitative research in the form of semi-structured interviews (Robson, 1993) saw literature searches move away from Service Design in the private sector, to activities of design in public life and explorations into other disciplines where Designers have been drawing inspiration for their practice.

The depth of knowledge gained from the qualitative research phase directed literature searches and reviews out of the Design domain e.g. In Communications (Frascara, 1997), Interaction Design (Moggridge, 2007) and Design Management (Cooper and Press, 1995; Best, 2006), and into other disciplines that have inspired their practice. Some of these disciplines have included Economics, Policy, Social Sciences, Information Technology and Business. Further literature searches and reviews have identified even more disciplines with overlapping areas of practice. These disciplines include Architecture (Sanoff, 2000) and Development Studies (Desai and Potter, 2002; United Nations, 2008). Literature searches and reviews in all these areas are currently being undertaken with the question of how much depth would be required for the thesis.

One of the most critical areas of literature has been the national policy context in the United Kingdom. Investigations into Government and Policy documents were touched upon earlier in this report and reveal the implicit and explicit role for Designers and design in developing the UK's economy, identity and quality of life[49]

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48 This was due to the fact that disciplines that Designers draw methods and approaches from could not be identified clearly until the qualitative research phase.

49 Such as The Cox Report (2005), Transformational Government (2005), Service Transformation (2006), Building on Progress (2007), Innovation Nation (2008), Creative Britain (2008), etc.

(for example Cox, 2005; HM Government, 2005, 2006, 2007; Mahroum et al., 2007; Mulgan, 2007; DIUS, 2008; DCMS, 2008; NESTA, 2008a; NESTA 2008b). Such reports detail enabling conditions and barriers for Designers wanting to work with the public sector including insights into language for the articulation of design in public life.

More focused literature areas have been generated to frame tighter domains of enquiry for the continuing research programme. Three main domains of literature have been identified:

1. Design in Public Life and the Policy Context
   (eg. Government reports, policies and initiatives etc.);
2. Design Methodology
   (History, models, methods, influences from other disciplines eg. Interaction Design, Social Sciences, Development studies etc.);
3. Design Practice
   (Philosophy, approach, methodology, methods, project managements etc.)

Other Sources of Evidence for Dott 07

Limited literature on Dott 07 steered research activity toward other sources of evidence (Yin, 2005: 83). This was valuable in the preparation stage for the qualitative research in gaining familiarity with the Dott 07 projects. Research on Dott 07 was found via many sources including:

- Archival records (Dott 07 website and blog);
- Documentation (Unpublished work by Design Council, publishing and reporting by the press and online);
- Dott 07-related events[50] and;
- Physical artefacts (Dott 07 Festival).

Outputs from the desk research included Dott 07 timelines of the projects which were used to familiarise the researcher with the projects before the qualitative research, and during the interviews as prompts (See Appendix 4 for a sample).

Case Study development

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50 These included the Dott 07 Festival, Dott 07 Debates, InterSections Conference and the Dott 07 Explorers Club

Yin's (1994) Case Study Method has been largely followed in the research design, but one key part was challenged taking a Grounded Theory approach. Yin's (1994) Case Study Method advises that theory is developed before data is collected (Yin, 1994: 49). In the sprit of Grounded Theory, where theory emerges from the data, this first step of the Case Study Method (Ibid: 49) was not conformed to[51]. Eisenhardt (1989), who's roadmap for generating theory from case study research, provides a fitting approach to this research programme[52] advising the early stages of case study research need to "retain theoretical flexibility" (Eisenhardt, 1989: 533). Furthermore, building theory before the data collection could not be done due to issues in early literature searches and reviews. Yin (1994) states that the literature review is a way to determine theory (Cooper in Yin, 2005: 9), but knowledge of appropriate literature was limited. Design practice draws from a multitude of disciplines and this lacked identification until the qualitative research phase.

For the case study development, investigations into design practice was seen as, "The study of the principles, practice and procedures of design in a rather broad and general sense." (Cross, 1984: vii). This broad approach led the qualitative research phase towards the goal of understanding design methodology through the project experiences of the stakeholders. These stakeholder comparison groups (Glaser and Strauss, 1967) were:

- Project Clients;
- Project Champions;
- Senior Producers and;
- Designers.

(More detail on these stakeholders can be found in Appendix 5. Planning, sampling strategy and criteria etc. can be found in Appendix 6).

Yin (1994) encourages the undertaking of a pilot interview and this was critical to this research programme as it modified the format of the semi-structured interviews in the

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51 Glaser and Strauss (1967) advise that, "Potential theoretical sensitivity is lost when the sociologist commits himself exclusively to one specific preconceived theory… For this person, theory will seldom truly emerge from data." (Glaser and Strauss, 1967: 46).

52 Eisenhardt's (1989) framework is a synthesis of Glaser and Strauss's (1967) Grounded Theory principles, Yin's (1994) Case Study Method and Miles and Huberman's (1994) approaches to anaylsing the data, all currently utilized in the research design. She also states that her roadmap is well-suited to "new research areas or research areas for which existing theory seems inadequate" (Eisenhardt, 1989: 548-9).

qualitative research (Robson, 2002) from being team-based to individually-based. Planning, undertaking and reflections[53] from the pilot interview can be found in Appendix 7. The key reason for adjusting the research design was to maximize time for contributions by interviewees in the interviews.

Revisions to the interview questions in the Discussion Guides were undertaken shortly after the Pilot interview. Planning documentation (See Appendix 8 and 9) was written up to ensure careful research design (Trellis, 1997) and systematic collection of the data (Yin, 1994). Key points in the planning documentation were condensed into one-page that served as a checklist for the qualitative research aims and objectives, materials needed and a guide to introducing the research to the interviewees (See Appendix 10).

Treating the Data

Transcribing and First Stage Coding

All recording and transcribing of the interviews was done by the researcher. Comparative analysis (Glaser and Strauss, 1967) of the data was undertaken during this stage. Coding while assembling transcriptions was done at three stages:

1. Among the text as it was being transcribed (Ibid)
2. Along the margins when checking completed transcriptions (Ibid) and
3. Collecting the codes in the Contact Summary Sheets (Miles and Huberman, 1994: 51) that outlined factual information for the interviews such as name, date, time and location.

(For a sample see Appendix 11 for full transcriptions including Session Summary Sheets and coding)

NVivo Coding as Second Stage Coding

The second stage of data analysis was done with Nvivo. Coding of the data was done as per Discussion Guide questions. Due to the semi-structured and conversational interview approach (Robson, 2002), distinctions between the

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53 The reflections in summary were: Designers need time to express and discuss their design process; Interviewing separately would mean gaining time to adequately covered and distribute the Discussion Guide between individuals; Logistically it was going to be difficult to get the design teams together; Separate interviews allow focused insight on both a strategic and tactical level.

questions were often tricky. At this stage the interview question coding produced little value, so explorations for synthesizing, rather than analyzing the data were undertaken.

Data Reduction and Display – Visual case studies

Miles and Huberman (1994) outline many methods for data reduction and display. Methods of data reduction and display utilised in the research programme thus far have included:

- Session summary sheets
- Memoing
- Intermin summaries and
- Data displays (Miles and Huberman, 1994)

In data displays, visual case studies were developed to disseminate the Dott 07 projects on a single-page. Yin (1994) presents a key criticism of case study research as being too lengthy in narrative (Ibid). The development of visual case studies, as a synthesis of design methodology and project experiences of Designers and Clients, has been helpful in quickly disseminating findings, demystifying design practice and formed a valuable part of case study development.

The visual case studies were assembled to articulate five main features of each project. These were:

1. Key aspects of the design process[54];
2. Corresponding feedback to these key aspects by Designers[55];
3. Associated feedback on these key aspects by Clients[56];
4. The outputs of the project[57];
5. The legacy of the project[58].

The visual case studies have further supported "member checking" (Robson, 2002) by providing a quick mechanism for testing accuracy and researcher bias (Ibid: 175).

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54 The visual case studies drew out those methods which were spoke of, unprompted by Designers and Clients.

55 Which in whole, mostly conveyed the Designer's experience on the project.

56 Which in whole, mostly conveyed the Client's experience on the project.

57 Outputs denoted the tangible aspects of the project's response to the problem.

58 As understood at the time of doing the interviews.

Case study narrative development and discussion

The visual case studies were used as a guide for discussing key elements in the case study narratives. The narratives use the framework of discussing the context[59], content[60] and process[61] (Young, 2005) of each project, where context frames the policy environment in which the content or issue is dealt with. The process denotes the design-led practices as undertaken by the Designers and other project stakeholders. Design outputs and the legacy of the projects will complete the case study narratives.

It is anticipated that case study discussions will form around the following areas:
- Identifying and discussing emerging new roles of Designers;
- Identifying common design methods used in the Dott 07 projects, which gives an indication for design methods used where design plays a role in public life;
- Recognising the complexities Designers deal with utilizing design practice in public life. This will be done through interrogating of the relationship between the three areas of context, content and process.

Peer Reviews for verification and iterations of research findings

The emergent modes of practice and associated theories will engage the peer review group for verification (McNiff and Whitehead, 2006)…. Platforms such as workshops, panel discussions etc. will allow for presentation of ideas and exchange of dialogue.

Peer reviews (McNiff and Whitehead, 2006: 157-165) have been undertaken, throughout the research programme, mainly with Northumbria University and the Design Council, the co-sponsors of the research. While many peer review sessions have been undertaken, a variety of limitations have made it difficult to conduct them on a regular basis. These limitations have included:

- Residential location away from the industry hub;

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64 Context denotes the bigger picture the project operates within. The context identifies to the external factors that have an impact on design projects, where little control can be exerted by Designers and stakeholders of the project. These factors include policy, the economy, social trends, technology, business etc.

65 Content specifies the key issue that is central to the project. In Dott 07, the public commission projects looked at 5 issues these were health, energy, movement, education and food.

66 Process is the time-based journey and series of design methods of the project led by Designers and involving the project's stakeholders.

- Small size of the industry that left few options for design practice representation and;
- Early stages of the PhD programme without having completed the qualitative research.

Informal peer review sessions have, however, worked well and suited the disparate geographies, Designers and their work schedules.

Peer reviews have also happened with a wider audience mainly through presentation formats at Northumbria University's International Service Design Conference (ISDN3) (2008) and the Changing the Change Conference (2008) of which the latter published a peer-reviewed paper, and research was presented in front of an international audience. Further peer reviews of both these presentations have been published online (STBY, 2008; Core 77, 2008).

Ongoing peer reviews with "Critical friends" (McNiff and Whitehead, 2006: 159) are less formal, but occur more frequently. These interactions, mostly with industry, the Design Council and Northumbria University, provide valuable insights in maintaining relevance to practice and identifying emerging questions that provide opportunity spaces for the research to pursue. Face-to-face meetings and email exchanges have been documented and archived to date.

Further research dissemination for peer review has included a research blog and monthly newsletter (discussed in the next section). Both these have been used to update research progress, share knowledge and give insight into evolving thinking and ideas. These communication channels provide a frequent channel for a wider community of interest, and all discussion and feedback has been archived.

This research programme has adopted a hybrid of strategic choices in its research design. This has included literature reviews (Hart, 1998), case study development (Yin,1995) and the treatment of data through coding (Glaser and Strauss, 1967) and data reduction and display (Miles and Huberman, 1994) To verify and iterate research findings, a variety of peer reviews has been engaged.

Additions to the Research Design

One concern of this research programme has been the connection between academic research and practice. The divide between acaedmic research and practice in design is well-known (Archer, 1981; Schon, 1991: 308; Holness, 2000; Banerjee, 2008; Bayzit, 2008; Cross, 2007a) and difficult to bridge. Modfications and developments on research designs have therefore been engaged with the purpose of increasing relevance and depth of understanding to design industry and practice.

The following list decribes the additions to the research design to act in congruence with the subject of inquiry, and combine current academic approaches with design research methods adopted from practice.

Making explicit Frames of Reference

In the spirit of Grounded Theory, the inclusion of a Frame of Reference piece by the researcher demonstrates "theoretical sensitivty" to the research topic and supports the acvitity of generating theory from data (Glaser and Strauss, 1967). Frames of reference outline the researcher's viewpoint on the relevance of the research, the commitment to research intent and the various hypotheses used to signpost the broad topic area, espeically at the early satges of the research programme.

Conversations with Design indsutry as part of the research design

Schon (1995) states that reseachers should not "keep themselves removed from the contexts of action." (Schon, 1995: 320). In light of this, formalisation of conversations with industry provide the research with deep insights into design practice[62], a sharing of evolving research and ideas, and maintaining research relevance as the emerging industry progresses[63]. Meetings with the design industry have happened regulary, with all meetings documented and archived.

Research disseminations

Monthly newsletters and blog postings have updated the University and the Design Council on research progress since September 2007. The disparate geographies of the Supervision Team, mentors, Designers and the PGR community have seen email and online research dissemination as effective, efficient and also an opportunity for peer review (McNiff and Whitehead, 2006). Monthly newsletters are emailed as pdfs (See Appendix 12) and regular blog postings occur at www.letterstoaustralia.blogspot.com (See Appendix 13).

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62 Partly to compensate for the absence of participant-observation (Yin, 1994) in the Dott 07 projects.

63 Some of the most important insights gained from the design industry have shaped topic areas for the final thesis. Eg. Identifying the changing role of the Designer, not just investigating the methods.

<u>Interviews with Dott 07 Management Team and other key Dott 07 stakeholders</u>
Semi-structured interviews with Dott 07 Management Team and conversations with the Design Council provided additional sources of evidence for case study development. This was not outlined in the IPA, but is in line with the approach of Theoretical Sampling (Glaser and Strauss, 1967) as desk research on the Dott 07 programme provided limited details on its aims and objectives. It was therefore necessary to undertake semi-structure interviews (Robson, 2002) with people leading the management of Dott 07. (See Appendix 14 for a list of interviews).

<u>Visual case studies</u>
Miles and Huberman (1994) provide many methods for qualitative data analysis. This research design has found many opportunities to build on data displays and one such are visual case studies as previously discussed (See Appendix 15 for a sample).

The above additions to the research design have been important in maintaining relevance and congruence to the subject being studied. Much literature discusses the need for different kinds of research philosophies, strategies and methods (Archer, 1980; Frayling, 1993/4; Holness, 2000) to communicate and draw out unique aspects of design which tend to get engulfed by the rigour and inflexibility of traditional research designs. Holness (2000) reports that among academic design research there is "… a general belief that the philosophical basis on which design research is conducted needs a fundamental reappraisal." (Holness, 2000). Doctoral programmes in design are a relatively young area (Banerjee, 2008) and this research programme can only add small steps towards developing new modes of research design for design.

Limitations to the Research Design

The researcher noted limitations to the research design. The following table lists key limitations and steps taken to address these limitations

Limitations	Actions and proposals for reducing effects of limitations on research design
Limited reflective practice (Schon, 1995) due to structure and timing of the reseach programme[64]: Relfection-in-action is important for the identification of the small but significant aspects of design activity during a design project. It is what Schon (1995) called knowing-in-action, or Ryle (1949) called know-how (Ryle, 1949). These qualities are critical to the making of design projects and are more easily identifiable in the participation of design practice.[65]	- Conversations with industry as part of research design - Documented reflections on researcher's own practice
Subjectivity and personal interests, while important, can also affect objectivity through researcher biases.	- Frame of reference chapter will serve as a benchmarking point to identify any possible biases - Utilisation of peer review, member checking and critical friends
Little opportunity for participant-observation (Yin, 1994) in the projects due to timing in commencement of the research programme	- Increased reliability by redundancy of questions in the Discussion Guides, - Comparison groups (Robson, 2002) as part of the research design - Holding interviews at place of

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64 Commencement of the research happened at the completion of Dott 07

65 As identified through the author's pervious practice

	work of each interviewee to gain deeper insight into practice environment and cultures
Limited time in the interviews meant that not all the Discussion Guide could be completed	- Follow-up emails and contact were requested and undertaken. - Member checking of research displays
Timing of interview affected interviewee's focus on the interview e.g. Some interviewees were under a lot of time pressure	- Some interviews spent a lot of time upfront trying to gain focus with the interviewee. - Notations in Contact Summary Sheets (Miles and Huberman, 1994: 51) help understand the context of the interview
Timing of the interviews were not always 6 months to the date of project completion	Due to availability of interviewees and staggered completion dates of the projects, the measure of 6 months post-project for interviews was not always exact. A "Hot off the Press" piece at the end of the research programme will update the research on project legacies and help gauge to what degree time is of influence in reflections on the projects.

5. Indications of Themes Emerging from the Case Study Data

At the time of this report, indciative themes have emerged from the case study data. These themes are detailed below. Further analysis and reflection is needed to bring these themes together to establish the basis for the generation of new knowledge leading to the potential creation of new theory.

Patterns of Design Practice in Dott 07

The phrase "design practice" was deliberately used instead of "design methodology" to avoid the research output becoming a design process model and listings of methods used. The abstract nature of such models has been found to be of limited use by the design industry, except in proposals for new business. Schon (1991) refers to practice as the "preparation for performance… [and] an element of repitition." (Schon, 1991: 60), and the qualitative research for case study development sought to understand, not just the process and methods used, but also stages of preparation, and *use* of the process and methods during the projects. In this research programme, design practice encompasses the following aspects:

- Personal philosophies of the Designer

- The multi-faceted roles of the Designer

- The approach and ethos taken in the projects

- The design process

- The methods (or tools) used in the projects

At the time of writing this report, formative ideas have only just emerged to occupy these areas of design practice. (A brief decription can be found in Appendix 16).

An illustration of Design Practice in Dott 07

An organising principle of stage production[66] was used as an analogy to deconstruct design practice in Dott 07 in early stages of analysis of the qualitative research.

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66 The idea for stage production as an analogy for design practice in Dott 07 was inspired by the concept of the Hollywood model popularised in business literature as a way to tackle complex problems and projects. Furthermore,

This analogy was inspired by the concept of the Hollywood model popularised in business literature as a way to tackle complex problems and projects (eg. In Morley and Silver, 1997). Furthermore, Service Design literature[67] frames aspects of service delivery as having both front and back stage elements (eg. In Grove et al, 1992; Teboul, 2006 and Voss and Zomerdijk, 2007). At the time of writing this report, this analysis is in its formative stages. An initial document of formative ideas has been included in Appendix 17 and 18.

Roles of Designers in Dott 07

In October 2007, InterSections 07, brought together leading Designers and design thinkers to consider how the field of design was changing. Jeremy Myerson, Chair of the Conference, published key themes that emerged. These themes pertained to four emerging roles of Designers of which Myerson (2007) stated were the Designer as:

- Strategist;

- Rationalist;

- Co-creator and;

- Storyteller.

The qualitative research, and visual case study development demonstrated and supported these roles but also identified a number of other emerging roles of Designers. These included, but are not limited to the Designer as:

- Facilitator;

- Researcher;

- Project Manager;

- Communicator;

- Coach/capability builder;

- Entrepreneur;

- Inspirer;

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much Service Design literature frames aspects of service delivery as having both front and back stage elements (Grove et al, 1992; Voss and Zomerdijk, 2007: 10-11) see also Laurel, B., (1993) Computers as Theatre).

[67] Also, Laurel (1993) writes about using theater as an analogy for design practice in user interface design in her book, *Computer as Theatre.*

- Leader (leadership).

Further exploration to flesh out these roles will be undertaken through anaylsis and development of case study narratives. A mind map of this work-in-progress is demonstrated in Appendix 19 and 20.

Designers deal with complexity in public life

The Dott 07 projects were not without a number of challenges. Some of the challenges in Dott 07 met by the Designers included:
- The need to manage a multitude of stakeholders in each project (Designer 2, 2008; Designer 11, 2008; Designer 9, 2008);
- The lack of ownership in multi-stakeholder projects, especially pertaining to the legacy of the project (Designer 2, 2008; Designer 11, 2008; Designer 1, 2008; Designer 9, 2008;);
- Project management issues, such as project planning which Clients reported as lacking (Project Stakeholder 7, 2008; Project Stakeholder 17, 2007; Project Stakeholder 16, 2007);
- Limited knowledge of the policy context by the Design teams (Project Stakeholder 13, 2008);
- Limited knowledge of the local context by the Design teams (Project Stakeholder 1, 2008; Project Stakeholder 6, 2008);
- Limited knowledge of the issue by the Design teams (Project Stakeholder 13, 2008; Project Stakeholder 3, 2008; Project Stakeholder 1, 2008).

A key area of research into design has involved the need for Designers to better navigate complexity in projects (Jones, 1992; Young, 2005; Dorst, 2007). The challenges faced by Designers in Dott 07 speak to these complexities, and while many of the Dott 07 Design teams effectively overcame these complexities, more can be done through research into design (as seen in Young, 2005 and Dorst, 2007), to help Designers identify and navigate these complexities in projects at an earlier stage. It is in this area that this PhD programme seeks to make an original contribution to knowledge and this is further detailed in the next section.

Other indicative themes emerging from the qualitative research

A final mind map of other emerging themes can be found in Appendix 21[68].

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[68] Appendices 22 and 23 are additional appendices which include: One-page summary of the PhD research progress as of October 2008 and; First draft thesis chapter outline.

Additional uses of the case material

Throughout the PhD programme, the research has been actively sought and used by the PhD co-sponsor; the Design Council. Consequently, the research has made contributions in the following areas to the Design Council:

- Insights in the emerging service design industry, who participated in Dott 07;
- A Dott methodology: This was a workshop that occurred in August 2008 and resulted in a Dott-specific methodology which is currently featured in the Dott Cornwall business case and published on the Design Council website[69];
- Workshop contributions to the Design Council's Service Design Knowledge cell (to be published in 2009);
- Contributions to the Design Council's Public Services by Design programme development workshops.

At this point of the PhD, the researcher understands the importance of focusing on the PhD's original contribution to knowledge. The researcher has and will continue to ensure that collaborations with the Design Council will not adversely affect the completion of the research as a doctoral project, but enrich it through opportunities for peer-review, discussion and assessments of the application and receptivity of the findings to future Dott and the Public Services by Design programmes.

6. Contribution to knowledge

The original contribution to knowledge of the PhD programme will be in reviewing the design practices utilised in the Dott 07 public commission projects, to identify their applicability and relevance to design practice and the broader Service Design context. The research will investigate emerging modes of practice and associated theories of design to service development through acknowledging the triangulation of content, process and context in the Dott 07 public commission projects.

Changing contexts greatly expand design's role in new and different areas. The idea that design has a multiplicity of contributions to public life is an exciting and fascinating area of study. The Dott 07 public commission projects provide a vehicle to

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[69] See 'Transforming Public Services' by John Thackara on the Design Council website at: http://www.designcouncil.org.uk/en/Design-Council/1/What-we-do/Our-activities/Public-services-by-design/Transforming-public-services/

investigate emergent knowledge for design methodology in new and different areas for design. Dorst (2007) identifies that current gaps, or "blind spots" in design methodology research are around "…issues to do with the designer, the content of the design activity and the context in which that activity takes place" (Dorst, 2007). The qualitative research phase of this PhD programme responded to this by investigating the context, content and process (Young, 2005) of each Dott 07 project (Figure 1) with the aim to better understand the complexities of the contexts Designers work in.
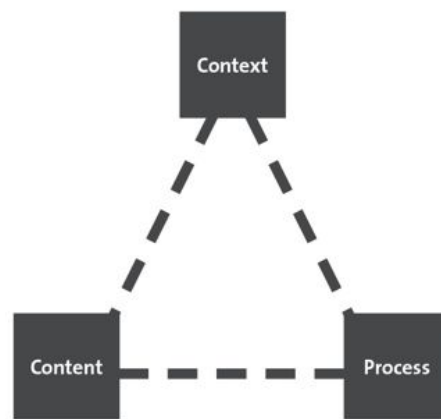
Figure 1. *Dott 07 was investigated by looking at the context, content and process of each public commission project.*

These complexities can be framed by the triangulation of context, content and process, but the original contribution to knowledge will be achieved through an interrogation of the *relationships* between these three areas[70] (Figure 2). This will reveal the impact each area has on the other, and the implications this has for design practice utilised in public life.

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67 The study will look at the relationships between: Context and content; Context and process and; Process and content.
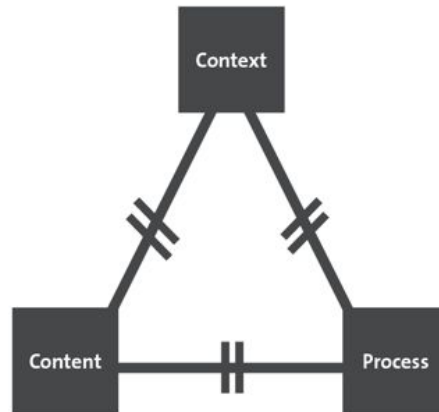
Figure 2. *Interrogating context and process; process and content and; content and context, will lead to better understandings of the complexities of design practice in public life.*

In addition to understanding how Designers can navigate complexities utilising design in public life, better articulations of design practice will be explored. These articulations will be a key part of forming a vocabulary of design in public life. Building vocabularies of design are crucial to enable "diverse professionals to engage in discussions" (Boland and Collopy, 2004: 14) of design in new and different areas. Building vocabularies of design is a key part of rethinking and reframing design[71].

To date, many research programmes have explored building vocabularies of design in new and emergent areas (such as design in business in Boland and Collopy, 2004; design in services in Heapy and Parker, 2006; design in science and technology services such as in Kimbell and Seidel, 2008). It is important to note the use of the word vocabulary means more than just words and definitions. Boland and Collopy (2004) used the word vocabulary to mean "the strategies of problem solving [Designers] were drawing upon, the kinds of imagery they were being inspired by, and the materials, shapes, and textures of the design elements that formed a kind of language" (Boland and Collopy, 2004: 15).

This PhD programme has already begun to explore vocabularies of design in public life. One such example is the deconstruction and description of design practice through the use of show production as an analogy (as mentioned earlier in this report

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71 RED's *Transformation Paper* discusses philosophical and practical changes the design community must overcome to work in the public sector (RED, 2006: 26-28)

and in Appendix 17 & 18). This analogy explains the elements and interactions of design practice to stakeholders of such projects (such as clients, design users, design students, educationalists and design practitioners). Extrapolations from this analogy will then form proposed recommendations for future practice (such as in the development of Dott Cornwall). It is anticipated that this analogy will have the potential to contain insights from the interrogations illustrated in Fig 2 in a way that brings the knowledge to life, for reference and use by stakeholders of design.

Therefore, the main contribution to knowledge from this PhD programme is based upon the development of stage production as an analogy to provide a flexible, appropriate and realistic understanding of how the Designer can navigate complexities of design content issues and processes in public life contexts. In addition to this contribution to knowledge, this research will provide better articulations of design practice for a wider audience of stakeholders and propose recommendations for future (design) practice.

Proposed Next Steps and Timeline

Date	Research Design	Research to be undertaken
Dec 08 onwards	Peer reviews for verification and interactions of research findings	Peer review: distribution of visual case studies for feedback and accuracy. Peer review: Opportunity to establish this as a more formal process with "Validation Groups" (McNiff and Whitehead, 2006: 159)
Dec 08 onwards	Literature searches and reviews	Continuing this is a more focused way
Dec 08 onwards	Miles and Huberman (1994), MNniff and Whitehead (2006) and Silverman, (2001) offer guidance for data analysis	- Tactics for generating meaning (Miles and Huberman, 1994: 245-6) - Cross-case displays (Ibid: 172) - Tactics for testing or confirming findings (Ibid: 263) - Continuation of peer reviews (McNiff and Whitehead, 2006: 157-165) - Conversational analysis (Silverman, 2001: 167-177)
Dec 08- Mar 09	Case study writing and analysis	Use visual case studies to expand case studies into written narrative. The cases study analysis will use the context/content/process filter to frame the narrative and also initiate discussion on the Dott 07 projects. From this analysis and discussion key categories will be derived
Mar 09	Stage 2 Nvivo coding	Coding of categories which will form the basis of theory
Dec 08- Mar 09	Options for interpretation of qualitative data	Such as spectrum models to identify degrees of approaches taken in projects, matrices to identify common

		methods used in Dott 07 etc. Silverman (2001) provides possible interpretations as: - a model - a concept - a theory - a hypothesis - a methodology - methods (Silverman, 2001: 3)
Mar 09-Mar 10	Thesis write up	Will bring together the literature review, desk research, qualitative research, case study narratives, case study analysis, generation of codes and the development of codes for theory.
Mar 10	First draft thesis submission	
Mar 10-Jun 10	Hot off the Press	Second round of semi-structured interviews (Robson, 2002) to update project legacies
Jun 10	Final thesis submission	

Timeline showing proposed and actual research undertaken, and next steps.
(A short-term timeline has been submitted to the Supervision Team to show research to be undertaken between December 2008-March 2009).

POSTGRADUATE RESEARCH STUDENT SKILLS TRAINING PLAN

northumbria UNIVERSITY

During your research degree programme you are expected to develop a range of skills to give breadth to your learning. This plan helps you evaluate your learning needs and develop a timetable for enhancing skills. You should work through the list and evaluate whether you already possess the skill, need to develop or enhance it. If you have achieved the skill mark this in the second column. Provide evidence for your achievement in the third column.

PGR Student's name: Lauren Tan

Principal Supervisor's name: Robert Young

Academic School: School of Design

Start date: 4 June 2008

Full time

Supervisors should confirm that you have completed your skills training at each stage.

IPA stage	MPP stage	Final stage
Supervisor Signature	Supervisor Signature	Supervisor Signature
....	....	....

MPP Stage

Research Skills and Techniques – to be able to demonstrate skill in:	Achieved / Partly Achieved/ Not Achieved	Achievement / Enhancement programme
developing theoretical concepts	Partly achieved	Utilisation of Grounded Theory approach sees theory are emergent. Indicative theoretical ideas are outlined in the MPP Appendix
the techniques available for keeping up to date in the area of research	Achieved	Lots of contact with industry, conferences, workshops, talks and with the Design Council
relevant research methodologies, techniques and their application	Achieved	A hybrid research methodology has been employed in the research programme
critical analysis and evaluation of findings in relation to others	Partly achieved	NVivo training has been completed. Currently analysing qualitative research data collection
summarising, documenting, reporting and reflecting on progress	Achieved	Reflective journal, Meeting and event write-ups, monthly research newsletters and research blog is evidence of this

Research Environment – to be able to develop:	Achieved / Partly Achieved/ Not Achieved	Achievement / Enhancement programme
a broad understanding of the context, at national and international level, in which research takes place	Achieved	But ongoing due to changes in the Design Council strategy which sees more overlap their activities and the content of this research
an understanding of the processes for funding and evaluation of research	Achieved	PGR Handbook has been used to guide this understanding
arguments to support their research	Partly achieved	Analysis and coding of data collection is currently in progress

approach based on sound principles.

Research Management – to develop the skill to use:	Achieved / Partly Achieved/ Not Achieved	Achievement / Enhancement programme
effective project management through the setting of research goals, intermediate milestones and prioritisation of activities	Achieved	This is largely outlined in the MPP report, but more frequent milestones and short-term goals need to be developed
appropriate resources and equipment to design and execute data collection	Achieved	Data collection already completed. A shorter second phase at the very very end of the programme will require less resources and equipment
appropriate bibliographical resources, archives, and other sources of relevant information	Partly Achieved	Endnote training has been completed. Greater utilisation of Endnote will ensure more efficient referencing
information technology appropriately for data management, recording and presenting information	Partly Achieved	Currently limited access to Nvivo. Options to purchase software for personal use and/or extended visits to Newcastle are currently in planning

Personal Effectiveness – to develop the skills of:	Achieved / Partly Achieved/ Not Achieved	Achievement / Enhancement programme
learning and acquiring knowledge	Achieved	But new residential location will allow greater access to the design industry and practice
creativity, innovation and originality in one's approach to research	Achieved	This is discussed in the MPP Report

	Achieved	This is discussed in the MPP Report
flexibility and open-mindedness	Achieved	This is discussed in the MPP Report
drawing upon sources of support and recognising boundaries	Achieved	This is discussed in the MPP Report
initiative, independent working and self-reliance	Achieved	The undertaking of research thus far has had a very strong independent approach to working with tactics to help self-motivation throughout all stages of the research

Communication Skills – to develop the skills of:	**Achieved / Partly Achieved/ Not Achieved**	**Achievement / Enhancement programme**
clear writing in a style appropriate to the audience	Achieved	Thought looking to push this further in terms of articulation of research to wider audiences e.g. Non-designers and non-academics
articulating ideas clearly using coherent arguments to a range of audiences	Achieved	Presentations at national and international conferences have demonstrated the ability to articulate ideas to a wide audience
constructively defending research outcomes at seminars and viva examination	Partly Achieved	As above. Viva training is a high consideration, but will be attended closer to the end date of the research programme

Networking and Teamworking – to enhance the understanding of:	**Achieved / Partly Achieved/ Not Achieved**	**Achievement / Enhancement programme**
personal behaviour and its impact on others when contributing to team work	Achieved	Have acted as PGR Rep for the Design PGR Community for a year and done numerous presentations at the University,

		Design Council, workshops and conferences
the skills of listening, giving and receiving feedback in a perceptive and supportive way	Achieved	Have given many presentations for peer review and also facilitated and captured discussions during these sessions

Final Stage

Research Skills and Techniques – to be able to demonstrate skill in:	Achieved / Partly Achieved/ Not Achieved	Achievement / Enhancement programme
developing theoretical concepts	Not Achieved	Final stage of NVivo coding will allow the development of theoretical concepts
summarising, documenting, reporting and reflecting on progress	In progress	Reflective journal, Meeting and event write-ups, monthly research newsletters and research blog is evidence of this

Research Environment – to be able to develop:	Achieved / Partly Achieved/ Not Achieved	Achievement / Enhancement programme
an understanding of the process of academic or commercial exploitation of research results	Not Achieved	To explore training options for this through the University. Former employment boss commercially developed his PhD study and is currently acting as a mentor

Personal Effectiveness – to develop the skills of:	Achieved / Partly Achieved/ Not Achieved	Achievement / Enhancement programme
initiative, independent working and self-	In progress	Short-term (6 monthly) timelines will help better manage the

reliance

research programme

	Achieved / Partly Achieved/ Not Achieved	Achievement / Enhancement programme
Communication Skills – to develop the skills of:		
clear writing in a style appropriate to the audience	Partly achieved	Continue practice with writing more papers, presentations and interim reporting
articulating ideas clearly using coherent arguments to a range of audiences	Partly achieved	Focus on appropriate use of language in thesis
constructively defending research outcomes at seminars and viva examination	Partly achieved	Experience has already been gained through presentations and conferences. More Viva training is f high consideration
promoting the public understanding of research	Partly achieved	Some public presentations have included discussions of research methodology. Close connections with industry and their interest in this research demonstrate an increased understanding of how research and practice can contribute to each other
effectively support the learning of others through teaching or mentoring	Partly achieved	Have had many conversations with Northumbria under-graduates and also Masters students. Offers to present at other Universities have also arisen. For my own research, currently identifying local mentors to further challenge the research

	Achieved / Partly Achieved/ Not Achieved	Achievement / Enhancement programme
Networking and Teamworking – to enhance the understanding of:		

the ways in which co-operative networks and working relationships may be developed and maintained within the institution and the wider research community	Achieved	Have worked with the University and the Design Council on a range of activities and projects. Have also set up and kept momentum going with an international PhD Design Group (on Facebook) organising many meet-ups in London
personal behaviour and its impact on others when contributing to team work	Partly achieved	The research programme is largely self-directed work with limited opportunities for team work. Team work has been undertaken in other activities and projects with the University and the Design Council
the skills of listening, giving and receiving feedback in a perceptive and supportive way	Achieved	PGR Rep role at the University to represent the Design PGR community

Career Management – to:	Achieved / Partly Achieved/ Not Achieved	Achievement / Enhancement programme
appreciate the need for and show commitment to continued professional development	Partly achieved	Am aware and interested in pursuing future research questions
take ownership for and manage career progression through set realistic and achievable career goals, and identifying ways to improve employability	In progress	Have good insight into opportunities both in the UK and Australia, post-PhD
demonstrate an insight into the transferable nature of research skills to other work environments and the range of career opportunities within and outside academia		
present one's skills, personal attributes and experiences through effective CVs,	Achieved	Have already held several jobs in the private sector which

applications and interviews		required these skills
the ways in which co-operative networks and working relationships may be developed and maintained within the institution and the wider research community	In progress	Have also set up and kept momentum going with an international PhD Design Group (on Facebook) organising many meet-ups in London, but am interested in other ways to build networks

Details of courses / seminars / modules / activities completed or attended

Name of course / activity	Date(s) Attended
NVivo training	18 December 2007
Endnote training	4 April, 2008
Viva training/Mock Viva	TCB
PGR Presentation, Northumbria University	June 07
Designing for Services workshop, Oxford	July 07
Mapping Design Activism workshop, Leeds	September 07
Design Council Presentation, London	September 07

London Design Festival, London	September 07
Dott 07 Festival, NewcastleGateshead	October 07
Dott 07 Debates, NewcastleGateshead	October 07
InterSections Conference, NewcastleGateshead	October 07
Designing for Services workshop, Oxford	October 07
Presentation to Northumbria Master students	October 07
Presentation to Northumbria Undergraduates	November 07
6 Month Review Presentation, Northumbria University	December 07
Desform Conference, Northumbria University	December 07
6 Month Review Presentation, Design Council	February 08
Dott 07 Explorers Club, Newcastle	March 08

Event	Date
Design Management Institute Conference, France	April 08
London Design Tour, London	April 08
PhD Design Group Drinks, London	May 08
Graphic Design Festival Presentation, Netherlands	June 08
Changing the Change Conference Presentation, Italy	July 08
Dott Cornwall Methodology workshop, Design Council	August 08
Presentation to 2nd Road, Sydney	September 08
Design in Public Services workshop & facilitation, Design Council	November 08
Design PhD Group Drinks, London	November 08
Design in Public Services workshop & facilitation, Design Council	December 08
Submitted MPP Revisions	January 09

References

2nd Road, (2006). *Building Innovation Around the Customer Experience*. Conference. 27-28 March. Sheraton on the Park, Sydney.

Alben, L. (1997) 'At the Heart of Interaction Design'. *Design Management Journal*. Volume 8. No. 3. USA.

Almaden Service Research (2007). *IBM Almaden Research Center*. http://www.almaden.ibm.com/asr/. USA.

Archer, B. (1980). 'A View of the Nature of Design Research.' in Jacques, R. and Powell, J. (Ed) (1981). *Design, Science, Method: Proceedings of the 1980 Design Research Society Conference*. pp 30-35. Westbury House. England.

Archer, B. (1981). 'What is Design Research that it is Different from Other Forms of Research?' in Jacques, R. and Powell, J. (Ed) (1981). *Design: Science: Methods. Proceedings of The 1980 Design Research Society Conference*. Westbury House. England.

Banerjee, B. (2008). 'Designer as Agent of Change: A Vision for Catalyzing Rapid Change.' Conference paper. *Changing the Change: Design Visions, Proposals and Tools*. Conference. 10-12 July. Turin, Italy.

Barter, T. (2007). Personal Communication. 11 July. London, United Kingdom.

BBC News (2000). 'New Era for Patient-centred NHS'. BBC.co.uk. http://news.bbc.co.uk/1/hi/health/847284.stm. Sunday 23 July. United Kingdom.

Boland, R. J. and Collopy, F. (Ed) (2004). *Managing As Designing*. Stanford University Press. California, USA.

Brandt, E. (2006) 'Designing exploratory design games: a framework for participation in Participatory Design?'. *Participatory Design: Proceedings of the ninth conference on Participatory design: Expanding boundaries in design - Volume 1*. Pp 57-66. Trento, Italy

Broadbent. G. (1981). 'The Morality of Design'. *Design: Science: Methods. Proceedings of The 1980 Design Research Society Conference*. pp. 309-328. Westbury House, Guilford, England

Broadbent, G and W. Ward. (1969). *Design Methods in Architecture.* Lund Humphries. London.

Brown, T. (2007). 'The challenge of design thinking'. *InterSections: Design Know-how for a New Era*. Conference presentation. Baltic Centre for Contemporary Art. October 25-26. NewcastleGateshead, United Kingdom.

Buchanan, R. (1995). 'Wicked Problems In Design Thinking'. *The Idea of Design- A Design Issues Reader.* The MIT Press. Cambridge, Massachusetts, USA.

Burns, C. Cottam, H. Vanstone, C. Winhall, J. (2005). *RED Paper 02: Transformation Design*. Design Council. London, United Kingdom.

Changing the Change. (2008). *Changing the Change: Design Visions, Proposals and Tools*. Conference. 10-12 July. Turin, Italy.

Chris Jones, J. (1992). 2nd Edition. *Design Methods: Seeds of Human Futures*. Wiley-Interscience. Great Britain.

Collins, J (2006). *Good to Great and the Social Sectors*. Random House Business Books. USA.

Cook, M. and Stanton, Z. (2007). Personal Communication. 8 August 2007. London, United Kingdom.

Cook, M. and Szebeko, D. (2008). Personal Communication. 30 October, 2008. London, United Kingdom.

Cox, Sir G. (2005). *Cox Review of Creativity in Business: building on the UK's strengths*. HM Treasury. United Kingdom.

Cross, N. de Vries, M. and Grant, D. (1993). *Design Methodology and Relationships with Science*. Springer. Netherlands.

Cross, N. (2007b). 'Forty Years of Design Research.' Editorial. *Design Studies.* Vol. 8. No. 1. Great Britain.

Cross, N. (2007a). *Designerly Ways of Knowing*. Springer. London.

Project Stakeholder 8 (2008). *Interview for OurNewSchool*. 31 January. Newcastle.

Davies-Cooper, R. and Press, M. (1995) *The design agenda : a guide to successful design management*. John Wiley & Sons. England.

DCMS. (2008). *Creative Britain: New Talents for New Economy*. The Department for Culture, Media and Sport. United Kingdom.

Deloitte. (2005). *Who are the Millennials? Aka Generation Y*. Deloitte Development LLC. Canada.

Desai, V. and Potter, R. B. (2002). *The companion to development studies*. Arnold. London.

Designer 6 (2007). Personal Communication. 8 August, 2007. London, United Kingdom.

Designer 12 (2007). Personal Communication. 20 August, 2007. Newcastle, United Kingdom.

Designer 1. (2008). *Interview for Alzheimer100*. 23 May 2008. London, UK.

Designer 2. (2008). *Interview for Alzheimer100*. 24 April 2008. London, UK.

Designer 3 (2008). *Interview for DaSH*. 16 June 2009. London, UK.

Designer 4 (2008). *Interview for DaSH*. 31 March 2008. Newcastle upon Tyne, UK.

Designer 5 (2008). *Interview for OurNewSchool*. 11 June 2008. London, UK.

Designer 6 (2008). *Interview for OurNewSchool*. 1 May 2008. London, UK.

Designer 7 (2008). *Interview for New Work*. 27 May 2008. Newcastle upon Tyne, UK.

Designer 8 (2008). *Interview for New Work.* 8 May 2008. Newcastle upon Tyne, UK.

Designer 9 (2008). *Interview for Move Me*. 7 May 2008. Newcastle upon Tyne, UK.

Designer 10 (2008). *Interview for Move Me*. 6 May 2008. Newcastle upon Tyne, UK.

Designer 11 (2008). *Interview for LowCarbLane*. 29 April 2008. London, UK.

Designer 12 (2008). *Interview for LowCarbLane*. 26 March 2008. Newcastle upon Tyne, UK.

Designer 13 (2008). *Interview for Urban Farming*. 13 May 2008. London, UK.

Designer 14 (2008). *Interview for Urban Farming*. 9 May 2008. Newcastle upon Tyne, UK.

Department for Culture, Media and Sport. (2008). *Creative Britain*. Business Enterprise and Regulatory Reform. United Kingdom.

Department for Innovation, Universities & Skills. (2008). *Innovation Nation*. Business Enterprise and Regulatory Reform. United Kingdom.

Design Council (2007). *Design Council Online*. http://www.designcouncil.org.uk. London, United Kingdom.

Design Council (2006). *Designs of the Time 2009 Application Pack*. Design Council. London, United Kingdom.

Designs of the Time (2007). *Designs of the Time*. http://www.Dott 07.com. United Kingdom.

Department of Communities and Local Government. (2007) *Building a Greener Future: policy statement*. London.

DTI (2006) *Economics Paper No.17. UK Productivity and Competitiveness Indicators 2006*. United Kingdom.

Dubhthaigh, R (2007). Personal Communication. 9 August, 2007. London, United Kingdom.

Project Stakeholder 1 (2008). *Interview for Alzheimer 100*. 13 February. Newcastle.

Eisenhardt, K. (1089). 'Building Theories from Case Study Research'. *Academy of Management Review*. Vol. 14, No. 4. pp 532-550.

Experientia, International Design Experience Consultancy (2007). *Experientia: Putting People First Blog*. http://www.experientia.com/. Italy.

Florida, R. (2002). *The Rise of the Creative Class: And How It's Transforming Work, Leisure and Everyday Life.* Basic Books. USA.

Frayling, C. (1993/4). *Research in Art and Design*. Royal College of Art. Volume 1, Number 1. United Kingdom.

Frascara, J. (1997). *User-Centred Graphic Design: Mass Communication and Social Change.* Taylor and Francis. London.

Glaser, B. G. and Strauss, L. A. (1967) *The Discovery of Grounded Theory: Strategies for Qualitative Research.* Aldine Publishing Company. Chicago, USA.

Handy, C. *Understanding Organisations*. Fourth Edition. Penguin Books. 1993

Project Stakeholder 12 (2008). *Interview for Move Me.* 28 March. Berwick upon Tweed.

Hart, C. (1998). *Doing a Literature Review*. Sage. London, United Kingdom.

Heapy, J. and Parker, S. (2006). *The Journey to the Interface*. Demos. London, United Kingdom.

HM Government. (2005). *Transformational Government: Enabled by Technology*. Cabinet Office. United Kingdom.

HM Government. (2007) *Building on progress: Public services*. Policy Review. Cabinet Office. United Kingdom.

Hollins, B. (2006) 'Service Design'. *Design Council*. http://www.designcouncil.org.uk. London, United Kingdom.

Hollins, B. and Hollins, G. (1999). *Total Design: Managing the design process in the service sector*. Financial Times/ Prentice Hall. United Kingdom.

Holness, A. (2000) *The analysis of design methods by a comparative study of award-winning industrial architecture since 1970*. Unpublished PhD thesis. Northumbria University. United Kingdom.

Horn, P. (2005). 'The New Discipline of Services Science'. *BusinessWeek Online.* January 21, 2005. http://www.businessweek.com/technology/content/jan2005/tc20050121_8020.htm?chan=search. USA.

House, E.R. (1978). 'Assumptions Underlying Evaluation Models'. *Educational Researcher.* Vol.7, No.3. March. USA.

Hunter, M. (2008). *Leading with Design Event*. Presentation. http://www.designcouncil.org.uk/en/Design-Council/1/What-we-do/Our-activities/Leading-with-Design/. Design Council. London.

IBM (2008b). *IBM Academic Initiative: Service Science, Management and Engineering*. http://www-304.ibm.com/jct09002c/university/scholars/skills/ssme/index.html

IBM (2008a). *Service Research and Innovation Community (SRIC)*.
http://www.ibm.com/university/ssme.

InterSections (2007). *InterSections: Design Know-how for a New Era*. Conference.
Baltic Centre for Contemporary Art. October 25-26. NewcastleGateshead, United
Kingdom.

ISDN 3. (2008). *Designing for 'Real People': Research into Emerging Methods and
Practices.* Conference. 2-3 April.

Jacques, R. and Powell, J. (Ed) (1981). *Design, Science, Method: Proceedings of
the 1980 Design Research Society Conference*. Westbury House. England.

Jones, J.C. (1970). *Design Methods: Seeds of Human Futures*. Wiley-Interscience.
Great Britain.

Kimbell, L. (2007) *Designing for Services Blog*.
http://www.designingforservices.typepad.co.uk/. United Kingdom.

Kimbell, L. (2006). *Designing for Services in Science and Technology-based
Enterprises*. Workshop. 2-3 July. Oxford Said Business School and the Arts and
Humanities Research Council. United Kingdom.

Kimbell, L and Seidel, V. (2008) Ed. *Designing for Services: Multidisciplinary
Perspectives: Proceedings from the Exploratory Projects on Designing for Services
in Science and Technology-based Enterprises, Said Business School.* University of
Oxford. UK

Kirkwood, A. (2008) 'Generation Y asks more from work than 9-to-5'. *The Age*. May
14, 2008. Australia.

Laurel, B. (1993). *Computers as Theatre.* Addison-Wesley Professional. USA.

Lawson. B. (2004). *What Designers Know*. Architectural Press. Oxford.

Lawson, B. (2005). *How Designers Think: The Design Process Demystified*.
Architectural Press. Oxford.

Lee Y., Bichard J., and Coleman,R. (2008) 'Designing with users, how? Investigate
users involvement tactics for effective inclusive design processes'. *International DMI
Education Conference.*14-15 April, Cergy-Pointoise, France

Lester, R. Piore, M. and Malek K. (1998). 'Interpretive Management: What General
Managers Can Learn From Design'. *Harvard Business Review*. March/April. USA.

Liedtka, J. (2000). 'In Defence of Strategy as Design'. *California Management
Review*. Vol. 42. No. 3. Spring. Berkley, USA.

Live|work (2007). *Live|work :: Service Innovation and Design*. Website.
http://www.livework.co.uk/. United Kingdom.

Mahroum, S., Atterton, J., Ward, N., Williams, A. M., Naylor, R., Hindle, R., Rowe, F.
(2007). *Rural Innovation*. NESTA Report. December. London.

Markusen, A. (2006). 'Urban development and the politics of a creative class: evidence from a study of artists'. *Environment and Planning A.* Volume 38, pp 1921-1940.

Martin, R. (2008). *The Opposable Mind: How Successful Leaders Win Through Integrative Thinking*. Harvard Business School Press. USA.

Manzini, E. (2008). *Sustainable Everyday Project*. http://www.sustainable-everyday.net/manzini/

Margolin, V. (1989). *Design Discourse. History Theory Criticism*. The University of Chicago Press. Chicago and London.

McNiff, J. and Whitehead, J. (2006). *All You Need to Know About Action Research*. Sage Publications. London, United Kingdom.

Mintzberg, H. and Quinn, J. B. (1998). *Readings in the Strategy Process*. Prentice-Hall International Inc. UK.

Moggridge, B. (2007). *Designing Interactions*. The MIT Press. USA.

Morley, E and Silver, A. (1977). 'A film director's approach to managing creativity.' *Harvard Business Review*. Mar/Apr. Vol. 55 Issue 2. pp59-70.

Muller, M., Wildman, D. and White, E. 'Taxonomy of PD Practices: A Brief Practitioner's Guide'. *Communications of ACM*. Vol, 36. No. 6. pp26-28

Mulgan, G. (2007) *Ready or not? Taking innovation in the public sector seriously*. NESTA Provocation. NESTA. London.

Myerson, J. (2007). *Pressing the Pause Button.* Design Council. London

NESTA (2008b). *Taking services seriously: How policy can stimulate the 'hidden innovation' in the UK's services economy*. NESTA Report. NESTA. London.

NESTA (2008a). *Beyond the creative industries: making policy for the creative economy.* NESTA Policy Briefing. NESTA. London.

Nonaka, I. (1991). 'The Knowledge Creating Company'. *Harvard Business Review*. November-December. USA.

Patterson, A. (2001). 'Managing Upwards'*. New Design Magazine*. November/December. United Kingdom.

Peck, J. (2005) 'Struggling with the creative class'. Department of Geography. University of Wisconsin-Madison. USA.

Reason, B and Winhall, J. (2007). Personal Communication. 8 August. London, United Kingdom.

Rittel, H. (1972). 'Son of Rittelthink: The State of the Art in Design Methods'. *The DMG 5th Anniversary Report*. DMG Occasional Paper No. 1. 7.2 (1972): 143–147. England.

Robson, S. (2008). *Interview for DaSH*. 14 February. Gateshead.

Rowe, P. (1987). *Design Thinking*. MIT Press. Cambridge. MA

Ryle (1949). *The Concept of Min*d. Hutchison. London.

Sanoff, H. (2000) *Community Participation Methods in Design and Planning.* John Wiley & Sons, Inc. New York.

Silverman, D. (1993). *Interpreting Qualitative Data. Methods for Analysing Talk, Text and Interaction*. Sage Publications. London.

Saco, R. and Goncalves, A. (2008). 'Service Design: An Appraisal'. Winter 2008. Vol. 19, No. 1. *Design Management Review*.

Schon, D. (1995). *The Reflective Practitioner: How Professionals Think in Action*. Ashgate. London.

Peer Insight (2007a). *Peer Insight LLC*. Website www.peerinsight.com. USA.

Peer Insight (2007b). *Seizing the White Space: Innovative Service Concepts in the United States*. Tekes. Helsinki.

RED (2006). *RED Recipes: A Scrapbook 2004-2006*. Unpublished. Design Council. London, United Kingdom.

Pine, J. and Gilmore, J. (1998). 'Welcome to the Experience Economy'. *Harvard Business Review*. July-August. Vol. 76 Issue 4, p97-105. Boston.

Project Stakeholder 1 (2008). Interview for Alzheimer100. 13 February 2008. Newcastle upon Tyne, UK.

Project Stakeholder 2 (2008). Interview for Alzheimer100. 5 February 2008. Hebburn, UK.

Project Stakeholder 3 (2008). Interview for Alzheimer100. 5 February 2008. South Shields, UK.

Project Stakeholder 4 (2008). Interview for DaSH. 14 February 2008. Gateshead, UK.

Project Stakeholder 5 (2008). Interview for DaSH. 30 January 2008. Gateshead, UK.

Project Stakeholder 6 (2008). Interview for DaSH. 23 January 2008. Gateshead, UK.

Project Stakeholder 7 (2008). Interview for OurNewSchool. 31 January 2008. Newcastle upon Tyne, UK.

Project Stakeholder 8 (2008). Interview for OurNewSchool. 31 January 2008. Newcastle upon Tyne, UK.

Project Stakeholder 9 (2008). Interview for New Work. 5 February 2008. Newcastle upon Tyne, UK.

Project Stakeholder 10 (2008). Interview for New Work. 30 January 2008. Newcastle upon Tyne, UK.

Project Stakeholder 11 (2008). Interview for Move Me. 5 March 2008. Newcastle upon Tyne, UK.

Project Stakeholder 12 (2008). Interview for Move Me. 28 March 2008. Scremeston, UK.

Project Stakeholder 13 (2008). Interview for Low Carb Lane. 15 February 2008. Newcastle upon Tyne, UK.

Project Stakeholder 14 (2008). Interview for Low Carb Lane. 7 February 2008. Newcastle upon Tyne, UK.

Project Stakeholder 15 (2007). Interview for Urban Farming. 20 December 2007. Middlesbrough UK.

Project Stakeholder 16 (2007). Interview for Urban Farming. 27 March 2008. Newcastle upon Tyne, UK.

Project Stakeholder 17 (2008). Interview for Urban Farming. 20 December 2007. Middlesbrough UK.

Robson, C. (1993) *Real World Research*. Blackwell Publishers. Oxford, United Kingdom.

Sainsbury, (2007). *The Race to the Top: A Review of Government's Science and Innovation Policies*. HM Treasury. United Kingdom.

Shostack, L.G. (1977). 'Breaking Free from Product Marketing.' *Journal of Marketing.* pp. 73-80. USA.

Shostack, L.G. (1982) 'How to Design a Service.' *European Journal of Marketing*. 161, 1982, 49-63. United Kingdom.

Shostack, L.G. (1984) 'Designing Services that Deliver. *Harvard Business Review*. Vol. 62, No. 1 January – February. pp. 133-139. USA

Schlesinger, L. and Heskett, J. (1991). 'The Service-Driven Service Company'. *Harvard Business Review*. September-October 1991. USA.

Siodmok, A. (2006). 'Signposts for the Next Decade'. *International Service Design Northumbria Conference*. 31 March. Newcastle, United Kingdom.

Spohrer, J. (2007). *Spohrer on Services Blog*. http://forums.thesrii.org/blog?blog.id=spohrer. USA.

Taylor, D. (Ed) (2007). 'Who Designs Your Life? Dott 07'*. Blueprint Magazine*. June 2007. United Kingdom.

Teboul, J. (2006). *Service Is Front Stage: Positioning Services for Value Advantage*. Palgrave Macmillan. New York.

Thackara, J. (2005) *In the Bubble: Designing in a Complex World*. The MIT Press. USA.

Thackara, J. (2007). Interview. 13 July. Newcastle, United Kingdom.

Thackara, J., O'Dowd, R. and Hasnip, R. (2008). Interview. 31 March. Newcastle. United Kingdom.

United Nations (2008). *Participatory Governance and the Millennium Development Goals (MDGs).* United Nations Publications. Department of Economic and Social Affairs. New York.

Voss, C. and Zomerdijk, L. (2007). *Innovation in experiential services - an empirical view*. UK Department of Trade and Industry (DTI). United Kingdom

Venderbeeken, M. (2008). 'Changing the Change – A Call to Action'. *Core 77 Design Magazine and Resource.* Website.
http://www.core77.com/blog/events/changing_the_change_a_call_to_action_10470.a sp

Varney, D. (2006). *Service transformation: A better service for citizens and businesses, a better deal for the taxpayer*. HM Treasury. United Kingdom.

Project Stakeholder 15 (2007). *Interview for Urban Farming*. 20 December. Middlesbrough.

Whiteley, N. (1997). *Design for Society*. Reaktion Books. England.

Winhall, J. (2006). *Designing Future Public Services*. Emergence Conference. 8-10 September 2006. Carnegie Mellon University. USA.

Wood Holmes Group. (2008). *Evaluation of Design of the times (Dott 07): Final Report.* May. United Kingdom.

Yin, Robert K. (1994). *Case Study Research and Methods*. Sage. London.

Young, R. (2005). 'Developing an Integrated Model of Designing to Aid Understanding of the Complexity Paradigm in Design Practice'. *International Conference on Complexity Science, Embracing Complexity in Design*. November. Paris.

Young, R., Cooper, A. and Blair, S (2001). 'Redesigning Design Education - the Next Bauhaus? A contextual discussion document for a new Design Praxis'. *ICSID Conference 'Exploring Emergent Design Paradigms*. 7-1 October. Korea.

Zuboff, S. and Maxmin, J. (2004) *The Support Economy: Why Corporations Are Failing Individuals and the Next Episode of Capitalism*. Penguin Books. USA.

Appendix 3

Supervisor Meeting Report

Date	2 July 2008	Time	2.00-3.15
Location	Bob's office		
Attendees	Bob Young, Lauren Tan		
Apologies	Nil		
Subject	Catch up meeting		
Overview	Update on data collection progress, issues with work, future geography and Dott Cornwall contributions		
Next Meeting	Turin, Italy		

Summary	Actions
• Update on data collection which is now complete and about to be treated in NVivo	• Need to complete tidy of document and then put into Nvivo • Need to write up data collection report
• Discussed contributions to Dott Cornwall	• Phone call on design methodology to happen while in Italy
• Discussed work with the DC last month	• All communication with DC to go through Andrea. This has now been made explicit
• Discussed LT move to London and maximising participation at UNN with interim events held at the uni	• Clear diary dates for events • Would be good to invite wider university community eg. 4th year students

• After Turin, PGR event happening but LT will still be away	• Send CTC presentation with extra slides to ensure presence
• Discussed travel costs. Committee meeting travel cost was an exception • No expectation that when LT moves to London that UNN will absorb travel expenses for supervisor meetings and PGR events	•
• LT will be away for whole of Sept in Australia for sister's wedding. Not complete holiday as will bring work along as 4 weeks is a long time to be separated from research	•

Reflections

- DC issues are a learning experience and have been through the past year

Action Items

- CTC presentation to update for UNN PGR event
- Send data collection progress report to BY and AS
- Email CTC presentation to AS when done
- Time/date in October for full supervision meeting to prep for MPP
- BY to discuss MPP in Turin
- Talk to Kevin about events (?)

Appendix 4

General Meeting Report

Meeting Write-up | PhD Studentship

L. Tan | Northumbria University | Design Council

Please use Word tools to add and/or comment on this write-up

Date	26 January 2009	**Time**	4.00-6.00pm
Location	London		
Attendees	Designer and LT		
Apologies	Nil		
Subject	PhD overview		
Overview	PhD chat		
Next Meeting	Monthly		

Summary	Actions
• Talked through preso did at DC in December 2008 • Agree strongly with not doing another model • Design process is unfolds as it is rolled out	• x
• Talked about Cultural Probes and their use in client engagement and for cultural change/change mgmt in organisations eg. use of them like personas with a company that increased empathy. RS did only 5 (don't need to do loads). Put stories up at A1 • Talked about how people like reality TV, getting insights into lives of others.	•
• Talked through visual case studies • WHY did designers do that role? Is it part of their skills and capabilities they could bring to the table? Client need? New business?	•
• Discipline appropriation comes with baggage form that discipline eg. most other disciplines are very in-depth and academically heavy whereas design is academically light.	•

• Outlined that public sector projects were like "big bangs" not small 10K projects and many of them in private sector	•
• Talked about external advisor role, once a month meeting. Not mentoring, mutually beneficial, mutual interest	•
• Designer also helping Design 21C in Ireland and put me in touch with Jim • Read through docs and sounds similar to Dott	•
• Sees every student who emails him for a meeting. Says that the skills aren't good enough for what the company needs	•
• Talked about the Viz case studies and how you can continue to layer them eg. above designers would have skills and capabilities an above client could have what were the client's needs at this stage of the process?	•

Reflections

- Like the big bang analogy for public sector
- Can tell I am getting more eloquent with talking about the research.
- Good we both agreed over the value of design tools is that they can achieve both an end for design and/or engage the client in the project and help cultural change

Action Items

- Send visual case studies

I have read and agree, to the stated discussions that took place at this meeting and the action items. Where I have feedback and edits, I have commented within the text. (Please provide an electronic signature or note your name and date. Thank you).

Signed: <Signature> <First name> <Last Name>

Date: <Date> <Month> <Year>

Appendix 5

Presentation to Design Council

8 August 2008

Selected slides only

DESIGN COUNCIL PRESENTATION

LONDON | 8 AUGUST 2007

IN LONDON | SERVICE DESIGN FIRM OVERVIEW

thinkpublic
- Public Sector. Health-focus ie. NHS
- Design research, facilitation, skills training, service consultation
- Co-design and building relationships

uscreates
- Public Sector. Education & nutrition-focused eg. Well London
- Design research, facilitation,
- Bring experts into the process

live|work
- Private and public sector eg. Vodaphone and NHS
- Design research, re-design/re-engineer, facilitation
- User insight, visualisation, empathy, knowing context

Engine
- Private and public sector
- Design research, service consultation, operationalise
- Systems-focus and bottom-up approach

radarstation
- Private sector eg. large organisations
- Workshops, facilitation, visualisation
- Service innovation focus (one strand)

IN LONDON | SERVICE DESIGN ISSUES & QUESTIONS

thinkpublic
- Political issues --> how to build trust with management?
- "We don't do Service Design... don't know what we call it."

uscreates
- What happens in the "aftermath?" Makes project expensive
- More facilitation, more design research, less "loose design"
- "The worst question I could be asked is what I do!"

live|work
- What is it that transforms people during the process? <-
- How do you scale design in services?
- How do you sustain practice?

Engine
- How do you sustain bottom-up approach once we have left?
- How do we create a more interactive dialogue between people?
- eg. More than a brief for the school and architects?

radarstation
- How do you sell design? Get new business? (just hired BDM)
- How do designers learn about facilitation?
- How do you measure design?

IN LONDON | SERVICE DESIGN FIRMS | REFLECTIONS

thinkpublic

- Designing systems (sustainability, scalability, bottom-up approach)
- Melting pot of design methods. Pulled out lacking academic rigour

uscreates

- Entry level of designers in organisations are on many levels
- Front line to strategy

live|work

- Inarticulate methods, process and tools--> Dotto7 stories for insight
- Expresses issues with selling Design

Engine

- Running small business-side was often talked about (less designing)
- All do public sector work

radarstation

- Passionate about people (Co-design, ideas, making things better)
- All expressed a strong interest in Service Design research

Appendix 6

Planning for data collection

Planning and Delivery of Comparison Group Semi-structured Interviews for the Dott 07 case studies

Comparison Group	Sampling Strategy	Sampling Criteria	Access	Discussion guide development	Confidentiality	Delivery
Project Clients	The Project Stakeholders on he client side include Project Clients and Project Champion Through discussions with Designers, sometimes the Project Clients were identified	Clients had either sponsored the project or had key decision-making power during the project.	The Dott Debates (October 2007) provided access and insight to the project stakeholders, also indicating their roles on the project. These were confirmed by the Senior Producers..	Questions for semi-structured interviews considered the framework of content, context and process. Different discussion guides were assembled for all the stakeholder groups, with many overlapping questions to test reliability. Discussion guides distributed to the Supervision Team for comment and tested in the Pilot interview.	Confidentiality agreements were signed by interviewees to inform them of why the data was being collected, for what purpose and to give them the opportunity to state their level of confidentiality. Included on these agreements was the researcher's contact details for additional comments and contact post-interview.	Time: Maximum 1 hour for the interview Location: The choice of the interviewee. Locations ranged from London to as far north as Berwick-upon-Tweed Costs: All travel and material costs were incurred by the researcher
Project Champions		Champions were those who participated in the projects and shared an enthusiasm for design.				
Senior Producers (Lead Designer)	Two Designers from each project were chosen for interviewing. The Senior Producers and the Designers were identified through the Dott 07 website's project information.	The Senior Producers led the project and were interviewed to gain insight into design methodology, project management and context of the project.	Access to the Senior Producers and Designers was either through the Design Council and/or the design consultancies own website contact details.	Additional questions to the Discussion Guide were added. They did not replace questions to provide consistency throughout.		Time: Maximum 1.5 hours Location: The choice of the interviewee, usually at the design consultancy office in London or Newcastle Costs: All travel and material costs were incurred by the researcher
Designers		The Designers supported design-led activities in the project. The key focus of these interviews were the identification of design methods used. Many projects were supported by additional Designers, but for consistency and manageability during the data collection, a limit of 2 people on the Design side, were decided upon.		Additional questions, specific to the project were added to the Senior Producer and Designer Discussion Guides for clarification or further exploration into [project aspects and issues		

Appendix 7

Sample of Dott 07 project timeline

Working timeline for Low Carb Lane Project

Approx dates		Nov 06	Dec 06	Dec 06		Prototyping		Oct 07	2008
Phase	Business case submission for ONE	Recruiting partners and LCL team	Discovery research (LW call this Insights)	Idea Generation	Visualisation and communication of ideas	Prototyping	Dissemination of LCL ideas to Community of Interest	Dott Festival (and outputs)	Legacy
Methods	**Writing business case**	**Gathering stakeholders:** people/organisations who have a policy interest and/or who can provide funding and resources	**Shadowing** local people in the Ashington to gather insights and understand the key issues in the community **Interviewing** the locals **Observations and visual documentation** of the area (eg. photos)	**Brainstorming ideas:** Live Work work with the NEA for their expertise in energy in the home **Referential case studies:** Live Work also looked for inspiration overseas	**Developed visuals, communications and presentations:** to present the Saverbox concept and smart metering information design for the TV	**Prototyping and iterations of ideas**	**Facilitate meeting:** with the project stakeholders **Presented ideas**		
Additional Notes and Questions	Did other projects write business cases as well?							Saverbox concept- interest free loans for energy efficient improvements to the home Smart metering through the TV. An information design interface to bring live updates of energy usage to households	ONE are doing a follow up project on the Saverbox idea NEA have been talking to the local Credit Union to provide interest free loans ONE and NEA have keen interest to scale the project throughout the region

Appendix 8

Preparation for Stakeholder Interviews

Background

The remit set by the Design Council and Northumbria was for Dott 07 to be the main case study for the PhD research and thesis. As well as researching the design practice (tools, methods, processes) used in the public commission projects, an evaluation of Dott 07 would also be undertaken.

Initial discussions with designers identified challenges with evaluating their work. The PhD programme and research with project stakeholders (Clients and Champions) provides an opportunity to understand how receivers of design evaluate and experience design projects. It is hoped that the interviews will answer questions such as:

Are indicators aligned between designers and their clients? Can there be a constant set of indicators/outputs (not necessarily quantitative) for all the Dott 07 projects? For both designers and non-designers generally?

Two Dott 07 projects also observed a transformation in the individuals throughout the process[1]. It is hoped that interviewing the Project Champions will give greater insight into this experience and answer questions such as:

What were the triggers for the transformation? What was transformed in the individual? Was there a single turning point or was it more a cumulation of experiences? Could this journey be mapped?

Please note that sometimes the Project Client and Champion may be the same person.

Aims for the research with Project Clients and Champions

- Identify whether indicators/outputs used (if any) were aligned between designers and people at receiving end of design
- Develop consistent set of indicators/outputs to evaluate Dott 07 in the PhD
- Currently very little research exists on how and non-designers experience design
- Gather holistic picture of the context and stories of Dott 07

Sampling Strategy

This was approached initially by identifying the Project Client for interviewing. But through discussions with designers, sometimes the *project clients* were not intimately involved in the process

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[1] In my own practice, I have observed this with several individuals. In the most successful case two individuals were continually promoted within their organisations as the design process helped their thinking go up stream. In doing so, they were able to identify more opportunities which increased the potential value of their projects.

and the designers referred to *project champions* would give better insights. The sampling strategy was reconsidered to accommodate that these two roles may have been shared between two people, not held by a single person. If this was the case, then the interview phase for the Project Stakeholders was split into two.

If the project owner/clients was Dott 07, One NorthEast / Design Council (?) they were interviewed as the project owner/client.

<u>Sampling Criteria</u>

The Dott Debates (held in October 2007) provided great insight into the project stakeholders and their roles, but these needed to be confirmed by the Senior Producers on Dott 07.

Phone conversations or emails were sent to the Senior Producers requesting a description of the role each of the project stakeholders identified at the Dott Debates played. The conversations and emails were also open to other suggestions for people to talk to gain a better grasp of the context each project was set in.

Some questions for the Senior Producers which helped in identifying Project Clients and Champions:

Project Client
- What role did this person play in the project?
- Did this person set the intent for the project?
- Was this person the key decision-maker?
- Did this person hold the budget for this project?

Project Champion
- What role did this person play in the project?
- Was this person an advocate for the design process?
- What made them a project champion? (note to ask about Campions in SP interviews)

Stakeholder table and mapping

A table was put together to identify key persons for the interview phase.

PROJECT NAME	SENIOR PRODUCER	PROJECT CLIENT/S	PROJECT CHAMPION/S	STATUS
Alzheimer 100	Designer Designer	Project Stakeholder	Project Stakeholder	1 PS to complete
DaSH	Designer Designer	Project Stakeholder	Project Stakeholder	1 PS to complete
Low Carb Lane	Designer Designer	Project Stakeholder	Project Stakeholder	1 PS to complete 1 PS uncontactable
Move Me	Designer Designer	?	?	PS to complete
New Work	Designer Designer	Project Stakeholder	Project Stakeholder	Complete
Our New School	Designer Designer	Project Stakeholder	Project Stakeholder	Complete
Urban Farming	Designer Designer	Project Stakeholder	Project Stakeholder	Complete

Once all roles of project stakeholders were identified, stakeholder mapping was done to provide an overview of all involved parties (to do).

Discussion Guide for Semi-structured Interviews

A semi-structured interview is the approach taken because it allows for flexibility in an exploratory case study and also helps the stakeholders provide candid and honest insights into the project.

To ensure the interviews were consistent and aligned to achieve the aims, a Discussion Guide was put together to ensure that all points of enquiry were covered.

Forming the Discussion Guide

Developing a framework of questions for enquiry

The questions are open-ended and do their best to minimise steering questions that come from assumption and perceptions gathered from being engaged with Dott and the Dott community 6 months into the research.

A framework from an initial mapping of the questions for enquiry was developed before brainstorming of questions. The framework comprised of six key areas for exploration:

1. Context (what happened pre-Dott and how did the community become engaged with Dott?)
2. Content (project intent, issues and indicators)
3. Experience (with designer and design process)
4. Evaluation (measuring the project against indicators)
5. Reflections (would you go it again? What would you do differently?)
6. Legacy (What does this mean? What is it? What do you hope it to be?)

Notes for interview: sign confidentially agreement, gather photos or artefacts, additional documentation post-Dott 07

Brainstorming questions

Framing
- PhD is about understanding the role of design in the Dott 07 projects
- Dott 07 is therefore the key case study
- Interviewing you because I would like to get a holistic picture of what happened
- But would also like to better understand if and how the Dott 07 projects were evaluated

Agreement
- The interview today is used solely for my PhD research
- There are not right or wrong questions; I am interested to hear your honest and candid perspective on the project. Your insights will be highly valued and help in creating recommendations for future projects of similar nature
- Please let me know if you would like to:
    o Remain anonymous
    o See the final published work of the PhD where I have referenced a quote from you and inserted a transcription of this interview in the Appendix
    o If there is any part of the interview where you wish to not be recorded
- Please grant permission to all of the above and recording of this interview by signing the agreement

Introduction (easing into the interview)
1. What is your role here in <insert name>?

2. In your own terms, could you explain what the Dott project was about?

Context

3. What was happening with the <project/issue> before Dott?
4. How did you come to be engaged with Dott and why?

Content and Indicators

5. What was your role on the project?
6. What was the project's main aim?
7. What was your understanding of design and what it could contribute at the time?
8. What indicators, if any, were set in place before the project?

Experience

9. What was it like working with designers?
10. What was it like working with the design process?
11. We spoke about your thoughts on design before the project, have they changed and how?

Evaluation

12. We spoke about indicators early on, have you measured the project against these? If so, what are the results? If not, are you going to? Why/why not?
13. (If no indicators) How much of a success or failure do you think the project was and why?

Reflections

14. Would you do a project like this, with designers and the design process again?
15. What would you do differently?
16. What did you learn from the project? About yourself? The issue? The community?

Legacy

My PhD research is interested in the legacy that Dott 07 will be leaving behind.

17. Was a legacy of the project thought about in the planning stages of the project?
18. What is the legacy of this project?
19. Is it what you hoped it to be? Why or why not?
20. What have things been like since Dott ended? What's happened since then?

21. Do you have any questions for me?

Thank you for your time today.

Confidentiality

The advantage of having already conducted informal interviews with Dott 07 stakeholders (eg. Claire Byers) provided a good insights into key issues with the topic area. Requests for confidentiality have already risen. A Confidentiality document will be introduced at the beginning of each interview to ensure use of material in the research.

Delivery (cost, time, anonymity, possibilities and limits, place)

After initial brainstorm of ideas, length of time for the interviews came up as a possible issue (ie. One hour may not be enough time to cover all the questions). The interviews need to focus on developing an evaluation model and these were marked as the essential questions.

Costs

Time and transport to locations. Possibly transcribing services due to the number of interviews.

Time

Possibilities

Limitations

To minimise variables, timing of the interviews could have happened on a specific date relative to the completion of the Dott 07 project. The Dott 07 projects were staggered which would have made the interviews staggered and the short time between the start of the PhD and the Dott Festival provided too short a window to organise this staggered interviewing schedule.

Place

It is requested that all interviews take place at a location that is familiar to the interviewees so they felt the most as ease and comfortable. The location will be a place of the Interviewee's choice.

Access

Negotiating access was undertaken in various ways. I had the opportunity to meet many of the project stakeholders at the Dott Debates (held in October 2007), I was also able to gain access via the Senior Producers and Robert O'Dowd of Dott07.

Negotiating access was potentially sensitive as the interviews were undertaken shortly after the Dott Festival when many of the Project Stakeholders were debriefing with Dott 07 and/or the Design Council.

To identify the Project Client and Champion was also time-consuming as the Senior Producers and/or Dott 07 needed to give guidance here. The extended timeline to complete this phase in February is in doubt due to the fact that December-January are peak holiday seasons. It is hoped that any overflow of time will be made up when interviewing the Senor Producers as relationships with them have already been developed and negotiating access will be much easier here.

The framing of interview intent upfront (via first contact eg. At Dott Debates, email or phone) was important to set the agenda and tone of the interview.

Data Analysis

Grounded Theory
NVivo
QSR N6

Other research

Numerous other parties are involved in looking at Dott 07. These include, the Wood Holmes Group (external evaluators) and the Design Council's Knowledge Team. Talks and meetings with both these parties occurred and sharing of research was granted.

Learnings through the process (thus far)

- Documentation and laying out thinking was helpful eg. The Table, writing this document to establish clear aims.
- The Dott Debates were great to identify and make connections with key stakeholders
- Overlaps with other parties involved in researching and evaluating Dott 07 were highlighted by a Senior Producer, need to collaborate more with key people- Robert O'Dowd (Dott 07), Ruth Hasnip (Design Council), Stuart Smith (Wood Holmes Group)

Appendix 9

Preparation for Designer Interviews

Preparation for Design Team Interviews | March 2008

<u>Background</u>

The remit set by the Design Council and Northumbria was for Dott 07 to be the main case study for the PhD research and thesis. One of the main foci for the PhD is the capture of design methods utilised in the Dott 07 public design commission projects.

These methods, some old, some new, some emergent are important to reflect on and identify to understand what, where and how Designers work in the public sector and in services.

Literature reviews seem to imply that design methods is a point where academia and practice seem to divide. Part of the Design Methods Movement pushed to systemise and scientise design methods and practitioners had adverse reactions towards this due to the organic nature of design projects that sees Designers adapt and change courses of action to suit people and the situation.

Furthermore, in a recent conversation with a designer, I asked her what she thought of design methods. She didn't have a straightforward answer, but concluded that methods were important. Methods are embedded and implicit to the design process and there is something bigger wrapped around the process of the methods that needs identification and exploring. The conversation was great insight into the need to deep dive with the design teams to help make their design methods and processes in Dott 07 explicit.

DaSH and Our New School were the only 2 projects that articulated their methods on posters at the Dott 07 Festival. Prior to the Design Team Interviews mapping of the projects, with the methods laid out chronologically was undertaken drawing from a number of sources that included:

- Dott 07 website and blog
- Dott Festival
- Dott Debates
- Dialogue with the Designers
- Media and press (eg. blogs)
- My own background and experience (which has included the use of similar methods in Dott-type projects ie. Project involving the use of service, involving people and in the not-for-profit sector)

Later, the methods were listed, but work needs to be done in clustering and creating topologies once the final research source, the Design Team interviews are completed.

Generating the Dott project timelines

Project timelines for each Dott 07 projects were generated to explore the design methods used in Dott 07, prepare for the Design Team interviews and also help the Design Council's Knowledge Team form case studies on the public commission projects.

The project timelines were done chronologically because projects follow a time-based order and were communicated as such through the Dott 07 website and blog. In a presentation delivered to the Design Council (27 February 2008), we briefly discussed if the project timelines could be articulated, not as time-based, but as clustered methods (as mentioned above).

Identifying methods through the Dott 07 website and blog was a challenging task. The inconsistency in depth, and quantity of reporting comparatively on each project was problematic. For example, some projects were well documented throughout the process while others seemed to have a light-touch approach. The depth of reporting did not give significant insight into design methods and practice and a combination of sources was thus needed to initially identify the methods. The website and blog served a different purpose with a more general audience that sought to gain an overview of what as going on.

The Dott 07 Festival was a great synthesis of the commission projects. Each project stand sought to communicate its outcomes and most of them also communicated their process. In previous work, I have observed that the design process can be, as much, or even more valuable than the outcome (especially when the outcome was not successful) and this seems to be an emerging theme to Dott 07, especially when Dott 07 is viewed under the lens of innovation. The outcomes of Dott 07 have been perceived as more 'common sense' than innovative, but what has emerged from the Project Client interviews is that the process the communities participated in, was the innovation. The process presented new and different ways of tackling wicked problems, and also produced different kinds of outcomes, which included the generation of many more ideas, empowering and enabling communities with creative skills, brought them together etc. and this is worthy of further exploration.

When the Dott 07 Festival was attended, it was visually documented through photography. This has proved to be extremely valuable both as a reference point and also for the use of visual aids for knowledge elicitation in the Project Client interviews.

The Dott Debates allowed for further immersion into the public commission projects. It also provided a different articulation by the Designers and the project participants. The Designers built compelling stories for each project and some of the project participants spoke of their experiences and learnings on the projects. The discussion sessions at the end of each project presentation provided a forum to bring up interesting questions and draw further on key issues and contexts surrounding the project.

The Dott Debates also provided access to some of the Project Clients. The Debates identified the key people in the projects and introductions made it easier to set up the interviews a few months later.

The remaining key project participants were identified and contacted through dialogue with the Designers on their recommendations of individuals who would best contribute to the aims and objectives of the Project Client research phase. Part of including the Designers in this phase as to let them know what research was being undertaken and with whom.

Dialogue is undertaken with the Designers on a more informal and frequent basis to ensure the PhD research can have a valuable contribution to the industry as time progresses. Dialogue usually takes place face-to-face, and when I am visiting London. It has proven helpful in both connecting with the reality design practice and better understanding how this research can be of value.

The media and press have also been a key source for my research. While not as targeted with discussions on design practice, it has been interesting to see the different articulations and interpretations of Dott 07 by others. It is also evidence of the reach of the programme beyond London and the NE of England. During the Dott 07 Festival a group of blogs emerged, and news feeds from various websites also provided commentary on Dott 07 (a list of Dott 07 reference on the web can be found here: http://letterstoaustralia.blogspot.com/2007/10/dott-festivals-blogging-community.html).

Finally, my own background and experience in professional design practice has contributed to forming the project timelines. Of all the Dott 07 methods identified thus far, there is nothing that I have not used before (sometimes under different names) in my own practice as a Designer. This has helped in identifying the methods in the projects. Drawing from my own experience has also advanced reflections on the projects and identified key themes and issues.

Aim of the research with the Dott 07 Design Teams

The aim of this second phase of research is to understand design practice, as utilised in the Dott 07 public commission projects, and identify their broader relevance to Service Design. The latter is helped by the findings in the first phase of research.

Objectives of the research with the Dott 07 Design Teams

- To collect evidence of work from the commission projects;
- To understand the context, content and process of the Dott 07 public commission projects;
- To identify and understand why the methods used in the Dott 07 projects were used. (eg. What response they received, what was successful/not successful, what would be used again, what activities did the methods involve on the part of the designer and the client);

- To understand the learnings and experiences of the Designers from Dott 07, and what they seek to integrate and embed into their own practice (eg. was Dott 07 an experimental ground? Could they do anything different here as opposed to in their commercial practice?);
- To understand how Designers measure their own work;
- To explore the key issues which arose from the corresponding Project Client interviews;

<u>Proposed outcomes of the research with the Dott 07 Design Teams</u>
(note: this is not an exhaustive list)

- Holistic case studies: Which allow a base and reference for key discussion areas in the thesis;
- To document the project processes, in an engaging way, to understand the narrative of each public commission project and also present evidence of the project process (Please refer to Process Book Methodology document);
- Identification and confirm major themes across the Dott 07 public commission projects.

<u>Sampling Strategy</u>

For each of the public commission project Design Team there were Senior Producers and Designers (note: often the Senior Producer was also a Designer). These Design Teams worked directly with the Project Client and give insight into the design methods and practices utilised in the projects.

<u>Sampling Criteria</u>

Design Teams were easy to identify and mainly comprised of 2-3 people fully engaged on the project. These people were defined as the Senior Producers and the Designers. The Senior Producers were the main lead on the project, and further discussion into their specific roles will need to happen during the interviews. The Designers supported design-led activities in the project, bringing with them experience in design methods and practice. Some projects were supported by additional Designers, but to enable consistency and manageability during the interviews, a limit of 3 people per interview was decided upon.

<u>Stakeholder table and mapping</u>

A table was put together to identify key persons for this interview phase. (Senior Producers and Designers are marked in red). Once all interviews are complete, stakeholder mapping will provide an overview of all involved individuals.

Discussion Guide for Semi-structured Interviews

A semi-structured interview is the approach taken because it allows for flexibility during the interview process to identify the tacit knowledge of the Designers. It also helps the Interviewee provide candid and honest insights into the project.

To ensure the Designer interviews were consistent and aligned to achieve the aims, a Discussion Guide was put together. The Discussion Guide draws from the previous Discussion Guide used in the Project Client interviews to ensure a consistent framework is explored. The redundancy of questions will also allow for exploration of areas from both angles. The Project Client Discussion Guides were not significantly changed throughout the first phase of research. Any changes were additions to the questions to ensure that the Discussion Guide was kept consistent throughout. The same process was repeated for the evolvement of the Designer's Discussion Guides.

The Project Client Discussion Guide was most helpful in serving as a guide in the interviews. Interviewees' rhetoric tended to cover most of the questions when prompted with a single question. It is important to note that sometimes repeating the question encouraged the Interviewee to explore what has been said more deeply. Time limits were at times challenging, so marking out a set of Essential Questions to ask is important to ensure that consistent data is collected.

Forming the Discussion Guide

A framework of questions for enquiry was based on the Project Client Discussion Guide. It also draws upon an early document from the Design Council which set out plans for a Dott 07 Knowledge Capture.

A framework from an initial mapping of the questions for enquiry was developed before brainstorming of questions. Brainstorming and reference to the Design Council's Knowledge Capture document helped fill key areas.

(insert mind map of questions for enquiry)

In addition to this, revisiting the Project Clients interview transcripts was also done to draw out specific questions related to the project for further exploration. These were added to the respective Discussion Guides.

The Designer's Discussion Guide framework comprised of 10 key areas for exploration with subsequent sets of questions:

(The following Discussion Guide was generated before the Pilot Interview. New Discussion Guide now exist. See additional documents titled DiscussionGuide_SeniorProducers and DiscussionGuide_Designers).

1. **Observations and collections** (not part of questions, but need to note down team dynamics and interactions during the interview. Also need to request some preparation from the Designers to collect their process work and relevant documents to photograph or talk around. Will need to bring outputs to interview. Handy (1993) notes some things to look for: rituals of greetings; how do they behave; non-verbal cues eg. eye contact, physical proximity, communicating without words; relationship between leader and group)

2. **Background and Introduction**
    a. What is your current role/job title?
    b. If you could describe what you do as an object, what would that object be?
    c. How become involved in Dott 07 and why? (Deep dive into personal philosophy)

3. **Context and content/issue**
    a. Why was (possibly still is) the issue of <insert> important to the NE region?
    b. Who are the end users?
    c. What other issues eg. ethical, legal, political, did you have to deal with in the project?
    d. Did you do any fund raising for the project? Why or why not?
    e. Did you have any past examples of work which were similar to this project?

4. **Design Practice and Experience**
    a. Who was involved in the project? Could you draw me a map to show the team and stakeholders? (show map if I have one already)
    b. There were many constituencies involved in the project, how did you go about managing them?
    c. Was the wider community involved? Communicated to?
    d. What project planning was done before the project begun? (<u>How</u> did you assign roles? How were decisions made?)
    e. What happened on the very first day?
    f. Where did you mainly work?
    g. What was it like working with the client/s?
    h. How were they involved in the project? The wider community?
    i. How did you promote/communicate that the project was happening?
    j. What happened at the every end? How did you exit?)

5. **Design Methods**
    a. Why do you think design methods are important?
    b. Could you quickly sketch your process? (or show timelines) Is it related to a standard process you might use in your other work?
    c. Could you point out which were most successful? Why was it successful?

d. Could you point out which weren't so successful? Why wasn't it successful?

e. Would you use these methods again? Are there some you wouldn't ever use again? Are there some that you would use but need developing? If so, how would you go about this? Were there any methods that you wanted to use but didn't get a chance to?

f. How innovative do you think your approach was?

6. **Outputs** (take hard copies on interview)

a. How important do you think the outputs were in the project as a whole?

b. Where they what you were anticipating?

7. **Indicators and Evaluation**

a. What indicators did you set upfront for the project? Were these met?

b. How would you evaluate your project now?

c. Say a prospective client came along who had heard about the Dott project, how would you articulate your value as a designer to them?

8. **Legacy**

a. What has happened since Dott 07 both regarding the project and work you have done since then? (have you continued to engage a wider community?)

b. What do you think the legacy of the project is?

c. Do you think it's touched policy? A wider community?

9. **Reflections**

a. If you got a chance to do the project again, what would you do differently?

b. Would you do a project like this again, with this kind of client? Why or why not?

c. What did you learn from this project? What were your key learnings from doing a public sector service project?

d. What do you think Designers bring to the table in projects involving public sector services?

e. If you met someone in an elevator, and had a minute with them, and they asked you with what you did as a designer in Dott 07, what would you say?

10. **Additional**

a. Was there anything you would like to add?

b. Do you have any questions for me?

c. Would it be ok to follow up any questions I have by phone or email at a later stage?

The questions are open-ended and do their best to minimise steering questions. The additional set of questions (as a result from the Project Client interviews) did have a clear intent behind them because they were used to validate themes and issues.

Notes for interview: sign confidentially agreement, gather photos or artefacts, additional documentation post-Dott 07

Interview Process

Framing the interview to the Designers

- My aims are to identify and understand design practice and methods as utilised in the public commission projects
- Put together a visual documentation of what happened
- Build holistic case studies

Confidentiality

A Confidentiality document will be introduced at the beginning of each interview to ensure Interviewees understand how the data collected will be used.

Delivery (cost, time, anonymity, possibilities and limits, place)

To fill

Costs

Time and transport to locations.

Time

A maximum of 1 hour for each interview was requested.

Possibilities

To fill

Limitations

A pilot interview was undertaken to test the time and refine the Discussion Guide. The Pilot had limitation, which were discussed in the Iterations and '*Reflections from Pilot Design Team Interview'* document.

Place

All interviews took place at a location that was convenient and familiar to the Interviewee, so they could make the time commitment and also felt ease and comfortable. Their places of work were most ideal as it provided access to any project process work during the interview.

Access

Having already met all the Senior Producers and Designers, and with most of them familiar with my research, access was relatively easy.

Data Analysis

In the Project Client interviews, Transcript Templates were formed. These will be used with the Design Team interviews as well as a base, and will be added to, if change is required.

The PhD research adopted a Grounded Theory approach to dealing with the data. The process included very little commitment to conclusions, citing ideas as just ideas, or concepts. No frameworks had been drawn up prior to the interviews eg. A design methodology to test in the interviews. This was a considered option, but it was felt that this could potentially close off new ideas and possibilities, which could emerge in the interviews.

NVivo was the software used for data organisation and analysis. No data analysis was undertaken until both phases of the research were completed.

Other research

Numerous other parties are involved in looking at Dott 07. These include, the Wood Holmes Group (external evaluators) and the Design Council's Knowledge Team. Talks and meetings with both these parties occurred and sharing of research was granted.

Other research has also included the previously stated sources at an earlier part of this document. These sources of evidence were critical to reduce biases and subjectivity. Where the Wood Holmes Group undertook similar data collection for the projects, Low Carb Lane, Move Me and Urban Farming, exchange of knowledge was valuable in validating my interpretations.

Learnings through the process (thus far)

- A pilot interview was critical to this phase as it resulted in significantly changing the roll out of the Design Team interview phase.

PhD Research: Data Collection

Start date | 20 December 2007
End date | 16 June 2008
Approx duration | 6 months

PROJECT NAME	SENIOR PRODUCERS	DESIGNERS	PROJECT CLIENT/S	PROJECT CHAMPION/S
Alzheimer 100	Designer 1	Designer 2	Project Stakeholder 1	Project Stakeholder 2 Project Stakeholder 3
DaSH	Designer 3	Designer 4	Project Stakeholder 4	Project Stakeholder 5 Project Stakeholder 6
Low Carb Lane	Designer 12	Designer 13	Project Stakeholder 13	Project Stakeholder 14
Move Me	Designer 10	Designer 11	Project Stakeholder 11	Project Stakeholder 12
New Work	Designer 8	Designer 9	Project Stakeholder 9	Project Stakeholder 10
Our New School	Designer 5	Designer 6	Project Stakeholder 7	Project Stakeholder 8
Urban Farming	Designer 14	Designer 15	Project Stakeholder 15 Project Stakeholder 16	Project Stakeholder 17
7 public design commission projects	7 Senior Producers	7 Designers	8 "Direct" Project Clients	9 Project Champions
Total for each Phase	14		17	
TOTAL		31		

Appendix 10

Confidentiality Agreement

Confidentiality Agreement for PhD Research

Thank you for agreeing to participate in this interview for my PhD. The purpose of this interview is to gain a deeper understanding of the design practices used in the public commission projects of Dott 07, and their broader relevance to design and designers working with public sector services.

There are no right or wrong answers, and if you wish not to answer a question please let me know. I am interested in hearing your honest opinions and experiences on the project. Your insights will add value to my research and to future Dott programmes as learnings.

Please let me know if you wish to remain anonymous:

☐ Yes ☐ No

This interview will be recorded on tape and transcribed for an Appendix. Please indicate your consent to be recorded by ticking the appropriate box below:

☐ Yes, I consent to having this interview recorded ☐ No, I wish not to have this interview recorded

Please let me know if, and when, you would like something to remain confidential.

My research will be accessible to you if you wish to read it. Please indicate below if you wish to be contacted when any part of this interview is used in the final thesis:

☐ Yes. If yes, please indicate contact details ☐ No

_____

_____

Signed _____ **Date**_____

If you have any further questions/comments after today please contact me on 07 717 626 163 or at fiorucci@hotmail.com Thank you!

LAUREN TAN | NORTHUMBRIA UNIVERSITY – DESIGN COUNCIL | 2007 | 07 717 626 163

Appendix 11

Checklist

The aim of this second phase of research is to understand design practice, as utilised in the Dott 07 public commission projects, and identify their broader relevance to Service Design. The latter is helped by the findings in the first phase of research.

Objectives of the research with the Dott 07 Design Teams

- To collect evidence of work from the commission projects;
- To understand the context, content and process of the Dott 07 public commission projects;
- To identify and understand why the methods used in the Dott 07 projects were used. (eg. What response they received, what was successful/not successful, what would be used again, what activities did the methods involve on the part of the designer and the client);
- To understand the learnings and experiences of the Designers from Dott 07, and what they seek to integrate and embed into their own practice (eg. was Dott 07 an experimental ground? Could they do anything different here as opposed to in their commercial practice?);
- To understand how Designers measure their own work;
- To explore the key issues which arose from the corresponding Project Client interviews;

Outputs
- Identify design practice and methods as utilised in the public commission projects
- Put together a visual documentation of what happened
- Build holistic case studies

Interview prep
- ❑ Dictaphone
- ❑ Discussion Guide
- ❑ Additional questions list
- ❑ Confidentiality agreement
- ❑ Pen
- ❑ Camera
- ❑ Timelines
- ❑ Black notebook (designers)
- ❑ Blank paper
- ❑ Website prints / understand design company philosophy

Appendix 12

Discussion Guide for Designers and Senior Producers

Original Discussion Guide for the Designers and Senior Producers
Later became Discussion Guide for Designers with separate one for Senior Producers

1. **Observations and collections**
   - Evidence of work. Visuals to be able to tell a visual story.

2. **Background and Introduction**
   - Role at company? Want to understand the individual designer's philosophy to the work they are currently involved in. Also their background. Metaphor?
   - Also how did you become to be engaged with Dott 07?

3. **Context and content/issue**
   - In your own words, what did you think Dott 07 was about?
   - What was the issue of your project, and why was it important?

4. **Design Methods in the Project (see individual question sheet)**
   - What do you think about design methods?
   - What methods were used and why?

5. **Design Project Management**
   - Who was involved in the project? And roles?
   - How did you work with the client? What was it like working with them? How were they involved?
   - Where did you mainly work? Why?

6. **Outputs and Outcomes**
   - What outcomes did you expect from this project (writing the brief)? Are they the same as the outcomes from the project at the end?
   - Are there outcomes that a non-tangible you also seek to achieve? Eg. skills building?
   - How important were outputs to the project as a whole?

7. **Indicators and Evaluation**
   - Do Designers evaluate their work? How?
   - What value do designers and design bring to the table in a project like this?

8. **Legacy**
   - What do believe the legacy and impact of the project has been?

9. **Reflections**
   - What did the Designers learn?
   - If you met someone in an elevator, had a minute with them and they asked you what you did as a designer in Dott 07, what would you say?

10. **Additional Questions**

Discussion Guide Section Aims for the Senior Producers

1. **Observations and collections**
   - Evidence of work. Visuals to be able to tell a visual story

2. **Background and Introduction**
   - Want to understand the individual designer's philosophy to the work they are currently involved in. Also their background. Metaphor?
   - Also how did they enter Dott 07?

3. **Context and content/issue**
   - In your own words, what do you think Dott 07 was about?
   - What was the issue of the <project> and why was it important?
   - What was the <project's> main aim at the outset and did that change?
   - Did you do any fund raising? Why or why not?
   - What other issues, political, legal, ethical etc did you have to deal with on the <project>?

4. **Design Methods in the Project (Mention done interview around use of already)**
   - What do you think about design methods/tools? How important are they to <company>?

5. **Design Project Management**
   - There were many stakeholders involved in the project, how did you get them to work together? Who made the decisions?
   - What was it like working with the client? How were they involved in the project?
   - Where did you mainly work?

6. **Outputs and Outcomes**
   - What outcomes did you expect from this project (when writing the initial brief/project plan)? Are they the same as the outcomes from the project ion the end?
   - Are there outcomes that a non-tangible you also seek to achieve? Eg. skills building?
   - How important were outputs to the project as a whole? (innovation in the process or outcome?)

7. **Indicators and Evaluation**
   - How do you evaluate whether the project was a success or not?
   - What value do you think designers and design bring to the table in a project like this?

8. **Legacy**
   - What do believe the legacy and impact of the project has been? Your involvement? Impact on policy or wider community?

9. **Reflections**
   - What was most successful about the project? Least?
   - What did the design team learn from this project? Do you do anything differently now?
   - If you had to give someone an elevator pitch on what you did in Dott 07, what would you say?

10. **Additional Questions & any for me?**

Appendix 13

Discussion Guide for Project Stakeholders

Discussion Guide for Project Clients and Project Champions

Notes: Focus on 'Experience' for Project Champions. Aim for what triggered transformations.

For Project Clients, more focus on 'Context' and "Content and Outputs".

Introduction

1. What is your role here in <insert name of organisation>?
2. In your own terms, could you explain what the Dott project was about?
3. What have the outcomes been? (What changed? What contributions did it make to the local area? The region?)

Context

4. What was happening with the <project/issue> before Dott?
5. How did you come to be engaged with Dott and why?

Content and Indicators/Outputs

6. What was your role on the project?
7. What was the project's main aim?
8. What was your understanding of design and what it could contribute at the time?
9. What indicators/outputs, if any, were set in place before the project?

Experience

10. What was your understanding of design before the <name> project? (What did you think design would contribute at the time?)
11. What was it like/feel like working with designers?
12. What was it like/ feel like working with the design process?
13. We spoke about your thoughts on design before the project, have they changed since and how?

Evaluation

14. We spoke about indicators/outputs early on, have you measured the project against these? If so, what are the results?
15. In what ways do you think the project was a success and why?
16. In what ways do you think the project was a failure and why?

Legacy

17. Was a legacy of the project thought about in the planning stages of the project?
18. What do you think the legacy of this project is?
19. Is it what you hoped it to be? Why or why not?
20. What have things been like since Dott ended? What's happened since then?

Reflections

21. Would you do a project like this, with designers and the design process again?
22. What would you do differently?
23. What did you learn from the project? About yourself? The issue? The community?

End

24. Do you have any questions for me?

Appendix 14

Literature Map

Current literature and references. These writings, people and events have been sources of inspiration and reference in my university and work since 2000 and for my PhD.

DESIGN

CITIES

EVENTS

PROFESSIONAL BODIES

DESIGN-LED COMPANIES

SERVICE-DRIVEN ORGS

SERVICE DESIGN PRACTITIONERS

SOCIAL

SUSTAINABILITY

DESIGN HISTORY

PHD RESEARCH METHODS

NARRATIVES (INC STORYTELLING)

WEB

JOURNALS + MAGAZINES

EDUCATION

HUMAN-CENTRED DESIGN

DESIGN RESEARCH

STORYTELLING

MEANING

KNOWLEDGE MANAGEMENT

THINKING

BUSINESS

DESIGN PROCESS & METHODS

DESIGN PHILOSOPHY

NETWORKS

INNOVATION

SYSTEMS

STRATEGY

SERVICE THEORY

LEADERSHIP

GLOBAL CONTEXT

CREATIVITY

ORG CHANGE

TRANSFORMATION

Appendix 15

Literature Map

EVOLVING LITERATURE & REFERENCE MAP

Current literature and references. These writings, people and events have been sources of reference. Updated September 2009 (previous update January 09)

KEY

- PREVIOUS LITERATURE MAP KNOWLEDGE POOLS
- KEY KNOWLEDGE POOLS (FROM PERVIOUS LIT MAPS)
- KEY KNOWLEDGE POOLS (ADDITIONS)

CITIES
Newcastle-upon-Tyne · Singapore · Amsterdam · Monocle Magazine · London · Sydney · Melbourne · Pittsburgh · R. Florida · Copenhagen · New York · Japan · Peck

PROFESSIONAL BODIES
ACDA · RSA · JDPO · AIGA · DTI · Netherlands Design Institute · Business Design Centre · Dutch Design Centre · DMI · NESTA · DIA · Design Council

EVENTS
Building Innovation Around the Customer Experience, Syd · Mapping Design Activism, Leeds Uni · Emergence, CMU · ICSID · Intersections, NCL · Dott Design Camp · Service Design, Amsterdam · Dott 07 Festival NCL · Graphic Design Festival Breda · DFS Oxford · Dott 07 · Intersections 07

DOTT 07 TRANSCIPTS
R. Telford · H. Harrison · Dott 07 Mgmt Team · N. Belk · B. Reason · J. Carr · M. Sim · A. Fowler · D. Szebeko · J. Singleton · K. Davidson · D. Townson · S. Robson · A. Star · L. Hutton · I. Gormley · T. White · F. Rowe · N. Pellow · P. Douglas · M. Collier · S. Lee · J. Scharper · A. Webb Allen · I. Heapy · J. Williams · J. Williams · R. Coney · L. Dewilby · D. Barrie · J. Williams · J. Edwardson · J. Collingwood

DESIGN-LED COMPANIES
Apple · 3M · Dyson · CTDR · Google · OXO, USA · Intel · Philips · Unilever · ATG, Aust · Suncorp, Aust · General Electric · Nudie, Aust · Procter and Gamble · ASB, NZ · Samsung

SERVICE-DRIVEN ORGS
FedEx · Taco Bell · IBM

OTHER PHDS & NETWORK
K. Michlewski · B. Singleton · Q. Han · Broadbent · Miles & Huberman · McNiff & Whitehead · M. Cook · D. Szebeko · P. Rao · D. Sangiorgi · Facebook · Faban

PHD RESEARCH METHODS
C. Frayling · B. Archer · B. Banerjee · Glase & Strauss · K. Dorst · C. Robson · D. Schon · R. Yin · Silverman · Eisenhardt

REPORTING ON ACTUAL PHD PROCESS
LT OWN EXPERIENCE & REFLECTIVE PRACTICE

SERVICE DESIGN PRACTITIONERS
IDEO · Zest · Enabling Concepts · designmatters · B. Hollins · Cheskin · Wolff Olins · engine · Doblin · Think Public · Spirit of Creation · UsCreates · Zilia · Participle · Design Council · Ziba · Demos · Plot · for People · radar station · Peer Insight · live|work · 2nd Road

IDENTITY OF THE DESIGNER

WEB
Coop7 · Designing for Services · Experimentia · CPHn7 · Neat D · Nussbaum on Design · servicedesigngroup · PHD-Design · Nosiy Decent Graphics · L. Kimbell · Sphinxer on Services · Doors of Perception · Bruce Mau

SOCIAL
J. Heskett · Zuboff & Maxim · Whiteley · G. Kress · V. Papanek · S. Heller · J. Collins · Pajannek

SUSTAINABILITY
N. Whiteley · E. Manzini · A. Forty · J. Thackara · Lingari Policy Centre

DESIGN HISTORY
P. Sparke · M. Bogle · T. Fry · C. Barrie · Dutopia

NARRATIVES (ORG. STORYTELLING)
Disney · A. Patterson

STORYTELLING
W. Bennis · A. Moldenhauer

MEANING
Alben Design · B. Moggridge · Fishy Philosophy · M. Csikszentmihalyi · Rhea, Dillet + Shelzoff

HUMAN-CENTERED DESIGN
R. Coleman · L. Alben · G. Zaccai · H. Dreyfuss · Helen Hamlyn Centre · Clarkson, Keates + Dong · Alex Lee, OXO · Mayo Clinic

DESIGN RESEARCH
E. Lupton · J. Grant · J. Zeisel

JOURNALS + MAGAZINES
Creative Review · DMI Review · Design Week · BusinessWeek · HBR · McKinsey Quarterly · Open Manifesto · Design Issues · Rotman Management · InfoTechnology Journal · Design Observer · Peer Insight

EDUCATION
Northumbria · Said Business School · DIEC · RCA · E. Ostroff · CMU · Central St Martins · Bauhaus · Univ of England, Birmingham · Univ of Berkeley · Manly-Nagy · A. Findeli · Glodsmiths · University of Toronoto · Case Western University · Stanford D School · Cambridge · Harvard · LBS

LITERATURE MAP

DESIGN PHILOSOPHY
B. Jaurel · C. Alexander · Inside Out (NU) · T. Buzon · R. Young · T. Brown · Chris Jones · N. Cross · S. Gregory · Mitchell · B. Lawson · D. Rams · K. Hara

PHILOSOPHY
Socrates · Aristotle · A. Smith · G. Debord · C. Debord

ART
N. Bourriaud · Relational art

BUSINESS
Peters & Waterman · Morley & Silver · A. Preston · J. Collins · M. Gerber · J. Faris · B. Archer · Design Council web · R. Martin · J. Litdetka · J. Galbraith · A. Holness · S. Pugh · F. Gehry

DESIGN PROCESS & METHODS
H. Fraser · R. Boland & F. Collopy · R. Nussbaum · DIEC

THINKING
H. Simon · Gadamer · D. Schon · E. Schumacher · A. Smith · Aristotle · H. Rittel

KNOWLEDGE MANAGEMENT
D. Dougherty · Hansen et al · I. Nonaka · M. Polanyi · T. Morris · P. Drucker

DESIGN MGMT
Cooper & Press · K. Best · lester et al · H. Mintzberg · T. Golsby-Smith

STRATEGY
R. Whittington · P. Senge · T. Peters · K. Weick

NETWORKS
A. Haragdon · Sawerian · Huston + Sakkab · Facebook · R. Barras · B. Brown

IN INNOVATION
Tushman & O'Reilly · B. Iether · T. Kelley · S. English · R. Buchanan · G. Nelson · R. Young

CREATIVITY
E. De Bono · Mumford · R. Florida · Lego

SYSTEMS
Tint · C. Jones · Barter + Dubhthaigh · B. von Stamm · E. von Hippel

SERVICE RESEARCH/DESIGN
R. Ramírez · Young + Livesley · V. Seidel & L. Kimbell · H. Dubberly · J. Howard · P. Hill · J. Teboul · Saco & Goncalves · Pine & Gilmore · I. Shostack · B. Bassau

LEADERSHIP
L. Kimbell · A. Roddick · A. Patterson · M. Thurston

ORG CHANGE/CAPA BUILDING
Harvey + Brown · Schumpeter · Handcastle et al

TRANSFORMATION
RED · Week + Quinn

GLOBAL CONTEXT
United Nations · Pine + Gilmore · LIFFkin · Duncan + Jorgenson · A. Soldmok · Design for the other 90% · G. Cox · A. Roddick · P. Sheeman

DEVELOPMENT
United Nations · Design Sethia · Desai and Potter · D-school · Mulgan · Mahlouin et al · Cornwall · Cooper-Hewitt Museum · D. Bassau

ARCHITECTURE
BSF · H. Sanoff · CABE · W. Gropius

POLICY
IDeA · Design Council · Varney · Sainsbury · DCMS · Leadbeater · DEMOS · G. Cox · T. Blair · NESTA · DfES · Markusen et al · HM Gov't

FUTURES

FACILITATION

ENTREPRENEURSHIP

CO-DESIGN

PUBLIC LIFE/PUBLIC AFFAIRS
E. Manzini · RED · CHCH · A. Menini · Design Council · United Nations · F. Jegou · NHS

PARTICIPATION
J. LIU · Muller, Wildman & White · RED · E. Brandt · CoDesign Journal

SUSTAINABLE DEVELOPMENT

PROTOTYPING

COMMUNICATION

COLLABORATION

CO-DESIGN

Appendix 16

Sample of Interview Transcript

Interviewee	Designer 11 (D11)	**Participant Number**	5b

Project	Move Me

Date	6 May 2008	**Time**	10.00-11.00

Location	Free Trade, Newcastle

Observations	- Talked about selling houses - Designer 11 getting involved in company's service design capability. Challenge of ROI to client - Very much enjoyed this interview - Designer 11 is very easy going

Confidentiality	Nil. Would like to see thesis.

Main themes	Design attitude; Designer as catalyst (visual); Access (but issues of freedom); Decision-making (12); Tapping into networks eg. SureStart (15) and also use of Project Stakeholder 12 to communicate project; Adapting process (17-18); Doing with and building capabilities

New ideas	- Is the Festival where the engagement of the public is?

Action items	- Questions for Designer 10 noted in notebook

Questions focus/add	Nil

Research issues	- Let Designer 11 see project timeline. Was good to get feedback and also use it actively in interview. Need to add desk research and also community meetings. - Silence and time is ok during an interview

Dott issues and learnings	- Festival shaped the project direction, but also engaged more people - Dott as R&D - Knowing what already exists as to not duplicate

Evaluation	- Not discussed here

Legacy	- The Travel Plan contributions

Metaphor	-	Designers are the 'lynch pin' in complex issues
Methods response	- - -	Process is the same Need to 'cut the cloth' – language use and things that engage people Need to not just engage but also entertain eg. cameras for the kids.
Time	-	1h 10m 56s
Additional Notes	- -	Steering Group 'Pin point' is good in projects. Can think about the Direct Client a pin point in resources, the Frontline as pin point for community and the Designers as adding value through creativity, inspiration, engagement, doing something to make solutions tangible
Learnings	-	More balance to the design process

Interview | Designer 11 | Move Me

LT: What was your role, at Live|Work??

D11: I'm a Senior Designer as of last week.

LT: Congratulations!

D11: Thanks. At the time of the project, I was a Designer. There is not much of a difference with the role that I have got now really. At that time, my remit was to really kind of, be in charge of developing the design materials part of all the projects so that the outputs. But also really, Designer 10 was really the Project Lead. He tends to do the report on the project and the other designer and myself would be on the ground team, if you like. So we were kind of going in and speaking to people, doing the research and testing things out, and ultimately pulling it all together for the exhibition.

LT: Could you tell me a bit about your background, what you studied and how you came to work for Live | Work.

D11: Yeah. I studied Industrial Design at Northumbria Uni, so the Design for Industry course which is a 4 year course. Once I left there, I didn't have so much of an interest in product. I had kind of been led down a packaging route, just because it was really interesting and it was more… about a systems around the package and that was of interest.

When I left I did kind of, freelance work. One of my major projects was taken up by Marks and Spencers.

LT: Really?

D11: Yeah.

LT: How cool.

D11: Yeah, which was this reusable packaging. So I went in to work for a guy to produce that kind of packaging and hopefully get that into the store. And I kind of did my bit, the design role, and then it kind of like, it was all about him trying to get it into the store. And I don't know whether he's successful in the end. We have completely lost touch.

Anyway, that's what I did after Uni, and I was introduced to Live|Work, through… you know the DIEC and the projects that they did up here? They were obviously based in London, looking for someone to work as an intern, but who was based in the NE and could work here on one of the projects that they had here. And I was kind of recommended through the University, had an interview and got the job.

So I worked for them for 12 weeks and that was in 2005. And then they opened the office in February 2006 and it was me and Designer 10, obviously Designer 10 running and me being a member of staff.

LT: So you have been there from the beginning.

D11: From the beginning.

LT: Where was the office? Was it here?

D11: It was in the Robert Stephenson Centre. We were in one of the pods and we shared office space with DIEC, which was our only client for the NE work. So we shared an office with Robin Mackie. Who's assistant was Laura Lomax, who we then poached. And we were there for… don't know. It was always meant to be a couple of months, but it turned out to be the best part of a year until we moved to Holts Yard. Just the way things worked out.

LT: Ok. And, what work were you doing with DIEC? Were you developing the methodology?

D11: Not really. We were testing it. They have invested a lot in developing it. So they had a very expensive Powerpoint presentation. But it was Robin's lead to just give it a try. Just test it out. Which is always the push. I believe there were 5 projects and LW worked on two of them. The 2 that LW dealt with were the um… beg your pardon, there were 3. There was the Rural Access and Mobility Project.

LT: The RAMP one.

D11: Yeap. These were all like 3 months scoping projects. There as RAMP the Quadros project which was with TEDCO. The Tyneside Economic Development Company were opening a new, a new um, building and they were opening a new building on Bolden, which is South Tyneside and it was management of this space and they wanted to have a new kind of business support service to go along with it. So we were literally developing their business support services as the building was being made and businesses were moving in. So that was a really interesting project. And the third that we worked on was in Sunderland and looking at how people in long-term and capacity benefit can be supported back into work and the different kinds of services that they use. And all 3 of those projects ended up being extended. So that's kind of.. that was the NE office work to start with.

LT: I knew you had gone to Northumbria. Your project there and your work as a designer… why you are a designer?

D11: Why am I a designer? Um, I think it's…. it was never a real goal. I think at school I didn't really know what I wanted to do. I knew I had a passion for art… to be honest the thing that got me really interested in it was a packaging competition at school. There was no great story, I didn't win. I didn't even do that well, but there was something about it… I just couldn't stop thinking about developing this packaging… I should have been a packaging designer, shouldn't have I?

<both laugh>

The first thing that we had to design was a box for wine glasses. It sounds as dull as you like, but it just, uh… totally had me enthralled.

So from that… I wasn't entirely sure what I wanted to do. But an art foundation course at Newcastle College… have you heard about foundations courses in the UK? You just do rotations of just different types of art and design.

LT: How long is that?

D11: Just in a space of a year.

LT: That's just after school right?

D11: Yeah, just after 6th form. And it's quite intensive. You get to sample a lot of different areas of art and design. I focused on 3D design, it's like my specialism… and yeah, just really enjoyed it.

I think potentially just creating something from scratch and grappling with an issue and developing a solution for that. That just had me [enthused] and I decided that's what I wanted to do.

LT: Yeah, that's cool. I used to look on a lot of FMCG, supermarket products. That was my first graphic design job. It was a commercial graphic design studio and they had a lot of big clients. I think there is a lot of information design and systems design in packaging, because you usually deal with a whole suite of products, not just one. And think about how it all hooks together.

D11: Yeah, absolutely. And I think the project that… you know, having not… at Northumbria Uni, they are quite flexible in their approach. You can kind of do, pretty much what you want to.

You know, in our same year, there were some people like… Jenna Mathinson, a girl called Chloe Amos, and Nina and Laura who have set up Zest. All those guys did things that were about Service Design. They actually developed projects that kind of have to do with Service Design and I kind of hadn't at University, so when it came to being interviewed for LW I didn't have a Service Design project in my portfolio… but the one thing that I did have… **the common thread that I had through all my projects was the approach that I had that was to spend time with people.** Whoever I was designing for. So for my major projects I spent… I didn't know that my project was going to end up as a piece of packaging, **but I just spent a hell of a lot of time in Marks and Spencers in Newcastle. Not with walking around the isles, but the people who worked there. They were brilliant. They gave me access to lots of different roles and I just spent time with people and spoke to people.**

Design attitude

And equally, at the end of the project, that I did for my RSA awards was to spend time with older people and what kinds of products in their home that could be beneficial to them. It was that kind of Inclusive Design section.

And so I think, whilst the outcomes wasn't a service per se, **it was more the approach that I had taken.** It's what every designer … it's just the general fit. It's the basic principle.

LT: So if you could give me a metaphor, for what you do as a designer, what would that be?

<laughs>

You see, I have to work towards this question!

D11: Geez, I don't know… where to start on that one. Um… <pause> I'm really not sure.

LT: That's ok.

D11: I can't really [come up with anything] for that. Tell me some answers you got to that question.

LT: Well, I can't tell you about the other designers because you might copy them!

D11: Ha ha, yeah.

LT: But I have used this question at my old work when we went to interview micro businesses in New Zealand. We asked this question and we had a woman who was a management consultant and she said she thinks of her job as like a person who juggles plates. The plates are her clients who are always moving, but sometimes she needs to go in to nudge or shake them a little bit. Another guy, who owned a home business, said his business was like a reticulating fountain, the money is made but it goes back into the business to make it better and keep it going. But that's OK, you can think about it for later.

D11: I can't think about a brilliant metaphor for it, but I think the kind of work that we do at LW, it feels like more and more… it's not just about, you know… when I was involved in **design production it was taking an idea, or a need someone had, and just articulating it in a quite a successful way. A quite simple way**. More often than not, usually quite a **complicated issue.**

But I see, like, more of what we do now is less about that design and that outcome, it's still an important element to it, but I think we just… **we tend to be the lynch pin inside of what are quite complicated projects.** Just understand**… I think one of the things that we do quite well is how we map stakeholders, how people actually relate to each other.**

So, I am stuck for a good metaphor….

LT: Lynch pin! That's a good metaphor!

<laughs>

D11: It feels much more that that is what we kind of deal with.

LT: That's cool.

RT: **And design comes into it, because design comes in and helps move things forward. If you can visualise things and make things seem kind of real and possible, it just accelerates what probably would have happened anyway, but over a much longer period of time I think.**

LT: And in your own words, what did you think Dott was about?

D11: I am trying to think back to the… I mean, I think my thoughts have probably change throughout it. I think… like at the beginning of it… I understood it as they explained it, to do these community projects and understand what a sustainable region would be like.

The way I really thought about it, to begin with, and still at the end, **the real point of it was really about giving things a go and just trying something. To do something about what were quite large issues.**

R&D Dott

Because I think what Dott was… again it was **just a bit of a catalyst to spark some activity for issues that people knew existed, but it's always, you know, hard to find the time to deal with it and the methods.** So I just felt that it was just, it was an opportunity to spend a bit of time focusing on quite large issues, in quite a simple and localised way.

LT: And you mentioned that your understanding of Dott changed throughout, what was different about it at the end?

D11: I don't know. I think um… <pause> I think it was always… it was always going to be a bit of a showcase. From the start of it, there always seemed to be attention. While at the start I knew there was going to be an exhibition at the end of it to showcase the work, that wasn't at the forefront of our minds at the beginning of it.

I think you know ultimately, and you absolutely had to do this, but it had to generate a lot of good PR and interest. And we had to take, what was sometimes, **quite complicated issues, and not very entertaining subjects in a way... they are not very much for entertainment purposes, and try and turn it into this exhibition. So I felt that's what kind of changed the point of view.**

The effort that you had to put on the ground with the community then has to be refocused in pulling together and making it [understandable] for other people, but I think there is still value in that as well. That was a really challenging part of the project and kind of worthwhile, I suppose if you don't get people engaged with these issues, you don't get some kind of entertainment value to it. Ultimately then people don't take as much notice. I think that's how it kind of changed the focus for what it really was about.

Festival is where the public is engaged.

LT: What was the key issue in Move Me and why was it important?

D11: I think, the main issue in the project was the fact that… there was obviously a difficulty for people to get to the places that they wanted to go, which kind of, impacted on their lifestyle and their education through the school, which you could point to initially as a lack of transport, but it was completely apparent there it was not a lack of transport. **There is not a lack of transport anywhere, if there's one big problem is that there is too much of it. So the real issue became, not about, you know, how can we add more transport, and have more public services to get people from A to B. How do you actually get people to open up current transport and give access to it. That became the real big issue. That is still an incredibly difficult issue.**

Finding the right question to answer. Digging deep to find it.

It's about access not ownership, but then there are issues with lack of freedom.

LT: And why do you say it's still difficult?

D11: Because while I think we went a certain distance to make it more accessible, **just giving the people more opportunity to access the existing transport more obvious.** It's ones of those really difficult things to nail because it's just so **complicated**.

So I think we have gone some way to coming up with the solution in the time of the project, but it's still a difficult issue because **people want absolute freedom to go where they want, when they want, and any element of sharing anything, really, kind of impacts on that. If you don't own something, it's not really yours and you can't do exactly do what you want when you want and it feels restrictive when you are offering someone else a lift. You suddenly have someone else to consider.**

LT: Can you tell me a bit about what you think about design methods?

D11: Generally?

LT: Yeap.

D11: Um… I feel like um… a lot of the methods that I am kind of introduced to, and I am still very much learning that through my career, that more often than not they are pretty much **founded on common sense.**

Related to people.

You know, it's um…. People can describe a method in different ways, but it feels to me… and I [am open to be] correct, and further on in my career I could realise that I am wrong, but it feels to be that

there are different ways to explain and describe things, but generally **they are all much of a muchness. For basically, the design process. I am mainly talking about the process.**

I mean there are certain methods, like Insights methods, that we might use. And I think that for those you kind of have **to cut the cloth to fit the particular types of people that you are going to be working with to do it**. Because I think that some methods you will get a good response for the methods, but other people you will just get them rolling their eyes to the back of their head and not want to deal with you.

LT: For the people who roll their eyes, what do you do then? How do you deal with that?

D11: I think one of the things that can be **really off-putting with the methods is the way it's set up and the way that it is explained to them.**

So it's about just having a kind of, understanding of what… sometimes it's just really the **language you are using when you have se that up.** For those people**… and I think there is nothing more effective than giving people an example of how this thing kind of, how this things can be effective and works, before you do it**. Does that make sense?

LT: Definitely. For the Move Me project, I have been looking on the blog and from what you guys have told me and I did this ages ago, but feel free to correct me if I am wrong… these are just some of the methods that I recognised that you guys you used. Could you have a look over and see if they are ones you have used and see if I have missed any out?

<show the project timeline>

D11: Yeap.

<reading>

LT: The language… I have probably named them all wrong.

D11: Nah… just call them whatever.

Designer 12 also says tired of naming things.

That's alright.

LT: If you want to change anything, here's a pen.

D11: Nah, that's a good description.

LT: I guess out of all those [methods] which ones did you think were most successful?

D11: Um, it depends on how you evaluate the success of them. In the way the cultural probes were really successful in that… it was a really good way to get, um, the school community involved in the project. Which is kind of a challenge in itself. I think we always had the feeling if we could get the kids really interested in it and doing stuff, that that is the easiest way of getting the parents interested.

I think the information that came out of that was useful. There was some parts of it which were quantitative, like we just had… we had the different surveys about how you travel and how you would be willing to travel and we got some interesting data out of that. **And we used some interesting things like the cameras for the kids and stuff and it was an exciting thing for them to do. And it really encouraged them to do it. Whether the outputs of the photos… you know, probably didn't lead to any particular part of the… there wasn't any particular picture that sparked an idea, or added to the output of the project. But they were still incredibly useful to get the kids engaged and have something to talk around when they were describing their journey, so that was really useful.**

This is quite interesting. You need fun in the process, even though it might not lead anywhere, engagement of people through doing fun things helps a lot! Helping the kids talk about their journey make it worthwhile. So sometime the tools used are not always for the end/output, but to catalyse the process. Engaging and entertaining.

I mean generally the… uh… I'd say the other one that was successful for probably a different reason… well there was a couple I would say… **spending time with people in the community was great. I think interviews worked well to a certain extent, if you were just trying to gather information, but it was… I think the shadowing was probably more successful than that. And people were usually more relaxed. You are off with them on a day and they aren't being put on the spot.**

So you know, **the time spent with Margaret walking along the roads to see her mum and kind of understand how she's travelling.**

But also building relationships with the client.

LT: Was it far?

D11: Yeah! And it was wet and it was cold…

LT: Oh no!

D11: … And **we got splashed with mud. It was horrible!** But it really brought home the fact that we got all this traffic rushing by you on the A1 and it was like 'what?'

And in a way, you know, it was **recognising the people who were travelling past [us]. Is that woman there, is it really off chance that they've go past, or are they making that journey quite a lot and there is a possibility to just join that up?**

But I know you put down 'listing he challenges' and that's kind of really useful as well because it's… I think often people…. Things aren't kind of perfect… and there are some sort of issues, but until you have got someone who actually breaks it down and says, 'these are the things that I think we probably need to tackle' I think that's an incredibly useful thing to get your head around, what the approach is going to be.

LT: So there must have been quite a long list of challenges. How did you decide on which ones were the key ones?

D11: **It was just the case of prioritising. And on the base of what is achievable. There wasn't kind of a… a straight kind of process to narrow them down, it was just the fact that we need to sit around and debate around what's actually achievable within the timescale and what could make a real difference to the community? And what's actually going to fit with the type of community we are going to work with?** I know that's jumping ahead, but you can't help in a way, jumping a head to what you are going to develop on the back of it. It's that challenge that you kind of stay back there.

Localised decision-making

LT: And were there any [methods] that weren't on the blog that you tried, that weren't successful?

D11: Um… <pause> I am trying to think of anything additional that we did. I don't know, because I think that it broadly covers the areas that we did and dealt with. So no, I can't say in particular that… I think all of these things <points to table> have a varying degree of success to them. But I don't think there is anything beyond [this] that we tried.

LT: OK. Um, and had you worked with kids before?

D11: Um… I don't think so.

LT: How did you find working with them?

D11: It was probably the highlight of the project to be honest.

D11: Because I think… all the way… form the beginning of the project, it felt like quite an **unfashionable area to deal with. And transport can be really dry to be honest** <laughs> When you meet a transport consultant, they will absolutely take the fun out of it.

<both laughs>

You know what I mean? But, the session we did with the kids, in terms of just getting on and generating idea and have an enthusiasm behind it, it just felt like such a refreshing change. Do you know**… just generally when you try and deal with a difficult issue, it's easier to feel the kind of the, negative sides of what you might suggest. And [here you] latch onto the positives and build on people's ideas. And I think that was just something that the kids were particular enthusiastic [about] and we just had such a productive session**.

How designers cope with "unsexy" issues (coupled with empathy)- this is part of the changing role of the designer.

LT: And what was it like working with the school? Because you worked with the teachers and some of the parents?

D11: Yeah, we did. And I think it was generally the parents who were just generally quite involved with the school. They sat on the committee that they had. The school themselves were excellent, because they were very approachable and kind of open to giving the ideas a go you know? So obviously… and **I think Project Stakeholder 12 in her role… obviously has a very busy job but often had a lot of time and enthusiasm for the project and became a real advocate for it, with the parents as well**. They were really good to work with. I think that is one of the reasons why we ended by in Scremeston anyway to do the project. It was because Designer 12 had met Project Stakeholder 12, on the RAMP pilot, way back then, and just got a sense that this is someone who would be really open and enthusiastic to giving something a shot. So yeah, it as could working with them.

Project Stakeholder 12 is very much like some others interviewed. Qualities described.

LT: And who else did you work with on the project?

D11: We spent a bit of time with the school bus. They were kind of independent from the school. We spent another… another major organisation was Sure Start whom we worked with. The bus companies themselves didn't have a great deal with… well the local companies, we did work a great deal with. Arriva of course, because they were one of the major providers that ran through Scremeston. Working with Arriva, they were good because they came along to the Steering Group meetings and inputted and

um, you know, kind of responded to the community's suggestions, an example being the timetables. Again, they were approachable and I think… **I don't know, whether it's just down to the kind of, characters of individuals within the organisations you are dealing with, or you are coming to them with what is quite a positive approach, that really helps to get them on board and seeing the value of what you are doing and want to be involved**. So working with Arriva was quite good.

LT: And Sure Start, what do they actually do?

D11: OK, so Sure Start are a public sector… they were set up back when Tony Blair was in power and they were there to kind of help the development of young children and parents. So they run… I am just trying to think… I don't really have a succinct strap line for what they do, but basically they run a kind of, sessions and after school clubs and pre-school clubs for children and parents in the area. So they have midwives that go out and give support to parents, advice… and they have sessions. They promote breast-feeding, really heavily, so they will have sessions where you know, new parents will come out, and they have a breast-feeding club. And they put on activities as well for parents and children. So it's really building the bond between parent and child and just there to ensure that the child gets development.

LT: And what was their role on the Move Me project?

D11: **They were there to offer access to their network really**. It was fantastic and quite often it was quite a broader area and something that we didn't need to access, because we were keeping it quite local in Scremeston, but I think in terms of… we didn't work with them to hopefully increase access to their services because transport is such a huge issues. So they let us work with the lady who ran their antenatal class for example. And they also have good links with the schools so we could just see it as a potential opportunity to test some things out with Sure Start to make it something slightly beyond Scremeston and also for the future development. If really good things came out of the project, they were kind of the way in to upscale the test.

Sure Start were used to access a network. Need to tap into local "kings and queens". Sure Start also had reputation, credibility, familiarity etc.

LT: And with the testing and stuff, what kind of prototyping did you do? And what aspect of the service toolkit?

D11: **We prototyped every element of it.** So first of all if you start with the Information Point. So we worked with the school to get a notice board set up. Worked with them… we sent them designs on things… like the Activity templates for cards that parents could fill in if they have an activity they already attend or something that they know about that other people might be interested in.

So we just started off with some very basic designs and just try and get them to try them out and fill them in to see what was and was not working. **So just really like quickly mocked up in Powerpoint in a shareable format. So we used that to test out the board as well.**

We used Margaret as the main way to prototype the My Timetable, bespoke timetable cards, because she was the inspiration for it because she was the, you know, she… at the start of the… anytime the timetables would change, she would go and get them all from the, I think the main place to get them is the Tourist Information Point, and just sit there and scribble out, hand write out all the different buses she might be able to get and create her own timetable. So we thought that was quite a useful things for other people to do and just set up a nice little format, and made it a bit more easier to do and a bit more shareable and just again, quickly… designed it, mocked it up and posted it out to Margaret to have a quick shot with… 'oh this isn't quite right' and then just made it into like a proper card.

So we'd either go there, with the prototypes, and show them to people and get them to read them and see if they understood them and if they were self-explanatory. Or just even just putting them in the post to see.

LT: And what about the Lift/Share service itself?

D11: Hm. We tested that with one of the Sure Start events that they had on. They were going to have a Beach event and we thought that was an opportunity to see if people were willing to share journeys, so we sent them… we designed the invitations for that, that were to be sent out. And we have a reply slip on them and put in a section there when they could say, if they required a lift or could offer a lift so we just tested it out on that event. Yeah, so just creating those invites….

LT: Did you get a good response?

D11: Yeah they did. In the sense that, for a start the response to the event overall was much greater than they had seen. This was the time between the project and talking about… and I can't remember the numbers that turned up, but it was a vasty increase in the number of people that they expected. So I think that could have been down to some of the information that we provided and the very simplified bus route and timetable on how to get to the event.

So there was that element to it. They got a really good response to people who were willing to give families a lift to the event as well. I don't believe they got anyone who was actually requesting the lift though. So they had a lot of people offering, but not many requesting. So that was… so to that extent, we were probably expecting more people requesting and in that instant we had to reflect on why. Where as I think come of it… I think some of it might have been to do with the language in a way… because we had a… I believe it was like 'I'll give a lift' and 'I need a lift' and it was that idea of 'I need' a lift was what actually put people off.

And I think it was the nature of the events as well. Because it was a family event, it wasn't an individual who needed a spare seat, it was a group who needed spare seats in a car and some people might have just thought the practicality of 'me and the kids in this car'… it wasn't entirely unexpected but it was useful to the extent that it proved that people were actually willing to offer others a lift, when it's in… part of an event like that. It's prompted by a group that they are quite comfortable with. **The reputation of Sure Start in the area is very strong and I think you know, that really helped.** Whereas you know, that's where I think the differences between… like that sort of approach to the website that's been set up and you hope that people are going to visit and exchange journey details. Having it much more community-based and having Sure Start sending out the message and making the request is always going to generate more offers and interest.

LT: So you set up a website as well?

D11: No we didn't. What Northumberland County Council invested in was a Lift Share website. It's a company called **LiftShare.org** site. So they invest money to set up a Northumberland Lift Share. It's where you can sign up your details and input your journey information and then it searches for a match for that journey. You can say, 'I drive from A to B at 9 o'clock in the morning and I return at 5 o'clock in the evening and I willing to give someone else a lift'. But the response to it was completely under whelming. It had about one person sign up which was completely crazy and they aren't exactly sure why. They were sure if it was the way they promoted it or if it's the way Lift Share is. I have feeling that a lot of people just didn't know that it existed for a start. Also what it was lacking was that it was just a kind of website. It wasn't linked to any one kind of place. There was obviously the geography of Northumberland which was quite big, but it wasn't built around a specific event or a specific organisation.

How interesting that brand becomes quite important. Need reputation and credibility. Linking to event or organisation is really helpful.

And so for whatever reason, They just didn't get the numbers. So a really useful tool in principles. **A really smart little system to match these journeys, but in practice, no one was signing up.**

LT: So did you find out about LiftShare.org before the project?

D11: I think it was just doing the research. When we found that a potential solution or the area was going to be a lift sharing scheme **you just naturally just look for inspiration elsewhere and look for who's already doing this,** and found that there was this Northumberland lift sharing site that had been set up.

LT: OK. That's really interesting, because Move Me took that (service) of the website and made it more tangible and more suited to the community.

D11: That's absolutely what we did. The principle of it is really sound and it should really work. I'd imagine, in bigger cities it might work. They seem to be quite successful as in business they are doing quite well, but I don't know whether that's because as a Council you have money and that's the easy option to set up a scheme and you are ding your bit. But I don't know whether if they have figure on the number of journeys and people using it. That would be kind of interesting.

But we just got the feeling that… we had an idea of people exchanging value for taking lifts instead of giving someone else like a quid. You know, money exchanging hands, but would it be nice if there was a smart card system so people could pay with and secure it and stuff. And we got someone in who was a specialist from Sunderland, who was actually going to bring that technology and we could have tested it as part of the project, but just as the Lift Share project didn't feel quite right and suit the needs of the community, neither did the smart card and it felt like it would be such a mistake to drop that technology on them if the principle of it wasn't up and running.

We just got the feel that… all the way through we've always been keen to work with existing infrastructure we absolutely don't want to reinvent the wheel if there is something that is there and available to use, we don't want to… which is why on the Lift/Share cards, on the paper-based version, we do point people towards that site, because an outcome of the project would be to have more people using that resource. Because it's just a really efficient, paperless way to do it. As long as people had access, it would be really great. **But I think it just didn't quite suit the community. Which is why the cards, run by someone who is trusted, a little system run by Sure Start of the School, could be much more successful.**

LT: So I need to write in here Desk Research. Can you tell me a bit about how you worked with the project stakeholders?

D11: Um, yeap. Well, we had… **I mean the real method we have for the way we work is that we basically get everyone in one room. So we'd have these Steering Group meetings** so in that sense we had the people who were in charge of the different elements. So we had the head teacher and the people from ONE, so in terms of those guys, that's how we worked with them to report to them the findings of the project.

I mean the stakeholders more broadly, in terms of the school, the children and the parents, **we had kind of the project communicated to them through the head teacher really and through notices that went out.**

Communication is key. Again, Project Stakeholder 12 had trust, credibility, relationship with the other stakeholders.

And we also invited the parents in for a kind of working session to present what we had and also get some ideas form them. But it was a really low kind of response to that. You know for whatever reason. So we were quite keen on that. There was a certain amount of reporting to do, letters went out to inform people what was happening, the kids were taking things home, so there was generating an awareness of the project with those guys.

But we also wanted to be able to speak to them quite directly and for them to get involved, in a much more direct way if they wanted to, but the response to the session that we set up was quite limited for the amount of people who turned up. For whatever reason, perhaps it was just practicalities of just being there, they were less inclined to get involved so…

LT: I think I had a question down here that I was unclear about <on timeline>. There was a co-design workshop… inviting the parents in was different?

D11: Yeah it was.

LT: So that was a meeting.

D11: It was like a community meeting. And you know, since we did this project, I was watching this documentary called, 'The lady that stops traffic' and there is some sort of trouble-shooter. It was on the BBC I think. And she was like a trouble-shooter and it was similar to this project, but I think it was more in London and much busier area. She was parachuted in the sort out this massive school problem they were having and again, they spoke to all the stakeholders, a very similar kind of approach and also tried to host a meting with the parents to properly discuss it, but despite the big hu-ha of the cameras and TV shows, they were still there in the school hall waiting and like 2 people turned up. It was just like, yeah…. So I think it was just interesting to see they had a similar kind of success to get that kind of parent meeting happening.

LT: When you said that you sent notices out through Project Stakeholder 12 , could you tell me a bit more bout those?

D11: Yeah. I haven't got a copy but initially it was a letter to all parents to say what the project was about, and we worked with Project Stakeholder 12 on that on how to describe the project to the parents. [And it said] the children would be asked to participate and if they didn't want the children to participate, they didn't have to. And it was the fact that they would be bringing these packs home and these cameras and all that sort of [stuff].

That kind of stuff went on initially. So that was one notice that was sent out. And I think the next was the invitation to the session, which not many people attended, but the people that did attend, we did still have a session. It was still 4 or 5 parents there and it was still useful.

And then I think the next thing they got would have been the packs that we sent out to all parents which had their Lift Exchange cards in them and their companies of the activities templates that they could fill in and bring to school with them and they could have Julia the Admin lady, who was managing the Information Point to just put them up.

LT: The Activity templates, is that to advertise clubs and stuff?

D11: Yeah, it's broadly just different activities that were happening. Where that came from was that one of the things that we noticed speaking to people was that… so the issue was that Project Stakeholder 12 felt that the kids could have a much richer educational; experience outside of school by attending… you know, using more of the services that were available and attending these different activities and using these places of interest. She felt it kind of wasn't happening.

So it was a couple of things. We wanted people to get to them but if they didn't know that it existed for a start that was something that we needed to tackle. If we could make people more aware that these places existed and these opportunities that were out there then they can kind of get out there and make their weekends and evening more interesting. And we felt that once you got that and people were interested to attend these places and knowing about there, that is a really nice fit alongside, 'and here's some information to how you can actually get to them.' So this is the activity and so you could imagine that if the activity was the football club and one of that parents advertised that, they know that they are going and they could put a card up to say that 'we already travel there from this location' and immediately there is an opportunity for another parent to send their kid to that. Even if they don't have the transport to do it.

LT: What do you think the legacy of the project is?

D11: There is hopefully one within the school, in taking an issue and coming up with some solutions to deal with it.

I mean for the school themselves, it inputted into their School Travel Plan. So hopefully they have received funds to do things within their school grounds to improve it.

This added value also occurred in ONS and A100.

LT: I was going to ask you about that. Did you know about that Plan at the beginning?

D11: Yeah, Project Stakeholder 12 did make the point that it all tied in with that. So we always provided her with the information that we got back and the approach that we took. That was one of the reasons why… that was part of why the cultural probes with the kids [were done] but [with that] was also this standard survey that went into it and that was to satisfy the School Travel Plan office. They are quite a standard and dry survey… I think they know it is, but it's quite easy to collect in a process and it's much easier than the one that we created but it's less fun and less engaging. **So we worked with… that was one of the stakeholders, so we did have someone from the School Travel Plan department to be part of the project to understand the kind of information that they needed to gather in for the project.** So we designed the package around what we needed to get out of it and what they needed to get out of it.

So that's one element of… I think the work with the kids was great, and I think that will certainly have some legacy to it. I think they have still got the tools they have got out of ti and continue with.

LT: Which tools?

D11: The things like the Information Point.

LT: So was there a board there in the beginning?

D11: No. I think within the school they… I think they just pinned up information.

LT: Inside the school?

D11: Yeah, just on a wall…oh no I remember what they used to do, they used to put it in the windows, just posted in windows.

LT: Actually I just wanted to go back to the question… when you were prototyping the Lift Exchange cards, you talked about reflecting on why, but did you go back and talked to people about that?

D11: **We had a designer attend the event and talked to the people at the event, but we also talked to the Sure Start staff,** who were part of it and got their feedback and that's where one of the issues came from and they felt a bit like… kind of… charitable you know, which was something that people didn't want to express a need for and that influenced the design for the final cards where the **language** is different, you know, it's not about needing. It's about getting or giving. And it's very clear that there is a value to both.

LT: And I guess what did you learn from the Move Me project and do you do anything different in practice now?

D11: I think me personally, one of the things that I learnt, whilst I think… we took an approach for the Insights bit for it to be reasonably thorough. But I'd say as a **balance** across the projects, I felt that in hindsight, we might have benefited from ideas sooner and developing like prototyped ideas sooner and just spending more time getting then out there in the community and working on them. I think one of the things that I have learnt from the project is that… **one of the things that we bring to this is that we don't just think about the issues and write a report and leave it at that, but actually to do something about it. And that's where I think design has the ability to make things look or feel quite real and just can be used an work immediately.**

Doing something about it- designers value.

And I think once people started to see things happen, they got more engaged. And then it was like 'um, that's the end of the projects' so kind of naturally close towards the end, in a time when we ended to think about the exhibition so that limited the time we could spend on prototyping it.** So, you know, it's a bit of a difficult situation.

Engagement

You want to spend time on the Insights, so you know you are going with the right issue, but sometimes I think you can go with your gut instinct and you don't have the make sure of everything and you can just go and give it a shot.

Decision-making

So one of the things, or approaches, I have taken since is just to get in there that bit earlier with making stuff tangible and developing solution and testing them with people. Especially with that community that we were working with, I think they had been consulted to death. They always seem to asked people about the issues, but they never see results from it.

Relates to what Claire says in MC. That they need to be experts in the area so they can make hunch hypothesis and test them. That's the quicker way to do it, she says. For designers, how do they spend up the Insights?

And a lot of the work that we, or the session that we do with people, are the find out what the issue are, and they don't mind if something is actually going to happen this time, I think that's one of the biggest issues.

LT: Ok, last question, if you had to give an elevator pitch to someone about what you did as a designer on the Dott project, what would you say?

D11: What I did as a designer?

LT: Yeah.

D11: I think it was really to be responsible to gather the insights and develop the solutions on the project. That's the one floor elevator ride!

LT: That's great. And do you have any questions for me?

RT: How's it all going? Are you sick of it yet?

Personal conversation on PhD. Talked about doing the research and deep diving. PhD as a big design project. Findings such as building capability, embedded legacies, challenge of ROI.

Appendix 17

Example of NVivo Coding

Name: 11 Elevator story

Description:

<Documents\Interviews - Design Teams\A100_D_Interview_Designer 1> - § 1 reference coded [1.72% Coverage]

Reference 1 - 1.72% Coverage

¶520: LT: OK, last question, if you had to give an elevator pitch on what you did on Dott, what would you say?
¶521:
¶522: D1: You see, I hate talking about that project. It's one of the projects I avoid talking about to others.
¶523:
¶524: LT: Why do you hate talking about this project?
¶525:
¶526: D1: Because I feel like we let people down and we failed. Um… but if I was to give an elevator pitch I'd say we worked with people with dementia…. We designed tools to work with people with dementia to understand their daily experience to then identify opportunities to improve those challenges.
¶527:
¶528: *Same as what Nina said, we designed the tools. Is that like we designed the combination of tools? Like what Steve said?*
¶529:
¶530: LT: OK. Cool. Do you have any questions for me?
¶531:
¶532: D1: No, is that it?
¶533:
<Documents\Interviews - Design Teams\A100_D_Interview_Designer 2> - § 1 reference coded [0.56% Coverage]

Reference 1 - 0.56% Coverage

¶538: LT: If you had to give someone an elevator story on what you did as a designer on Dott what would you say?
¶539:
¶540: D2: We bought people together to address the challenges of dementia in the NE and encouraged creative thinking and collaboration amongst those people.
¶541:
<Documents\Interviews - Design Teams\DaSH_D_Interview_Designer 4> - § 1 reference coded [1.19% Coverage]

Reference 1 - 1.19% Coverage

¶371: LT: And if you met someone in an elevator, and had to give them an elevator pitch about what you did as a Designer in Dott, what would you say?
¶372:
¶373: D4: Um…. Oh…. Hm… we helped decision-makers… we put decision-makers in a local health service in touch with real local people so that they could understand what local needs are so that the service is designed…. Oh, that is really articulate isn't it… So that the service um, meets their needs. We effectively formed a bridge between the people making the decisions and the people who are going to be experiencing that. And making sure they understood, well the Commissioners understood what people need.
¶374:
<Documents\Interviews - Design Teams\LCL_D_Interview_Designer 12> - § 1 reference coded [2.21% Coverage]

Reference 1 - 2.21% Coverage

¶394: LT: It's good because you are really passionate about the issue. But I will ask you one more question so you can get back to work…. If you met someone in an elevator and you had a couple of minutes with them…
¶395:
¶396: D12: The elevator pitch?

¶397:

¶398: LT: Yeah. What you did as a designer in Dott what would you say?

¶399:

¶400: D12: Um… I would say that I um… developed a scheme to… help… people from any social or economic background… access and increase the energy efficiency of their homes.

¶401:

¶402: We designed a scheme, we came up with an idea, we developed an idea I suppose that removes the barriers to energy efficiency. Those barriers being cost apathy. Basically not giving anybody the excuse to be energy inefficient.

¶403:

¶404: And it was a prototype of that scheme and we are going to test it and then launch it. And that's what is really exciting about this stuff is that… everybody wants to be energy efficient. Whether you are a sceptic or not about climate change everybody wants to save money on their energy bill. So that's kind of the way in. And it would be fantastic to see it launched. So if we can get it working here, and there's loads of Credit Unions up and down the country. It would literally be a pack that they could just, you know, get, download or whatever, load material and go and do it.

¶405:

¶406: *Extreme users.*

¶407:

¶408: And again, it we'd want to get local installers involved, so we can support the local economy. So if it was launched in Birmingham we'd want to get local installers to do it not perhaps you know, not the big national installers, smaller scale to keep it local.

¶409:

<Documents\Interviews - Design Teams\LCL_SP_Interview_Designer 11> - § 1 reference coded [0.48% Coverage]

Reference 1 - 0.48% Coverage

¶513: LT: Yeap. OK. And if you could give me a brief summary, like an elevator pitch on what you did on Dott what would you say?

¶514:

¶515: D11: What we did on Dott? We developed a domestic energy service to help people reduce their bills.

¶516:

<Documents\Interviews - Design Teams\MoveMe_D_Interview_Designer 8> - § 1 reference coded [0.82% Coverage]

Reference 1 - 0.82% Coverage

¶435: LT: Well an elevator pitch…. So we could go up 3 or 4… 10 floors.

¶436:

¶437: D8: Uh, <pause> So as a designer I helped to engage real world business people and communities with, uh… the benefits of good design… for themselves and for the region, in probably quite a naive and fresh way as a designer.

¶438:

<Documents\Interviews - Design Teams\ONS_D_Interview_Designer 6> - § 1 reference coded [2.93% Coverage]

Reference 1 - 2.93% Coverage

¶355: LT: OK, last question. If you had to give an elevator pitch to somebody of what you did as a designer in Dott, what would you say?

¶356:

¶357: D6: Um, I think, our strap line said it very well. That we were helping create a design process for designing schools across Britain, across the UK rather, that was based on beginning with the school as a social system. Treating the school as a social system first,, and a building second. So understanding the things that go on, the people that are there, having a very user-centred approach and then designing the buildings around the activities and the people that happen.

¶358:

¶359: LT: When you say creating a design process. That's two outcomes of the project then?

¶360:

¶361: D6: Well, I guess. Coming back to your question about prototyping. I guess Walker was our, or is our prototype. So we were designing a design process that could be rolled out to different schools so we had all these different tools or methods, and I guess we could make a generalised or generic version of what we did with Walker and see if that fitted different schools. So I guess, Walker is our prototype… if that makes sense?
¶362:

Reference 1 - 0.72% Coverage

¶622: LT: OK, last question, if you had to give an elevator pitch on what you did as a designer on Dott what would you say?
¶623:
¶624: D14: Um, uh… I think I informed the early stages of the project, undertaking design research activity which provided a really solid foundation for the ideas that we then generated and the successful implementation of the project ultimately. It was very much about the early phases, was my design involvement.

Reference 1 - 1.07% Coverage

¶479: LT: One more question… if you had to give an elevator pitch on what you did on Dott what would you say?
¶480:
¶481: D13: Who's in the elevator?
¶482:
¶483: LT: Someone who doesn't know anything about Dott.
¶484:
¶485: D13: And it has to be about Dott?
¶486:
¶487: LT: What you did on Dott.
¶488:
¶489: D13: I came up with the project which, um, sort of thousands of people in a… in the asbo-capital of Britain, um… um, and which is brilliantly drunk on clickty-click heels and nightclubbing, decided to grow their own food in weird sort of unusual places. That's probably what I would say.
¶490:

Appendix 18

Visual Case Studies of all Dott 07 projects

Alzheimer 100 visual case study

Practice: Thinkpublic
Client: Alzheimers Society

Legacy

"The ideas at the Festival were themes that had been picked up from the Co Design Day and they were the ones that we stuck with and supported to go forward." DS

"We developed a Signposting Service that was linked strategically with the Alzheimers Society." DS

"I'd like the think we've created a bit of a ripple within the AS. And I think that that's probably the most powerful thing because they need to start to look at things differently. They have seen another way of working, and have also seen some useful tools to doing some things slightly differently." DS

"I hope it's given a few of the groups that we worked with an understanding of different ways of working and given them confidence to keep working slightly differently." IG

"One of the other challenges was to do with support. I knew Time Bank had done a lot around mentoring and buddying and what we did was to look at one of their existing models and look at how you could adapt that for people with dementia." DS

"They were already exploring with a care home how to create a safe wondering garden. So we accelerated that project by offering some support and money to go in and work with the people with dementia and their service providers to develop a prototype for what a safe wondering garden would look like." DS

New thinking (Recommission pending)

"The experience of Dott 07, I have to say in relation to this particular project, turned out to be subsequently very difficult. Initially, I thought very disappointing, but I am now completely convinced that there will be major rewards from the investment that has been made [...] because what I think Dott did for a lot of people, like myself, and ordinary members of Society and the public, is realise that co-design is central to the development of really effective public services [...] It has put co-design clearly in the mindset of everyone in the NE who is concerned about dementia" JE

"It's helped us see that instead of thinking about the service, let's design the service. Let's go out and find out, and use different methods as well." LW

Signposting Service

"This is not just signposting but people meeting people. They don't want to listen to somebody on the phone, people wanted the personal." LW

"The signposting highlighted there are huge gaps in how people obtain the service. People were saying that they often knew there was a service out there, but how to access it was always difficult. They would meet stumbling blocks and meet some person and get passed onto somebody else. If they just had one person who could deal with them and facilitate things with them, that would be more beneficial." LD

Wondering Garden

The interviewees were not involved in the activities for the Wondering Garden

Film

"I think it raised the profile of people with dementia and it gave them the ability to reach a wider audience to give the message [...] It showed that people with dementia have a huge ability to planning services, to putting their view forward, and that there are ways of engaging people for other people to listen as well." LW

"The people who took part in the film have agreed that if we want to use it for training purposes that they are happy to do that." LW

"For the people with dementia, to see themselves on the TV screen, they really felt like they had really achieved something and it gave that sense of empowerment and self worth." LD

"People still talk about being on the video. I think it has stayed with them which is quite unusual. So I think it has made quite an impact on them and they did quite enjoy taking part in it." LD

Designer's experience

"I would say that the main aim was to produce an exhibition. The secondary aim was to try and develop a project." DS

"The exciting bit about the A100 project was that it was a real challenge to get people with dementia involved in designing services. People with dementia don't usually get their voices heard. It's not a sexy issue that people want to design things for. So it was a good opportunity." IG

"We tried to focus on having the right people there and providing the best and most open platform for something to happen." IG

"We learnt a lot about working on this sort of scale and we were trying to be as open as possible about the whole thing. We wanted anyone who wanted to be involved to be involved and wanted to stimulate activity in a very broad way, in a range of subjects. We wanted people to choose which way they were going to take it on. Allowing people to make decisions about what needed to be changed and then take ownership for how it should be changed. So allowing people to identify the problems and become part of the solution." IG

"This was us finding our feet in the project. Finding out who we needed to talk to, creating a bit of interest in the work and making sure people know it's out there, mapping the current service links etc. We weren't at that point of producing any ideas, it was just about getting everything right so that we could start." IG

"That's the challenge with this sort of thing is that you have to be very careful about duplicating research." IG

"We were using film to just facilitate the process, but that's what stopped the project really because of the consent issues. [We wanted to use] the film as a conversation tool." DS

"We trained people on how to story capture." DS

"We needed to bring to life some of the issues and the get people talking about them." DS

"My favourite part was the Co-design event where people came together, listened, shared stories and identified challenges to then move forward together on." DS

"After the Co-design day we were waiting for the Alzheimers Society to put their funding in. We had run out of funding. When the AS decided they wanted to play again we had 6 weeks to go and there is only so much you can do in 2 workshops..." DS

"The challenge with the film is that you are provided loads and loads of material and someone at some point has to go through it all. That's quite tricky. It wasn't as collaborative as we would have liked. That is a good way of doing it, to go through editing the footage with people to ask them "Which are the important bits to you?" This can be a very nice way of not [having the designer] interpreting that data." IG

The Alzheimer 100 Story

Project intent

"I have been conscious for a long time of how little about what exists in public life, in big services like the NHS, actually is designed. I mean, when you have had a lifetime [of experience], you actually see how services develop in an almost haphazard way, and it can go on for years and years, just building on previous foundations." JE

"Getting groups of very diverse people to agree on an agenda needs a leader with ability and time [...] didn't have a Chair [for the Steering Group], we were Chairless." JE

"What we hoped for was that people with dementia and their carers were able to speak out with their own voice and not be reading from somebody's else script. That it was about their life, their experience." LW

"It was involving people with dementia in shaping services. We've never involved people with dementia [before]." LD

Stakeholder meeting

"A lot of the language they used was very difficult to understand. It was frustrating for some people with dementia, but we kind of understood from it, that it was to design a service. It would give us the opportunity to use different ways to do that, more creative ways, which were always interested in doing [...] We had a meeting to learn about using the design to design services." LW

"They explained each stage, what would be expected and what they would be doing. And then I realised that actually they would be with us each step of the way, they would support [us] at each step. There would be a lot of contact. They were actually going to be here, hands-on, doing interviews, showing us how to use design." LW

Website & blog

"There was always information on the website. So you could access it and just see what people were with things. It gave you a regular update. [The website] cascaded up to my manager who took it to a managerial forum. I would update them on our involvement and they were pleased that we were participating in it. I think they felt that I was quite a high profile event and I think they were pleased that South Tyneside were being recognised in that." LD

Discovery research

"Many service that affect the life of people are not fit for purpose. They originated from small pieces of research, from clinical interest from a number of individuals." JE

"It worked both ways. We gained skills from them, they gained skills from us. They were the experts with technology and design, we were the experts in the dementia, so we had a really equal sharing partnership." LW

Skills Share Day

"We learnt about communication skills– It made me think about what we were talking about, what we wanted back from people, how to relax people and how to engage them [...] The project certainly gave us a lot more confidence. I would have never stopped to camera, or give an interview to anybody. And it developed skills with technology– Computer skills, doing presentations etc." LW

"[The project] gave me insight into skills I probably knew I had but I had never used them. Was always a little bit fearful of maybe taking that step." LW

Co-design Day

"The Design Team had spent the previous day [to the Co-design Day] with us. We had some fish and chips and they got to know the team. It certainly made me think then–we can work with these people." LW

"We arrived at Newcastle University to go into this hall with market stalls, a massive colour of balloons,... here was chocolates and sweeties lying about for people to help themselves, and we had a little area as a café to sit with a cup of coffee and a biscuit and if you want to come and talk to me about dementia. I am relaxed and here. So that's when we took a step back and thought, this is more like it [...] That was the day that we felt, this is going to be good." LW

"I felt the workshop was a little bit basic. But if you looked at the other side of it, they were fun as

Film editing

"We gave them all the information. They had to wade through hours of probably relentless, not so good recording, and pick out the prominent things to put together." LW

Client experience

"For the amount of material they got and the amount of time they had to put this together. They actually produced very, very good displays and a very good information stand [at the Dott Festival]." LW

Design for Sexual Health (DaSH) visual case study

Practices: Design Options, Centre for Design Research (Northumbria University)

Client: Gateshead Primary Care Trust

Outputs   Legacy

Designer's experience

"[The main aim] was to develop a blueprint for a new service, which meant understanding what the needs of the area were, what the current configuration and issues were, and coming up with a service design that would support improved health outcomes." LH

"We set up a governance structure (Steering Group and Advisory Board) which really supported making this not just small little project […] It helps both bring in ideas and helps make sure that this case study is shared." LH

We get a good demographic grounding for the project through the professional one-to-one interviews, the mapping and [location] visits, the clinic visits and everything that is done before the workshops." JS

"We get together street level maps and plot where services are in relation to bus stops, in relation to schools etc. We look at that level of detail. We visit an area and get a tour guide who knows the area quite well. We put it up on a wall to visually show the area and in the first workshop the client came along and put Post-it notes up of nuggets of information that are really important to them eg. where a school is, because they have such an impact on a local level." JS

"You need to actually understand what the needs of the clients are first and that it's about ownership. If you are going to do anything with them then you need to get them involved because actually the process is just as important as the outcome." LH

"What we do differently to a market research company is that we try and mix quantitative data with qualitative data. The latter is more interesting and useful to us as designers to make decisions about how the service should work." JS

"Getting access to the [young people in Gateshead] and getting them to carry out a task on their own, over a week, is just not going to happen […] While we'd be getting people to do cultural probes, they are not the people whose lives that you want to know about." JS

"Street interviews cost a lot of money and the time to do. And there are better ways of [finding out information]." JS

"The Personas were built out of the cultural probes, the one-to-one interviews, a bit of our street interview experience and talking to professionals […] The workshops get the group that is sitting there to build a persona of people like them." JS

"With the persona we get people to explore the care journey of that persona. What the barriers are going to be and all of that." JS

"I would love to think that sexual health services, or any kind of health services could be totally overhauled and done totally differently, but the reality is that it's not like that. It is just not possible within NHS structures for things to happen quickly and big innovation is going to take a long time. So we can look at the minute level of detail such as: There is a school here and a pharmacy there, and you need to make sure contraception is available in that pharmacy and that the School Nurse knows about it to direct people there. The PCT structure massively impacts the way things can happen [on this level] too." JS

"I just hope that it's just a new way of demonstrating that you can be more innovative in the way review and how services run." LH

Developing practices

"Dott 07 gave use breathing space, as a new design-led sexual health consultancy, to establish ourselves. It has given us things to talk around and credibility." JS

"The frustration with the service was that they needed a location for their new service and at the time they were unable to identify one. There were issues with the funding. It was very hard for us to be more specific than we were, so the model was slightly abstract in a sense […] But I think it was sufficient for them to apply that intelligently." LH

Stirring interest

"We get emails from people saying we have seen the Gateshead report and are really interested in this element or that. We've just had really positive feedback generally from anyone who came across it." LH

Gateshead Genito Urinary Medicine

Service Experience Document

"Rather than do another whole business case, we used the documents the design team had produced for us because they are an excellent reflection on the work that had been done." SR

Blueprint

New thinking & ideas

"We are incorporating ideas from the Blueprint and Service Experience document into [the new GUM]." SR

"We refer to [the documents] a lot. A lot more than probably the Design Team imagine. We'll do that in team meetings where they say, 'We're doing something new.' But then we say, 'Hang on, let's have a think because actually in the DaSH they said was that maybe we should think about this' or just take a step back and look at what actually is going on here." PD

"One of the things which was very interesting was the idea of progressing through a service where you never go back eg. To the same waiting room. We are trying to hold onto some of those principles, of how can we make people feel like they are progressing." PD

"Four of my peers in other areas have been asking my opinion about the worth of this approach and I have been able to speak really positively about that." SR

"Rather than thinking, 'Oh well, we'll just do something fairly surface', I am more likely to think, 'Are there different ways that I could approach this? What might that look like if we didn't have the constraints? Then creating some of that, a 'what if' scenario." SR

"If we ever look to service changes and development again, I'd probably go back to what I kept from Dott to use the methods again. To look at it for reference. Like the visual stuff for use in consultation." AS

"We learnt loads of different ways of engaging with people, to get over communication barriers […] We manage to consult with current service users. So you can do one-on-one interviews in waiting rooms etc. But what we can't reach, and haven't been able to reach, those who don't currently use the service." AS

The DaSH Story

Client experience

Project intent

"The aim was to design a GUM (Genito Urinary Medicine) service for Gateshead […] It evolved slightly into looking at Gateshead and suggesting an integrated sexual health service." SR

"To design a service, to provide a GUM service for the population of Gateshead." AS

"To design a holistic sexual health service for Gateshead which would include the GUM service. And one that was acceptable and accessible." PD

"DaSH came along at the right time when we were looking to develop something and gave us an opportunity." PD

Context mapping
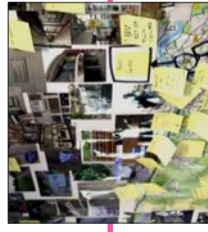
DaSH generated 3 maps to visualise the:
• Environment/location where the service takes place;
• Current services available and;
• Stakeholders of the service

"Right at the very beginning the Design Team went around Gateshead and [took photos] of some of the graffiti on the wall and all the paraphernalia etc. You know that is happens, you know that sort of thing, but actually seeing it, that it was actually what Gateshead [was about] made it real." AS

Service visits & observation

This included visits to sexual health clinics and interviews with professional experts (who were also consulted for feedback on service proposals at the end of the process)

Market research

Market research tools such as questionnaires, vox pops and street interviews were used
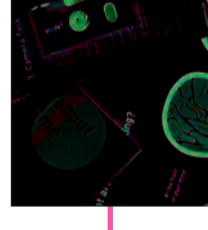
Cultural probes

"The cultural probes stood out because of the depth and the richness of information that the team got […] I am not sure if I have the skills and experience to draw out the information, but I would have them used by people who had a higher level of skill there." SR

"I would think to myself as being someone who knows how to consult young people, that's part of my job, and hey, I'm good at that. But the Design Team came up with some really interesting ideas, like cultural probes." PD

"We had never came across any of those tools before. We are probably much more used to doing very boring questionnaires and doing focus group stuff." PD

Service design workshops

"They came up with personas because what they were keen on was people telling their stories and I remember saying, you are never going to get a man to stand up in a room and say 'I'm a gay man with syphilis and this is what I want from my service.' So we had to find other ways of doing that, and I think the personas were really good and we have used them since, in telling some patient stories." SR

"As a co-design team we sat down and fleshed out the personas to be local. They had this young man from Bensham, we were able to say, 'He wouldn't go there' or 'He would need that' or 'He would say that' or 'That wouldn't be his issue.' So that again added another layer to [the personas]." SR

Personas & scenario creation

"With various groups and we used Care Journey Cards. The thing that worked really well was that visually they could choose [options]. We also put them on the wall, which was really handy as they talked to the wall rather than talking confidentially and making eye contact with someone they didn't know, about something quite private." JS

"It was hard to get them to come to a workshop. That takes a really good community contact who rallies people around for us, and that's to get them in a room for 20 minutes. We bribe them with vouchers and you get 3 people who stay in the room for the full 20 minutes, and then another 10 that will wonder in and out and sit there for like 5 [minutes]. Getting them to do a cultural probe, is not going to happen." JS

"The use of design cards [in the workshops], was really good. Giving people a visual feel of the way things could look […] it allowed people to have examples of what things could look like, rather than having the idea for themselves." AS

"Some of the work done with groups got us into groups that we had never got into before." SR

Journey mapping

Our New School visual case study

Design practice: Engine
Client: Walker Technology College

Outputs   Legacy

"[The boardgame is] basically a dialogue between [schools] and designers, so that they can use this tool together, and both get involved with it and discuss things. We can map out across a table, very quickly, what the nature of the problem is and also have some really good suggestions on potentially how design could help to solve it." SL

"Not much has happened with that because education seems to be a very difficult market to enter. It's centrally controlled by DCFS and there are few very large consultancies that get involved. It's largely controlled by central Government. We are still trying to figure it out. We are hoping that NCSL would be a way in for us because they printed a thousand copies of that Dear Architect book. They paid for it and distributed it through their network. And we were talking about developing some toolkits with other schools and… but they have gone off the ball with that because there is not much money in it. Unless somebody invests in it." JH

School new-build 2011

Boardgame

7-year learning journey

YEAR 7   YEAR 13

Adopting facilitation methods

"I think we are at a stage now where we need to use the same kind of facilitation we used on this particular booklet for other spaces within the school now that we have got broad principles for what it might look like." MC

More student involvement

"Now we need to go back to those plans, with a group of students, with the game to facilitate ideas relative to spaces." MC

"They came up with such a fantastic quality documents and we were amazed that they can to that end document because we really felt that we hadn't given them enough of our time." KD

"What has changed is that we've got clarity and completeness in the vision of the projects, where as prior to this, we had an amalgamation of views that didn't really marry together and dependant on the strength of personality in the discussion there was a greater or lesser input from one or more members of the team. And I felt that the vision we had prior to the involvement was a little bit fragmented as a consequence of that. So I think in two words, clarity and completeness is what I would describe as the vision." MC

Strategic thinking

"I realise now that to get anything on paper in terms of images and visuals, you have to go through the looking at the principles and I suppose find out a lot more about ethos, principles, structure." KD

Stirring interest from

Special Schools Trust
National College of School Leadership
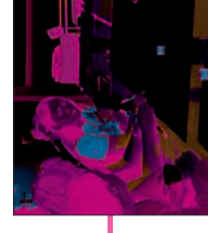Minister John Denham, DIUS
Other schools throughout the UK

'Dear Architect' Brief

"It's a very important tool that can be used at different stages of the project but ultimately it is very, very good at identifying peaks and troughs in quality of user-experience." JH

"The Senior Leadership Team, had spent a day demonstrating to Joe how the timetable works. How it takes into account the different spaces the different learning abilities and the different year groups as well. And it's absolutely unfathomable unless you have somebody like that to explain [it]." SL

"We took our Design Action team offsite to give them some objectivity to what a space is, what works and what are the things that go on in a space And what we got was a much more fertile group of statements and lists of different things that went on, so if we had just did it in school." SL

"It was quite interesting because we don't routinely deconstruct the services that we use in that way. And then got them to reflect on their own school when they had done that exercise." JH

Journey mapping

"I think was the most useful exercise I did because it really helped me to think of the change of curriculum over the next 20-30 years and of how it needed to be with the background of technology to one side and industry the other side and the economic needs of the local community." KD

"It really helped me to focus a lot better, to sit down, as a personal challenge, to sit down and think.That exercise alone, had a huge impact on what the need would be in the new build." KD

"We spend the first couple of weeks scoping out what's wrong and what can be improved, and then we write our brief."

"We let the Site Manager walk us around the school, we sat in some lessons, which they really wanted us to do. We had some lunch at the canteen."

"It's often the process of going through the project that dictates what we spend more or less time on." SL

"They didn't want us to be the kind of people who swan in and tell them what to do and go away again because they are getting that from other places." JH

"We had the Our New School website set up as a very kind of accessible touch point, where students, parents, people in the community, and teachers, could all see where we were up to all the way through, so we were very open about what it was that we were doing. And we were very welcoming, if anyone wanted to get involved." SL

"In terms of our relationship with the client, we tried to make up with the distance. Rather than be on call all the time, we tried to make up with that the best we could. One of the very powerful ways we did that was through the Our New School website." JH

"We did quite a lot of brainstorming and sometimes it seemed that we kind of needed to move on quickly. We had to be very responsive to what was going on, so after 20 minutes if people and the teachers were struggling, we'd go, 'ok, we'll let's shake it up.' SL

"You have to be quite nimble with workshops. There is no point in flogging a dead horse. It's certainly something that we wouldn't want to do with teachers, or adults, or schools, or businesses." SL

Taking the School Apart offsite

Workshop for issues and ideas

"The workshops at the beginning, I just did them for the sake of doing them to be honest. I couldn't, at the beginning, see the purpose of it. Towards the end. I saw more purpose of the workshops, when I was beginning to see the picture of how it was all coming together." KD

Insitu sketching

"We were on the tour, and Joe was listening to us with a clipboard in his hand and a sketchpad really, and he sketched some of those drawings in principle, instu, with our discussion, which I thought was an interesting way of working." MC

Setting up the blog

"Students will engage with electronic forums quite easily. They engaged with that quite well. I mean we didn't give them a big steer on that, but we had students uploading PowerPoint's and things for our interests." MC

"We developed a really good relationship early on. We communicated regularly through the electronic forum that we set up for this, which was good for keeping in touch in terms of the project." MC

Relationship onion

"A kind of diagram to start off your big picture thinking, that helps us to get all the layers of this together, so we could have a good clarity about where we were going." MC

Writing the brief

"The brief was very fluid when we weren't really clear of what the vision was or the vision for the project or the vision for the building was." MC

"I found it quite difficult to manage. I like to know the outcomes…I couldn't see where it was going and it all came together in Dear Architect, I felt rather pleased in its completeness. It was a consequence of good process." MC

"We started to get a little bit frustrated about outcomes, and they showed us some of the outcomes from the Heathrow project and that enthused us because we could see where the design facilitation was leading us. We just had to be patient with the process." KD

Immersion at the school

"It was good for the designers to spend some time in the school really, to fact find. I mean, I guess most of them hadn't been in a school since they themselves had been there… schools are different animals today, so fact finding was important." MC

"The Designers had recently completed work for Heathrow, on looking at the movement of people between terminals and the time involved in getting them to where they should be and so on. And that's what pretty much what we do from day to day as we move people around spaces. And it was interesting to see that the experiences they brought of that into an educational setting were very useful." MC

Project intent

"A collaborative project that would lead us to some sustainable designs within Building Schools for the Future." MC

"Designs that were going to be future-proofing. That weren't going to be a new-old school, but were going to reflect government agendas for now in national trends in education and employment." MC

Designer's experience

"Building Schools for the Future (BSF) is a very big opportunity. But the opportunity is being driven by the need to procure buildings rather than thinking about them.

So the two things we tried to do with the ONS project, was to look at the school as a social system first in order to inform the design of the building. And to position the school as a more active consumer of BSF on behalf of their students." JH

Client experience

The ONS Story

Our New School | Visual storyboard | Please note that only key design tools have been highlighted here | Internal documentation only

New Work visual case study

Design practices: Enabling Concepts and Livework

Client: Fabrium (co-sponsor)

Outputs

Legacy

"There are now 6 businesses in the NE that are now better informed. I would argue that they are better informed about how to address challenges that they are all facing together and individually and sustain their businesses through thick and thin. They certainly, I think, had a lesson on sustainable business practice." MS

"What we actually delivered, was much more precious, was ongoing relationships." HP

Developing new design practices

"The New Work methods kind of informed Live|work's new product Service Capability. We were just trying to gage reactions on how successful the methods were going to be." MS

Social networking site

New ideas

"There is a website that we are working on which is one of the ideas of Dott. One of the ideas was that we had all these entrepreneurs in the room sharing ideas and talking about each other problems, so we are designing a little social networking website. It wasn't a Dott deliverable, but the idea is a way for small businesses to get in touch with each other, share experiences and work together on projects." RC

Expanded thinking

"There this nothing out of any of these projects that is unique, there is nothing in these projects that we couldn't have thought about ourselves, but the reality is we would have never have thought about them. What I would really like to see happen is these case studies to be taken further and some sort of training course for entrepreneurs." RC

"I have a proposal on my desk now from an organisation looking to take it to the next level with a high price tag attached to it but I'm not going to do it." JW

"Without access to a Service Designer, I would have never been able to convince a client to turn a 2 month project into a 2 year project. To turn something they expected to spend €20–50 K on to perhaps paying nearly a million Euro on. Most of the time you just give clients what they ask for because that is what they pay for. And I'm not saying you don't think about, you just don't put a lot of effort into it. If a client says they want this, you get paid. It would be very rare, infact it would be unheard of before the Dott project, for me to turn around to the client and say, 'No, you do not want that, you want something completely different, this is what you want." RC

Designer's experience

"It was just basically looking at better ways of serving the needs of micro businesses. In non-traditional ways, so not with a support agency, but small businesses helping each other and large businesses working with small businesses with mentoring etc." HNP

"[New Work] was helping micro businesses in the region to develop and maintain services for themselves." MS

"We got some money from Fabrium and we got some money from ONE. And we got a load from Dott as well. It was [ONE and Dott] that took ages to give us the money. Actually if it wasn't for them, we wouldn't have been able to do the initial [scoping] work and then they had to agree formally to run it. They didn't fund us until [5 months later in] May/April." HNP

The Design team recruited people they knew to the project. Six micro businesses participated in New Work.

"[The interviews] were really a way of understanding what micro businesses did day to day, what their aspirations for the future where, what their challenges were with getting there and just introducing them to the project and what might be happening over the next few months should they choose to get involved, and what benefits they would seek to being involved." MS

"The blog was a way the micro businesses could refresh their memory – their idea of what the project was. They were able to go back to what happened in the workshop and how it informed this stage and what do they need to do now. There were occasions where people missed the workshop or the meeting because of their own commitments to the issues and challenges we were trying to address. The blog was also for people at the Festival to sit and read about the process." MS

"Initially the sketching didn't get a good response, although it turned out to be the stand out one. [The micro businesses] were a bit scared of putting pen to paper and just freezing up, but talking through it and maybe seeing how crap we are at sketching as well, they didn't have to worry about it. Just because we are designers doesn't mean a really good sketchers." MS

"We ran intermediary sessions to do with the services that we were planning. The micro businesses got a chance to talk about the services that they were thinking of creating and they got to speak to potential new clients to get feedback on these services. There were 10 businesses at these sessions, including the 6 case studies." HP

"We realised there were 5 main ideas and 3 of them were really similar, so back at the Live|work office we went back to all the ideas, to match the number of ideas to the number of micro businesses." MS

The workshop involved:
- Presenting the challenges identified from the Insights Interviews
- Generating ideas to overcome these challenges
- Sketching their ideas to explain them

"We returned to another workshop and we talked them through the next steps for prototyping. At that stage we were getting pretty close to the Festival. One thing that was frustrating about the project was that it started behind schedule, so the ideas and the prototypes were all decided upon but the micro businesses were too busy to take [them on]. So all the ideas were presented in the Festival and all the micro businesses showed up to try and tell the people what they were going to do." MS

The New Work Story

Project intent

Getting funding

Recruiting participants

Insights interviews

Setting up website and blog

I ♥ New Work

Brainstorm & ideas workshop

Live|work internal workshop

Prototyping workshop

6 Service ideas

Social networking site

"Fabrium Networks is a wide, physical broadband network of small businesses in the NE. We could run some added-value services over this network, but what could we run? That's where Dott kind of popped up." JW

"We ended up funding the Dott project on the basis that it would lead to greater things of interest to the activities that we get up to." JW

"Half of these people here are friends of mine and half of them are friends of Nathan's and we just got everyone together." RC

"The Design Team just got everyone together and asked them what challenges they've got in setting up their business, and at the same time how we can work together to fix them." RC

"I think the blog was produced more so for prosperity than for use. Dott for the micro businesses was incredibly time consuming and there was a lot of effort and time put into it by everyone. There was nothing a blog could have told me because I knew everything about the project. It was interesting to look at the photos, that was about it. Now, if this project was to go any further, and involve around 10 business, then a blog is absolutely, incredibly important. If we're to take these case studies and get other estate agencies or business support agencies excited about what we did, then a blog is absolutely important." RC

"Some people started out on this project and became too busy in their work life to actually take it further." RC

"The workshop was interesting at parts, boring at parts, incredibly frustrating at parts. The boring and frustrating part was when we'd spend half an hour on a crap idea, but there could be a nugget of gold in there, somewhere where you could either rejuvenate that idea and make that crap idea good, or actually just take that nugget somewhere else. The Design Team did their best to keep a structure on things, and they did a very, very good job" RC

"I think after our little workshops. Live|work they had their own brainstorming sessions in their offices. And I saw some of the photos of the room simply covered in Post-it notes. It was incredible that they had actually taken almost all of our ideas and they had expanded on them even further. And I suppose that is what you have to do. I suppose ideas don't just appear... Maybe it's a structure way of actually brainstorming." RC

"We cut it down to about 10 ideas that we liked. We each chose the one that was either relevant to our business or one that was closest to our heart and we then worked with the Design Team to bring those ideas into prototypes. Some of the ideas never went further than prototypes. Some of them did. Some of them went past it." RC

"One of the businesses decided that the most important thing they need is actually a mentor and they did go out and get one and they actually did get a very, very good mentor." RC

Client experience

Move Me visual case study

Practices: Livework Newcastle

Client: Scremeston First School, OneNorth East

Outputs

Legacy

Interest and possible avenues to continue the project:

"[If you] want to see it happen with a larger number of schools we have to start thinking about some sort of dedicated resource to ensure that information is being both captured and disseminated about this potential new service. So that kind of thing, you would need someone dedicated. That's not really a role for LW." DT

"The [Berwick] Community College was a bigger test bed and the whole Lift Sharing thing has gone well there." DT

"We thought about bringing in] technology but didn't feel it quite suited the needs of the community. It felt like it would be such a mistake to drop technology on this community, which is why the Lift/Share cards [and other pieces of communication] are mainly paper-based." RT

- NESTA Big Green Challenge
- Setting up a social enterprise
- Newcastle City Council

"So there are 3 potential routes for that potential activity and there are a group of people who view the world slightly differently." DT

"[Other] outcomes will pop up within the framework that you can't really set up at the start. So for example, the enquiry from Newcastle City Council, or the opportunity to set up a social enterprise." DT

Added-value

"The project] inputted into their School Travel Plan. So hopefully they have received funds to do things." RT

Scaling — Lift Share

New and improved communications

"The noticeboard the community can access, to find out about community information for transport and about other facilities locally, has been very beneficial." HH

"I think the outcomes have been very positive in quite a lot of areas. In terms of the local community, the noticeboard, the opportunity for the community to discus concerns about transport and the opportunity to engage with the transport providers and express the needs. Some of these needs were addressed by timetables that are easier to understand." HH

Lift Share toolkit

"It is disappointing that the Lift Sharing Scheme hasn't taken off [with the school community] because there did seem to be, at the consultation stage, a lot of enthusiasm for the idea. I think the reality is when people are faced with making that commitment, they baulk at making that commitment [...] Though it may be happening on an ad hoc basis that we are not aware of." HH

"I think it has achieved some of the aims, particularly in terms of flagging up transport [issues]. I don't think it's changed the transport available. But it has highlighted perceptions to a reasonable level." HH

"The older members of the community were sort of making comments like 'I hope this is not just going to be talk and nothing happens. I have seen all this before.' Which just shows they didn't really have a clear understanding, of how the Design Team could influence what was happening, that it was much more of research project with some outcomes." HH

"[The project] has left a legacy which others now want to copy. For me that's the real success of it." FR

New tools & thinking

"The legacy is quite interesting. It brought new thinking, but it didn't actually insist on there being high tech tools. [They were] very simple manual tools, with a fresh design perspective, enabling real opportunities for transport improvements to be made, which the community could access because it wasn't complicated. So it was appropriate to the community and yet it brought new thinking to the table." FR

"There is the noticeboard, there is the information about the transport, there's the knock on effect for the children with how they work together. For the school it's an openness to working with different organisations to benefit the children's education." HH

The Move Me Story

Project intent

"Move Me wouldn't have happened if RAMP [Rural Access and Mobility project] hadn't had happened. Move Me was an obvious spin-off." FR

"To see how design might work with a community to improve the way people could access school to get home afterwards. That was the very simple proposition to move on afterwards onto something bigger. Some rural development thinking now is moving away from being dependant on grants and subsidies, to saying that communities and businesses can determine their own futures. But they need to think and work differently, and innovation is sitting at the heart of that... means bringing ideas, networks and practice from outside the conventional rural development arena." FR

"To improve rural transport links in a sustainable manner." HH

"Multi-stakeholder type projects are terrific, but they often end up not having a direct client. You don't have a person who owns the service provision responsibility... So therefore it is slower, longer and more organic." DT

"The aim was to look at how to improve mobility and access, without more cars, buildings and roads [...] that super broad brief, became populated with notions of rurality and a small community in a school. It became more and more refined as it went through." DT

"There is not a lack of transport, there is too much of it. So the real issue was not how can we add more transport, but how we open up current transport and give access to it?" RT

"If you are truly trying to be innovative, then the chances are there isn't a known, or very explicit problem." DT

Designer's experience

"There are certain methods, like Insights methods, that we might use. And I think that for those you have to cut the cloth to fit the particular types of people that you are going to be working with to do it." RT

"The shadowing was probably more successful than interviews. People were usually more relaxed as you are off with them on a day and they aren't being put on the spot. We spent time with Margaret walking along the roads to see her mum, and kind of understand how she's travelling. It was wet and it was cold... And we got splashed with mud. It was horrible!" RT

Insights & desk research

Research included:
- Looking at other transport case studies
- Prior work done on RAMP

Insights tools included:
- Cultural probes
- Shadowing
- Interviews
- Observations
- Immersion

"Move Me wouldn't have happened..."

Client experience

"[The project] has benefited the school where every school has to have a school travel plan. So that the research and background work the children did, made a big contribution to us then developing our travel plan." HH

"You have to do a lot of research with the travel plan. Basically the research had been done and the data interpreted, so that was very helpful." HH

"I don't think we would have been able to engage with the communities as much. So we wouldn't have had a clear picture of what the community's need were. We'd probably look more at the school's needs. It just gave us a much clearer picture because the detail that they went into was more than we could really have managed." HH

Project intent / Market research

"There was some parts of [the research] which were quantitative. We had different surveys about how you travel and how you would be willing to travel and we got some interesting data out of that." RT

Note: This research was mostly done to fulfil the Travel Plan requirements. School Travel Plans were required by Government, at the time of the project, from all schools.

Cultural probes

"The cultural probes were really successful. It was a really good way to get the school community involved in the project. We used some interesting things like the cameras for the kids and it was an exciting for them to do. It really encouraged them to do it. The photos probably didn't lead to any particular idea or output, but they were incredibly useful to get the kids engaged and have something to talk around when they were describing their journey." RT
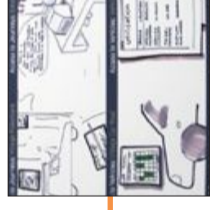
"It was beneficial for the children because they were basically used to do the research. They actively participated in the research. They were given cameras to take photographs of the journeys to the school, they had these wonderful notebooks and packs of crayons and they had to do interviews... it really supported the whole school curriculum because they were looking at transport, they were looking at maps, they were asking parents questions, they were working with people from the world of work. They had to use their imagination to develop ways of solving the problem, so it was fantastic because it gave a really reason for the children to be using these skills. It wasn't a contrived situation. It was real. It was great" HH

Codesign workshop

"You've got to be quite diplomatic and open-minded and not go in with an agenda. Even if you have an idea in the back of your mind, you've got to hold that in reserve if you genuinely want to collaborate with people the come up with solutions." DT

"There wasn't kind a straight process. We needed to sit around and debate what's actually achievable within the timescale and what could make a real difference to the community?" RT

"I gave guidance to the team who were working with the children eg. the types of activities that were suitable and also the materials [...] it was getting it to the right level with the children." HH

"I think the special thing about [the workshop] was that it was real life, it wasn't just an activity because I wanted them to practice there was a proper purpose to it." HH

Developing propositions

"Design helps move things forward. If you can visualise things and make things seem kind of real and possible it just accelerates what probably would have happened, but over a much longer period of time." RT

"We prototyped every element. We worked with the school to get a notice board set up, we sent them designs for the Activity templates, personalised timetables etc." RT

I think you need innovative people who are going to look at something in a new light. To have a range of suggestions and ideas, for people who are too close to [the issue]. Coming from outside with a fresh pair of eyes is very useful. And then hone down to what the community or what the customer wants." HH

Prototyping the ideas

"People have consultation fatigue, they don't want to be talked to by a bunch of experts about their problems, they just want to see stuff happen." DT

"One of the things Designers bring is that we don't just think about the issues and write a report, but actually to do something about it. That's where I think design has the ability to make things look or feel quite real and they can be used immediately. I think once people started to see things happen, they got more engaged [...] You want to spend time on Insights so you know you are going with the right issue, but sometimes you can go with your gut instinct and just give it a shot." RT

" Margaret and another parent had a look [at the prototyped communications] and they made suggestions about the colour coding for the different types of buses etc. It was nice that their suggestions were taking on board and then adapted." HH

Implementing the ideas

Sometimes it felt a bit slow. I think that is because when you don't know much about it, you are looking at the outcome too quickly. At the beginning I was thinking, when is something going to happen? The community wants something to happen. But as the process went on, I could see that the research, the investigation, the talking, it all came together at the end." HH

Low Carb Lane visual case study

Practices: Livelwork London
Client: National Energy Action (NEA), OneNorth East (ONE)

Outputs

"[The service was to] encourage reduced energy consumption through reward schemes and a different model of an energy company." AW

"At the Festival some chap has come up to us and said, 'where do I get one of those?'" BR

"We wanted Saverbox to be offered by a Credit Union, because they are much more responsible lenders." AW

"[NESCO] is the new energy company, a model for the new energy company, that is more a co-operative, not a profit-making, non-profit enterprise." AW

SAVE MONEY ON YOUR ENERGY BILLS
saverbox

nesco

Saverbox concept

"I am very pleased with the Saverbox. If we can do some training around the Saverbox concept and produce something tangible for the Warm Zone Surveyors then that will help greatly towards achieving the aim of getting to people." JC

"Saverbox allows people to install energy efficiency measures without having the make that big capital cost, an upfront cost, which is the main barrier." AF

NESCO

Demonstration house

"[The Designers] tackled one show house to show that reducing carbon emissions by 60% could be done. So that was the primary output." AF

"In order to get the best benefits you need [a solar panel] on a south-facing roof. Or as close as possible you can get to a south-facing roof. You need to consider that in the design. You also need to consider the angle in which you tilt the solar panel. So in it's most basic form it's [important] where you would site particular things." AF

Legacy

"It's not successful yet... It's successfully got further funding. It's convinced enough people that it's got value." BR

"Primarily we are designing the Saverbox to be delivered within a trail geography and we are working on the materials and with the Warm Zone team on communicating it." BR

"We didn't redesign the house, we just put some new kit in it [...]. We took a house to a 40% improvement with basically about £8000." BR

- Continuing work with Warm Zone
- Govt policy report case study
- ONE follow-on project

New partnerships

"We've got a relationship with a Credit Union and the possibility of the legacy project which we have submitted to ONE, which is to have a revolving loan fund in place. The Credit Union has had to change its rules so it can lend to new lenders [...] And that would have never have happened without The Designer's input into the community design element. And they have done all that community engagement—Getting the Steering Group together and all of those things... and it would not have happened at all without Dott." JC

Raising awareness

"Throughout the region [the project has] raised awareness of domestic energy issues, which are often considered unglamorous compared to some of the other renewable issues going on." AF

"[The project has] demonstrated the potential of communicating innovative energy models in the most vulnerable communities." AF

The Low Carb Lane Story

Project intent

"The objectives was to show cost effective methods in which you could improve energy efficiency and improve the carbon emissions and fuel bills from a show property." AF

Gathering stakeholders

NEA
WarmZone
NaREC

"The Designers were drawing together various partners within the region who would have an interest in a project." AF

"We wanted to be sure that [the low income market] was fully represented within this particular project [...] And we could supply information for the Saverbox idea." JC

"[Livelwork] were quite good at involving the various partners. There was quite a difficult to engage all those partners. It's notoriously fragmented the domestic energy and efficiency market. It was quite a good steering group they got in place. I think it was important otherwise they would have stepped on toes if they had tried to do it alone." AF

Insights research

Research activities included:
- Shadowing
- Interviews
- Observations
- Visual documentation

Insights presentation

CASTLE TCE

Idea generation

"Bringing design concepts to a new field, you don't really have an understanding of the full breadth of the implications of what you are designing [...] What was missing and what could have actually been better in this project would have been to understood more about the energy market and the regulations that are prescribed in this country [...] I suppose is why they put the Steering Group together and that was part of the Steering Group's role." JC

"My involvement was to deliver technical advice [...] Livelwork were firing questions as they were working, getting their head around the project and I would do some research." AF

'High fidelity' visualisations

"I felt that The Designers kept us informed of what was going on [throughout the project]. I thought their particular strength was communicating messages. So one of the things was when I was at the house, Alex was taking photos of the most bizarre things. And I was taking photos of the boiler and really technical stuff. Alex was taking photos for the sign for Castle Terrace and I actually saw a presentation that he gave down and I pieced together why he'd done it. He was keen that the audience didn't just view it as a technical project, [but he wanted to] engage the public with the whole environmental and community energy theme." AF

Prototyping ideas

saverbox no.1
saverbox no.2

Designer's experience

"To work out ways to accelerate the uptake of energy efficient measures at home. To look for ways to involve households in understanding and managing their energy use [...] The aim didn't change but got more refined in that we realised we needed someone who we could look at as the client." BR

"You have 2 groups of people. You have people who are on the ground, so frontline stakeholders who you learn a lot from as they interact directly with people. Then you have the strategic and policy people who are more high level. So we had 2 steering groups." BR

"One disappointment was that people weren't necessarily sure what their roles in the project." BR

"[The stakeholders] weren't all from the Council. [Some] were voluntary sector and organisations. Having them all involved was part of the research and the insights. Alex shadowed them and learnt all about their jobs and their agenda." BR

"The concept development was strung out over quite a long time because we were working with public sector groups and we needed to involve them in it." BR

"We were always like 'we gotta put this idea our' but there was not point in doing it if there wasn't something real. We had done mini focus groups with friends and family. And we asked them, 'Do you get it? Do you get how this works?' and they were like 'oh yeah.'" AW

"We had some early Saverbox graphics as posters and explaining how it worked. We stood there and people would come along and people didn't get it. They just couldn't get their heads around that it wasn't real... People couldn't relate it to something which is already out there, and we didn't want them to, as loans don't have very nice people, so you get better stuff." BR

Client experience

"The objectives was to show cost effective methods in which you could improve energy efficiency and improve fuel bills from a show property." AF

"I would have gotten an energy supplier involved to find out the constraints." JC

"[This stage] was about] working up the tangibles of the service early on. We communicated a lot of the ideas in Low Carb Lane through sketches, which are a very quick kind of thing to do." BR

"[This presentation] was just to let [the project stakeholders] know that we really understood the complexity and we weren't going to do something that would shy away from the real issues at hand—which were combating fuel poverty and trying to increase the quality of the housing stock in this country." AW

"[The presentation] was just to let [the project stakeholders] know that we really understood the complexity and we weren't going to do something that would shy away from the real issues at hand—which were combating fuel poverty and trying to increase the quality of the housing stock in this country." AW

"We then work up more high fidelity visualisations of things we were proposing and they become icons for projects, for ideas and it becomes easier to communicate. You can see whether people understand what the proposition is, or whether they can use it. And those things carry on, when you are building something, when you are refining and carrying on and testing it with people." BR

"I think [the idea] just came out of pay back times. When you invest in something to do with energy efficiency it's always about the payback time which is measured. That payback time means, how long it takes to pay for itself and after that you are making profit on it. So [the idea] came out of that." AW

"We went back and did our Insights work to say that our ideas were still valid [...] but we could have been more explicit upfront to say that we wanted to do this idea [...] You could say we were a little bit fixed on process." BR

Low Carb Lane | Visual storyboard | Please note that only key design tools have been highlighted here | Internal documentation only

Urban Farming visual case study

Practices: David Barrie (TV producer), Debra Solomon (artist), Zest Innovation (Service design); Andre Viljourn & Katrin Bohn (University of Brighton)

Client: Middlesbrough Council

Transferring ownership

"This was the million dollar moment." NB

"The Town Meal was the culmination of our narrative." DB

"The model that we created was one that was quite clearly scalable if it worked and we almost saw this project as a pilot for something that those who were interested could continue to be engaged in it and be developed further." NB

"The legacy involved people taking ownership of the project, which they did and they did structurally when the local authority became the accountable body." DB

Developing practices

"I also learnt a lot about what we shouldn't be doing as a company. It kind of helped figure out what the boundaries are and what your core capabilities are." NB

"There was an idea on the day of the Town Meal there would be a farmers market. I wanted some local framers to act as mentors to our growers. But we couldn't get buy-in from them." DB

"It's a 4-part narrative of experience,where you: grow food; learn how to cook it; share it in a meal; and Andre Viljourn maps it all. The whole package is a way to promote urban agriculture and the process seeds adjustments to the way public agencies deliver public services." DB

Council initiated ideas

Town Meal

"The legacy has 12 different legs, delivered through a company we are to set up, that is limited by guarantee. Some of the ideas include, new allotment sites at various locations including at schools; a Fifteen-Jamie-Oliver-style restaurant for education, training and employment opportunities; a Food Policy Council; a Food Co-op etc." IC

"I think the outcomes range from the very simple and practical, to the signposting new thinking and new policy directions." TW

"To not carry this [project] forward would have squandered all of the good things that came out of it." TW

New partnerships

"[The project] created a tremendous partnership across the Council, with external agencies, the community, the voluntary sector, and in the public and private sector." IC

Town Meal 2008

Planned and promoted to happen on 6 September 2008, the Town Meal was unfortunately cancelled due to saturated grounds from heavy rainfall 3 days before the event.

Designer's experience

"The area has one of the most prosperous economies in the country in terms of agriculture, and very little of it finds its way to the town. Middlesbrough has a a food system which is crippled with national supermarket distribution networks and the assumption that the community are not interested in health. So suppliers and the people who might supply the town with food don't bother. The aspiration of the project was to promote the town as possible food economy, turn thinking towards productive use of public space and seed behaviour change." DB

"We start by trying to figure out what we need to know to move the process forward, and then develop tools that will allow us to get the insights that we need. We went to Middlesbrough and drove around and observed the place. We looked at what it was like and talked to people. We very quickly got a sense of what made the place rick, and it wasn't reducing food miles. Their priorities were very different to that." NB

"The Idea Generation was literally locking ourselves at Dott HQ for a weekend. Having got a sense of the place seeing that the brief didn't quite match up, was asked how we could morph the project to engage the people of Middlesbrough and what the objectives of that brief were." NB

"The design team wasn't all from one company and everybody brought a different perspective. David was thinking about how this would actually look. I was thinking a lot about the practical and Debra brought inspiration." NB

"[The visualisation] was explain complex issues so that they would make sense to people." NB

"[The Council] thought it was slightly mad. The thing was that it was more a test-the-water kind of thing. We didn't speak directly to the public, but to the people were just going to get things done." NB

"[Designers] will certainly have a go at everything, but sometimes that's not the best thing for the project." NB
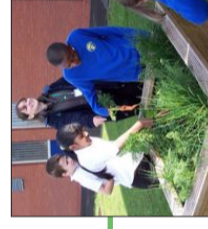
"They weren't really consultation events. It was just like, 'Here are our ideas, what do you think? Would you want to get involved?' It was more a test-the-water kind of thing. We didn't speak directly to the public, but to the people were just going to get things done." NB

"The model for delivering the project was that Dott and ONE initiated it and there was going to have to come a moment when the local authority was going to have take over responsibility for delivering it and becoming the accountable body. And that's quite a tricky process, but that's what make the process deliverable, that's what gives the process a legacy." DB

"We took inspiration from Meal Assembly Centres in America, which has been incredibly successful. We didn't prototype because we didn't have any produce yet, but at the initial consultation, everyone said to us, "We just want to experiment and play [with the produce]." And so we said, fine, we'll do that." NB

"There was a bit of confusion at that point. I got dragged into a lot of events organisation which wasn't playing to our strength as a team." NB

The Urban Farming Story

Project intent

Discovery research

Idea generation

Project idea presentation

Recruiting for delivery

Delivery of the growing tools

Delivery of Kitchen Playgrounds

Delivery of Town Meal

Edible landscapes proposal

"The CPUL (Continuous Productive Urban Landscapes) approach is a very challenging, but very interesting and different way of looking at the activity of growing, producing food and of landscape as well." TW

"I was sceptical about [Viljourn and Bohn's] involvement and didn't understand it at all. But I have to say, what they have produced is absolutely fantastic. It reflects the Council's blue-green lung strategy– the green being all the grasses and parks and the blue being the 3 becks in the town. I think when I saw Katrine and her model it started to click what it was all about. So there was something tangible to see as opposed to trying to deal with the theory." IC

"We emailed every school, we emailed all the relevant people, we wrote out to all the houses. We had regular planning meetings, we had a pre-Town Meal delivery meeting where over 60 people, representing various organisations and schools where there [...] It was about getting out there and selling the message and the product and it was about making the product understandable as opposed to concepts [...] If there is going to be the creative, you also need hard and fast level-headed project delivery mangers, otherwise it cannot happen." IC

"We created a document that became the Council's vision of the Town Meal. What we tried to do [for the Town Meal] was link soil to plate and town to country." IC

Client experience

"It was to explore a new model in Middlesbrough of community engagement that involved growing food. To create a celebration of the outcome by bringing people together through a series of events converging into a Town Meal." TW

"The idea was different, interesting and stimulating, but I had some real worries about its deliverability. On two counts, 1. Whether it could be delivered within the budget and 2. Did we have the organisational and intuitional infrastructure to deliver it and thirdly- vandalism. Those were my three big concerns." TW

"It had gotten to that point where the shape of it was in place, but it was more about implementation. So a different set of skills would be required." TW

"Nobody had done any thinking on whether we should have had a policy-driven approach on whether we used land to grow food. That simply wasn't on anybody's agenda. There isn't a department of healthy eating in the Council. It was just a little bit of somebody's agenda, but not their core agenda." TW

Appendix 19

Design practice as theatre

Appendix 20

Sample of 'Letters to Australia' research website

letters to australia

friday, 18 december 2009

Icsid Education Conference, 22 November 2009

The day after Service Design Thinks, I flew to Singapore to present my paper, *Perspectives on the changing role of the designer: Now and to the future*, at the Icsid (International Council of Societies of Industrial Design) Education Conference.

The theme of the conference was design education 2050. The intent of my paper and presentation was not to say how design education in 2050 should be, but inform design educators on what designers were doing today in the context of the public and social sectors. I hoped this might help inform pathways for educating tomorrow's designers.

I spoke about the design projects in Dott 07 as exemplars of where some designers were doing work today and profiled the different roles of the designer I interpreted from my research on Dott 07 (see image below for the seven dominant roles I drew from the Dott projects).

About me

lauren

Design PhDer looking at Dott 07 and the changing role of the designer.

View my complete profile

twitter updates

@servicedesign we going to skype sometime soon? (1 year ago)

Appendix 21

Sample of 'Letters to Australia' monthly newsletter

THIS**MONTH**•**SERVICE**DESIGN**CONF**PAPER**•**DOTT**07**REPORT**•**PHD**WORKSHOP**•**PHD**TWO**YEAR**REVIEW**•**THESIS**PLAN

August marked the completion of papers and reports and moving back to thesis planning.

Papers and publishing updates

From the 24-26 November 2009, the Oslo School of Architecture and Design will host service design conference, Dethinking Service Rethinking Design. My Northumbria colleagues Joyce, Phil and I have co-authored a paper about a service design project, and the paper is called, *The emergent roles of a designer in the development of an e-learning service.*

The Australiasian Medical Journal paper was finished last month. It's called, *Co-designing for dementia: The Alzheimer 100 project* and has since been reviewed for publication in October.

There was an unfortunate misunderstanding with the Touchpoints, *Design and sexual health (DaSH): Using design and market research methodologies* paper. It won't be published in its entirety, but a synposis of the DaSh project will be published in the October issue instead.

I have also been working on a *Dott 07 report* for the Design Council this month.

Two-year PhD review

In a final review of my research, I have mapped out my entire research process and key findings. Great exercise to do to clarify how the research has been undertaken and key insights discovered along the way.

Thesis planning and plan

Off the back of the review, I put together a new thesis plan and have been undertaking (more) planning for the write up for the next (and final) 10 months of the PhD journey.

This month's blog post and other links

• *Service design education update:* SD blogger Jeff Howard provides us with a US update.

• *Talking to Twitter:* Love this visualisation.

• *Dott 07 case studies by the Design Council:* Find a list of them all here.

For other blog updates. Go to:

www.letterstoaustralia.blogspot.com

• *One hundred years of design manifestos:* Social Design Notes publishes a list of design manifestos here.

• *Design TwentyFirst Century:* Find out what Ireland's doing about design.

• *Dott Cornwall:* Updates here on Twitter.

New ideas, evolving thinking, questions

• In reviewing how my research process has gone, it's been very much about moving in a circular motion toward recurring issues and reinforcing ideas that emerged. Throughout the process some concepts and ideas have come to the foreground and others have receded to the background.

• The question, 'What is a designer?' has become a really important question in this PhD research.

Up coming in September

• 3 September: The first Service Design Thinks held at the Sense Loft and was a great success! Films of the 4 presentations from the night will be uploaded soon on the website.

• 21-24 September: Greengaged events @ the Design Council, part of London Design Festival.

You can click on the blue text to open the links in your web browser

Please email me if you wish not to receive these newsletters

Appendix 22

List of published and unpublished papers

authored throughout the PhD investigation

'Design for Social Innovation.' *Object Magazine*. October 2011. Australia. http://object.com.au/object-magazine/current-issue/

'Design Thinking for Education.' *Object Magazine*. October 2011. Australia. http://object.com.au/object-magazine/current-issue/

'Prototyping public services: Using prototyping to design services for families with complex needs.' Co-authored with Deborah Szebeko, Ella Britton and Joseph Smith. Unpublished paper. February 2011. UK.

'Service Designing: A Network for Service Designers, by Service Designers.' *Touchpoints: The Journal of Service Design*. 2011. Germany. http://tinyurl.com/servicedesigning

'The different roles of the designer and their value: Researcher, Strategist & Facilitator.' *Bbtween 3*. 2010. Australia. http://tinyurl.com/RolesDesigners

'Co-designing for Society.' *Australasian Medical Journal (AMJ)*. August 2010. Australia. http://tinyurl.com/CodesignForSociety. http://tinyurl.com/CodesignForSociety

'Perspectives on the changing role of the designer: Now and to the future.' *Icsid Design Education Conference*. November 2009. Singapore. http://tinyurl.com/RolesOfDesignerNowAndFuture

'The emergent roles of a designer in the development of an e-learning service.' Co-authored with Joyce S R Yee and Phillip Meredith. *DeThinking Service, ReThinking Design: First Nordic conference on service design and innovation*. 24-26 November 2009. Oslo, Norway. http://tinyurl.com/RolesOfDesignerInElearning

'Design and sexual health (DaSH): Using design and market research methodologies.' Unpublished paper[1] for *Touchpoints: The Journal of Service Design*. 2009. Germany.

'Co-designing for dementia: The Alzheimer 100 project.' Co-authored with Deborah Szebeko. *Australasian Medical Journal (AMJ)*. November 2009. Australia. http://tinyurl.com/CodesignForDementia

'Dott 07 (Designs of the Time 2007): Designer as enabler of small, local, open and connected.' Unpublished paper[2] for *Artifact Journal*. May 2009. UK.

'Design in Public Sector Services: Insights into the Designs of the Time (Dott 07) public design commission projects.' *Changing the Change: Design visions, proposals and tools. Conference*. 10-12 July 2008. Turin, Italy. http://tinyurl.com/DesignInPublicSectorServices

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[1] This paper was not published due to mis-communication with the journal.

[2] This paper was not published as the journal was closed during the review process.

Appendix 23

List of peer review presentations,

including conference presentations

This list includes conference, lecture, peer review and workshop presentations and participation. Each of these played a part in shaping my thinking, ideas and research and served as platforms for peer reviews. Many of these events were captured on the blog I kept throughout my PhD, Letters to Australia, http://letterstoaustralia.blogspot.com

2011

'The changing role of the designer: Past, present and future.' Presentation. 12 August 2011. Design Symposium, Billy Blue College of Design, Australia

'Design-led Solutions to Wicked Problem: Dott 07 and design for public sector innovation.' Presentation. 9 August 2011. Powerhouse Museum, Australia

'Designing for services in the public and social sectors.' 22 March 2011. Service Design Drinks and Thinks Sydney. Australia.

Master of Design lecture. 11 March 2011. University of Technology Sydney (UTS) Australia

2010

'Co-designing for dementia: The Alzheimer 100 project.' Presentation. 1 October 2010. TEDx Design for Health, Montreal Quebec. http://letterstoaustralia.blogspot.com/2010/12/tedx-design-for-health.html

Service Design Thinks 3: Service Design from Scratch. Organiser and host. 30 March 2010. London UK http://letterstoaustralia.blogspot.com/2010/04/service-design-thinks-3-service-design.html

Writing Across Boundaries. Panel. 29-30 March 2010. Durham University. Durham UK.

Inspired: Designs in our time. Conference participation. 25-26 March 2010. Dott Cornwall, Mowgan Porth, Cornwall UK. http://letterstoaustralia.blogspot.com/2010/03/dott-cornwall-think-tank-inspired.html

Open Dott. Workshop participation. 23 February 2010. Cornwall UK
http://letterstoaustralia.blogspot.com/2010/02/visiting-dott-cornwall.html

2009

Icsid World Design Congress. Conference participation. 23-27 November 2009.
http://letterstoaustralia.blogspot.com/2009/12/icsid-world-design-congress-singapore.html

'Perspectives on the changing role of the designer: Now and to the future.' Presentation. 22 November 2010. Icsid Design Education conference, Singapore.
http://letterstoaustralia.blogspot.com/2009/12/icsid-education-conference-22-november.html

Service Design Thinks 2: Service Design at Scale. Organiser and host. 19 November 2010. London UK. http://letterstoaustralia.blogspot.com/2009/12/service-design-thinks-2-19-november.html

Design for development: Seeing beyond the world of wealth. Debate participation. 10 October 2009. Hosted by Kingston University, OXO Tower London UK http://letterstoaustralia.blogspot.com/2009/10/design-for-development-seeing-beyond.html

Interdisciplinary Discovery Through Design. Workshop participation. 28 September 2009. London UK. http://letterstoaustralia.blogspot.com/2009/09/interdisciplinary-discovery-through.html

Co-opportunity: A Day for World Builders. Workshop participation. 22 September 2009. Hosted by the Design Council, London UK. http://letterstoaustralia.blogspot.com/2009/09/greengaged-systems-for-common-good.html

The RSA debates: Design, cities and citizenship in the 21st century. Debate participation. 21 September 2009. Royal Society of the Arts, London UK. http://letterstoaustralia.blogspot.com/2009/09/rsa-debates-design-cities-and.html

Service Design Thinks 1. Organiser and host. 3 September 2009. London UK http://letterstoaustralia.blogspot.com/2009/07/service-design-thinks-1.html

'Research into design: Insights into Dott and roles of the designer' Presentation. 24 July 2009. Engine Service Design. London, UK

'So you're a designer, what else could you be?' Presentation. 17 July 2010. New Designers, London UK. http://letterstoaustralia.blogspot.com/2009/07/new-designers-london.html

 'Understanding design methodology in the public and social sector: Seven roles of designers in Dott 07 and their relevance to sustainable development contexts.' Presentation. 2 July 2009. Leeds Festival of Design Activism, Leeds UK. http://letterstoaustralia.blogspot.com/2009/07/leeds-festival-of-design-activism.html

NHS Design Showcase at the Health Innovation Expo. Expo attendance. Hosted by the Department of Health. 18-19 June 2009. London UK http://letterstoaustralia.blogspot.com/2009/06/design-at-health-innovation-expo-london.html

'Seven 'new' roles designers are playing in public life.' Presentation. 15-16 June 2009. Sustainability, Innovation & Design Conference, Lancaster University UK

Communicating to the Public: Vitae Poster Competition. Poster submission. 22 April 2009. Leeds UK http://letterstoaustralia.blogspot.com/2009/04/communicating-to-public-vitae-poster.html

'Observations of design in the public and social sectors.' Presentation. 3 April 2009. Design Council, London UK

Writing Across Boundaries. Workshop attendance. 30-31 March 2009. Durham University. Durham UK. http://letterstoaustralia.blogspot.com/2009/03/writing-across-boundaries-workshop.html

2008

'Six month presentation.' Presentation. 16 December 2008. Design Council, London UK

'Design in Public Life: Insights into the Designs of the Time (Dott 07) public commission projects.' Lecture. 26 November 2008. Kingston University, UK

'Design in Public Life: Insights into the Designs of the Time (Dott 07) public commission projects.' Presentation. 21 October 2008. Design Council, London UK

'About a PhD in Design.' Presentation. 20 September 2008. Presentation for 2nd Road, Australia

'Design in Public Sector Services: Insights into the Designs of the Time (Dott 07) public commission projects.' Conference presentation. 11-13 July 2008. Changing the Change conference, Turin Italy. http://letterstoaustralia.blogspot.com/2008/07/changing-change-in-turin-italy.html

Design Activism Leeds. Workshop participation. 2-3 July 2008. Leeds UK

'Design & Personality.' Conference presentation. 13 June 2008. Graphic Design Festival, Breda Netherlands. http://letterstoaustralia.blogspot.com/2008/07/graphic-design-festival-breda.html

'Insights into design and its contribution to public life.' Conference presentation. International Service Design Northumbria (ISDN) Conference. 4 April 2008. Newcastle upon Tyne UK

Design Thinking: New Challenges for Designers, Managers and Organisations. Organised by the Design Management Institute (DMI). Conference participation. 3-4 April 2008. France. http://letterstoaustralia.blogspot.com/2008/06/design-thinking-new-challenges-for.html

'*Design in Public Life: Insights into the Designs of the Time (Dott 07) public commission projects.'* Presentation. 11 February 2008. Design Council, London UK

2007

DeSForM (Design and Semantics of Form and Movement). Conference participation. 12-13 December 2007. Northumbria University, Newcastle upon Tyne UK http://letterstoaustralia.blogspot.com/2008/02/desform-07-december-2007.html

'Understanding the role of design practice in public commission projects and their broader relevance to service design contexts.' Presentation. 31 October 2007. Northumbria University, Newcastle upon Tyne UK

InterSections 07. Conference attendance. 25-26 October 2007. NewcastleGateshead UK.

http://letterstoaustralia.blogspot.com/2007/10/some-reflections-on-intersections.html

Dott Festival. Festival attendance and volunteering. 16-26 October 2007. NewcastleGateshead UK.

http://letterstoaustralia.blogspot.com/2007/10/dott-festival-day-1.html

http://letterstoaustralia.blogspot.com/2007/10/dott-festival-day-2.html

http://letterstoaustralia.blogspot.com/2007/10/dott-festival-day-3.html

http://letterstoaustralia.blogspot.com/2007/10/dott-festival-day-4.html

http://letterstoaustralia.blogspot.com/2007/10/dott-festival-day-7.html

http://letterstoaustralia.blogspot.com/2007/10/dott-festival-day-8.html

PGR Presentation. 6 July 2007. Northumbria University, Newcastle upon Tyne UK

Design for Services. Workshop participation. 2 July 2007. Hosted by Oxford Business School, Oxford UK. http://2-drifters.blogspot.com/2007/07/designing-for-services-at-oxford.html

Appendix 24

Training Needs Analysis (2012)

POSTGRADUATE RESEARCH STUDENT SKILLS TRAINING PLAN

During your research degree programme you are expected to develop a range of skills to give breadth to your learning. This plan helps you evaluate your learning needs and develop a timetable for enhancing skills. You should work through the list and evaluate whether you already possess the skill, need to develop or enhance it. If you have achieved the skill mark this in the second column. Provide evidence for your achievement in the third column.

PGR Student's name: Lauren Tan

Principal Supervisor's name: Robert Young

Academic School: School of Design

Start date: 4 June 2007

Full time

Supervisors should confirm that you have completed your skills training at each stage.

IPA stage	MPP stage	Final stage
Supervisor Signature	Supervisor Signature	Supervisor Signature
....	....	....

MPP Stage

Research Skills and Techniques – to be able to demonstrate skill in:	Achieved / Partly Achieved/ Not Achieved	Achievement / Enhancement programme
developing theoretical concepts	Partly achieved	Utilisation of Grounded Theory approach sees how theory is emergent. Indicative theoretical ideas are outlined in the MPP Appendix.
the techniques available for keeping up to date in the area of research	Achieved	Lots of contact with industry, conferences, workshops, talks and with the Design Council.
relevant research methodologies, techniques and their application	Achieved	A hybrid research methodology has been employed in the research programme.
critical analysis and evaluation of findings in relation to others	Partly achieved	NVivo training has been completed. Currently analysing qualitative research data collection.
summarising, documenting, reporting and reflecting on progress	Achieved	Reflective journal, Meeting and event write-ups, monthly research newsletters and research blog is evidence of this.

Research Environment – to be able to develop:	Achieved / Partly Achieved/ Not Achieved	Achievement / Enhancement programme
a broad understanding of the context, at national and international level, in which research takes place	Achieved	But ongoing due to changes in the Design Council strategy which sees more overlap their activities and the content of this research.

Skill	Achieved / Partly Achieved/ Not Achieved	Achievement / Enhancement programme
an understanding of the processes for funding and evaluation of research	Achieved	PGR Handbook has been used to guide this understanding
arguments to support their research approach based on sound principles.	Partly achieved	Analysis and coding of data collection is currently in progress
Research Management – to develop the skill to use:	**Achieved / Partly Achieved/ Not Achieved**	**Achievement / Enhancement programme**
effective project management through the setting of research goals, intermediate milestones and prioritisation of activities	Achieved	This is largely outlined in the MPP report, but more frequent milestones and short-term goals need to be developed.
appropriate resources and equipment to design and execute data collection	Achieved	Data collection already completed. A shorter second phase at the very end of the programme will require less resources and equipment.
appropriate bibliographical resources, archives, and other sources of relevant information	Partly Achieved	Endnote training has been completed. Greater utilisation of Endnote will ensure more efficient referencing.
information technology appropriately for data management, recording and presenting information	Partly Achieved	Currently limited access to Nvivo. Options to purchase software for personal use and/or extended visits to Newcastle are currently in planning.
Personal Effectiveness – to develop the skills of:	**Achieved / Partly Achieved/ Not Achieved**	**Achievement / Enhancement programme**

	Achieved	
learning and acquiring knowledge	Achieved	But new residential location will allow greater access to the design industry and practice.
creativity, innovation and originality in one's approach to research	Achieved	This is discussed in the MPP Report
flexibility and open-mindedness	Achieved	This is discussed in the MPP Report
drawing upon sources of support and recognising boundaries	Achieved	This is discussed in the MPP Report
initiative, independent working and self-reliance	Achieved	The undertaking of research thus far has had a very strong independent approach to working with tactics to help self-motivation throughout all stages of the research.

Communication Skills – to develop the skills of:	Achieved / Partly Achieved/ Not Achieved	Achievement / Enhancement programme
clear writing in a style appropriate to the audience	Achieved	Thought looking to push this further in terms of articulation of research to wider audiences e.g. Non-designers and non-academics.
articulating ideas clearly using coherent arguments to a range of audiences	Achieved	Presentations at national and international conferences have demonstrated the ability to articulate ideas to a wide audience.
constructively defending research outcomes at seminars and viva	Partly Achieved	As above. Viva training is a high consideration, but will be attended closer to the end date of the research programme.

examination

	Achieved / Partly Achieved/ Not Achieved	Achievement / Enhancement programme
Networking and Teamworking – to enhance the understanding of:		
personal behaviour and its impact on others when contributing to team work	Achieved	Have acted as PGR Rep for the Design PGR Community for a year and done numerous presentations at the University, Design Council, workshops and conferences.
the skills of listening, giving and receiving feedback in a perceptive and supportive way	Achieved	Have given many presentations for peer review and also facilitated and captured discussions during these sessions.

Final Stage

	Achieved / Partly Achieved/ Not Achieved	Achievement / Enhancement programme
Research Skills and Techniques – to be able to demonstrate skill in:		
developing theoretical concepts	Achieved	Emergent theory from this research investigates design methodology through the different roles of the designer. Each of these roles comprises a set of practices that is demonstrated in the Dott 07 projects.
summarising, documenting, reporting and reflecting on progress	Achieved	Reflective journal, Meeting and event write-ups, monthly research newsletters and research blog are evidence of continual reflection of the research process, reporting and

		summarising thinking and ideas. Numerous peer review sessions have been undertaken with industry, at conferences, workshops, presentations, and with the co-sponsor the Design Council (See Appendix 22 for a list of peer review sessions).
Research Environment – to be able to develop:	**Achieved / Partly Achieved/ Not Achieved**	**Achievement / Enhancement programme**
an understanding of the process of academic or commercial exploitation of research results	Achieved	Publication of several papers, including co-authored papers with designers (see Appendix 20) and invitations to speak at conferences (see Appendix 21) demonstrates the sharing of research results with many different audiences. How the roles more formally help designers develop their design practice is to be explored post-PhD. For example with former PhD candidate Emma Jefferies who is developing a service called 'Design Doctor' that helps design companies reflect on their practices and develop strategies for the company's future.
Personal Effectiveness – to develop the skills of:	**Achieved / Partly Achieved/ Not Achieved**	**Achievement / Enhancement programme**
initiative, independent working and self-reliance	Achieved	Numerous channels to communicate this research were used such as sharing of files with Supervision Team on Dropbox, PhD blogs, PhD newsletter, presentations, conferences and numerous peer review sessions.

Communication Skills – to develop the skills of:	Achieved / Partly Achieved/ Not Achieved	Achievement / Enhancement programme
clear writing in a style appropriate to the audience	Achieved	Numerous papers were published throughout the PhD programme, including two papers for a (non-design) medical audience (see Appendix 20). Attendance of Writing Across Boundaries workshops at Durham University in 2009 also encouraged better research writing.
articulating ideas clearly using coherent arguments to a range of audiences	Achieved	Presentations at national and international conferences have demonstrated the ability to articulate ideas to a wide audience (see Appendix 21).
constructively defending research outcomes at seminars and viva examination	Achieved	Mock Viva completed (2012). Presentations at national and international conferences have been excellent practice for the Viva examination (see Appendix 21).
promoting the public understanding of research	Achieved	Public presentations have included discussions of research methodology. Close connections with industry, co-authoring of papers and the design industry's interest in this research demonstrates how the public have engaged with the research.
effectively support the learning of others through teaching or mentoring	Achieved	Delivered a number of presentations to Northumbria under-graduates and Masters students. Lectured and been on panels at various universities and supported the PGR community over the years, including establishing an international PhD community by setting up a PhD Design Group on Facebook and organising PhD workshops in London.

Networking and Teamworking – to enhance the understanding of:	Achieved / Partly Achieved/ Not Achieved	Achievement / Enhancement programme
the ways in which co-operative networks and working relationships may be developed and maintained within the institution and the wider research community	Achieved	Have worked with the University and the Design Council on a range of activities and projects. Also set up an international PhD Design Group (on Facebook) to share PhD experiences. In 2008 co-founded and established the Service Designing network - a global network of service designers using social events to share knowledge about service design (See www.servicedesigning.org)
personal behaviour and its impact on others when contributing to team work	Achieved	The research programme is largely self-directed work with limited opportunities for team work. Team work has been undertaken in other activities and projects with the University and the Design Council, and co-authoring with designers.
the skills of listening, giving and receiving feedback in a perceptive and supportive way	Achieved	PGR Rep role at the University to represent the Design PGR community identified issue and needs that were presented to the Graduate School. Participation, attendance and reporting of many conferences, workshops and debates over the years has contributed not just to the PhD thesis but developed skills in many areas such as listening, participation, debating and writing. Participation at two Writing Across Boundaries workshops at Durham University. The first workshop was as a participant to learn and share PhD research writing and research approaches.

	Achievement / Enhancement programme
	Second workshop was an invitation as a discussion panel member to share research progress and how the workshop helped shaped this progress.

Career Management – to:	Achieved / Partly Achieved/ Not Achieved	Achievement / Enhancement programme
appreciate the need for and show commitment to continued professional development	Achieved	Am aware and interested in pursuing future research questions. Publishing of papers and blogging will continue post-PhD demonstrating a form of CPD related to the research topic area.
take ownership for and manage career progression through set realistic and achievable career goals, and identifying ways to improve employability	Achieved	Have developed an international network of service designers and interested stakeholders throughout the PhD programme. Have attended a number of job interviews for opportunities post-PhD. Have been included in many roundtables that have related to discussing public service design and, design and policy in the UK and also Australia.
demonstrate an insight into the transferable nature of research skills to other work environments and the range of career opportunities within and outside academia	Achieved	Current collaboration with a former PhD student is currently exploring how our research findings can create career opportunities and be transferable to design practice. The Writing Across Boundaries workshops at Durham University shared research skills and approaches across a number of disciplines.
present one's skills, personal attributes and experiences through effective CVs, applications and interviews	Achieved	Have previously held several jobs in the private sector which required these skills. Casual and constract work throughout Year 4 of the PhD also demonstrates experience in industry.

	Achieved	Service Designing network, PhD Design Group (on Facebook) and attendance of two Writing Across Boundaries workshops at Durham University are the best exemplars of this.
the ways in which co-operative networks and working relationships may be developed and maintained within the institution and the wider research community		

Details of courses / seminars / modules / activities completed or attended

Name of course / activity		Date(s) Attended
	2007	
PGR Presentation, Northumbria University		June 07
Designing for Services workshop, Oxford		July 07
Mapping Design Activism workshop, Leeds		September 07
Design Council Presentation, London		September 07

London Design Festival, London	September 07
Dott 07 Festival, NewcastleGateshead	October 07
Dott 07 Debates, NewcastleGateshead	October 07
InterSections Conference, NewcastleGateshead	October 07
Designing for Services workshop, Oxford	October 07
Presentation to Northumbria Master students	October 07
Presentation to Northumbria Undergraduates	November 07
6 Month Review Presentation, Northumbria University	December 07
Desform Conference, Northumbria University	December 07
NVivo training	December 2007

2008	
6 Month Review Presentation, Design Council	February 08
Dott 07 Explorers Club, Newcastle	March 08
Design Management Institute Conference, France	April 08
London Design Tour, London	April 08
Endnote training	April, 08
PhD Design Group Drinks, London	May 08
Graphic Design Festival Presentation, Netherlands	June 08
Changing the Change Conference Presentation and Paper, Italy	July 08
Dott Cornwall Methodology workshop, Design Council	August 08

	Date
Presentation to 2nd Road, Sydney	September 08
Design in Public Services workshop & facilitation, Design Council	November 08
Design PhD Group Drinks, London	November 08
Design in Public Services workshop & facilitation, Design Council	December 08
2009	
Submitted MPP Revisions	January 09
Writing Across Boundaries workshop, Durham University	March 09
'Observations of design in the public and social sectors.' Design Council presentation	April 09
'Seven 'new' roles designers are playing in public life.' . Sustainability, Innovation & Design Conference, Lancaster University	June 09
NHS Design Showcase at the Health Innovation Expo	June 09

'So you're a designer, what else could you be?' New Designers presentation	July 09
'Understanding design methodology in the public and social sector: Seven roles of designers in Dott 07 and their relevance to sustainable development contexts.' Leeds Festival of Design Activism, Leeds	July 09
Service Design Thinks 1, London	September 09
The RSA debates: Design, cities and citizenship in the 21st century, London	September 09
Co-opportunity: A Day for World Builders workshop, London	September 09
Interdisciplinary Discovery Through Design workshop, London	September 09
Design for development: Seeing beyond the world of wealth debate	October 09
'Perspectives on the changing role of the designer: Now and to the future.' Icsid Design Education Conference, Singapore	November 09
World Design Congress, Singapore	November 09

2010	
Open Dott, Cornwall	February 10
Writing Across Boundaries panel member, Durham University	March 10
Service Design Thinks 3: Service Design from Scratch, London	March 10
Inspired: Design of our Times conference, Cornwall	March 10
'Co-designing for dementia: The Alzheimer 100 project.' TEDx presentation, Montreal	October 10
Service Design Thinks 2: Service Design at Scale, London	October 10
2011	
Master of Design lecture, University of Technology Sydney (UTS) Australia	March 11
Service Design Drinks and Thinks presentation, Sydney	March 11

Design Thinking Drinks, Sydney	April 11
Australian Design Alliance (AdA): Driving Australian Design Strategic Intent Conversation, Sydney	June 11
Design Excellence Forum, Sydney	June 11
Object Creative Advisory Group meeting, Sydney	July 11
Service Design Drinks and Thinks, Sydney	July 11
The changing role of the designer: Past, present and future.' Presentation, Australia	August 11
'Design-led Solutions to Wicked Problem: Dott 07 and design for public sector innovation.' Presentation. Powerhouse Museum, Australia	August 11
Sustainable Sydney 2030, Sydney	August 11
Australian Design for the Next Decade, Sydney	August 11
Design Thinking Drinks, Sydney	August 11

Service Design Drinks and Thinks, Sydney	September 11
Design Thinking for Business breakfast, Sydney	November 11
Design Meets NSW Government, Australian Design Alliance (AdA) event, Sydney	November 11
2012	
Presentation to Meld Studios, Sydney	Jan 2012
Mock Viva, Skype	Feb 2012

Appendix 25

Epilogue

Any significant undertaking produces changed perspectives and a great deal of learning.
In this addition to the main thesis, I reflect on this PhD journey.

Epilogue

"We are human beings first and designers second. No amount of professionalism can substitute for our being personally involved. Our deep-rooted human qualities are what brings the greatest vitality and relevance to our work."
—*Lauralee Alben (1997) At the Heart of Interaction Design*

They say that the journey is more important than the destination. This has certainly been the case of this PhD journey. There is often an emphasis on the output of a PhD as a thickly bound thesis. And with this, skills for undertaking big research projects. But a PhD is so much more than a thesis and new research skills. I have found that it has often forgotten the experience of the PhD and its journey can bring many unexpected encounters and experiences that would have otherwise not occurred. It can also bring many answers to questions and many new aspects of learning.

The PhD journey

Many people say a PhD thesis can be done a lot quicker. I believe them. But it is the structure of a PhD that does not permit this. It is the combination of social isolation, little daily structure and routine, little early rewards, a higher level of self discipline which is required etc. which all contribute to a longer than anticipated PhD process. Added to this, long incubation periods of reflection, thinking, finding, reading, discussing etc. that also draw out the PhD process.

I think one of the things that is not emphasised much in PhD research is the value of discussing ideas and thinking with others. Discussing research ideas is really important. Just as important as thinking or writing on your own. In fact being on your own never really gets you as far as having a conversation. Some people suggest writing as early as possible. Again I don't believe in this because writing is chronological. It forces logic, and sometimes, in the early stages of a PhD, you need to be less logical, more exploratory to allow freer thinking. But while discussions allow this, you also need to capture all that is being discussed or it gets lost. This is where I use mind mapping a lot. Mind mapping and drawing makes thoughts public and visible, but they don't necessarily have to be structured, until later. Mind mapping ensures that thoughts don't escape and mind mapping can be helpful before writing because

the maps can be used to create a structure for a piece of literature.

Publishing: Balancing time and rewards

Mind mapping brings me to publishing. Publishing papers was cautioned during my PhD for the time it took. I roughly worked out that a journal paper takes about a month to complete. This is not a month of full-time writing, but a month of on and off of writing, revisiting, discussing, revising, editing etc. Then submitting for peer review and making revisions again. Sometimes authoring papers held up the PhD process, but I found them incredibly rewarding. Not only do they validate the originality of research and ideas, but they also give you something tangible to easily share with others. Papers have also given opportunities to present and attend conferences[1] and also meet people who have come across my papers. Publishing forces you to reach a wider audience, simplify your arguments and also gives you a boost of confidence during long periods of the PhD journey.

Opportunities during and beyond the PhD: The Designer as Networker

In my thesis I talk about many different roles of the designer. As a designer myself, I often thought, what is my role in this process? I did share many of the roles I wrote about, while not to the extent of the inspirational designers I have come to know, I had a sense of what each role felt like. I came to understand I had my own role, created by this very PhD. The first role I had was one of being an *organiser* among the service design community. This role saw the establishment of many networking nights for the community and this role would have not been as successful if it wasn't for the neutral position the PhD gave me as a researcher. Since 2008, I along with two other designers have been organising and hosting two streams of networking nights called Service Design Drinks and Service Design Thinks. These events, and many others come under the umbrella servicdesigning.org a website that promotes "events for people who are service designing by people who are service designing." (servicedesigning.org). Service Design Drinks nights in London bring together service designers and people interested in service design to share knowledge, network and of course have a drink together. Since 2009, Service Design Thinks nights, held in London's SoHo, again bring together the service design community to share interesting and inspiring stories and projects from people who work on the fringes of service design practice. The success of the servicedesigning.org can be seen in the adoption of the model around the world in other

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[1] Such as Changing the Change (Italy, 2008); Icsid Design Education 2050 (Singapore, 2009); TEDx Design for Health (Montreal, 2010).

cities. To date, fourteen cities[2] use the servicedesigning.org model and website to organise and host their own events, with many cities developing their own specific events such as Amsterdam's Service Design Reading Circle.

My role: The Designer as Articulator of Value

The second role I have come to reflect upon is the role of the *designer as articulator of value*. I frame it in a similar phrase like the seven Dott 07 roles because I think this is a role that is adopted by many designers and could be adopted by more of them. My role as designer as articulator of value is about 'advocacy with evidence.' The Dott 07 projects gave a lot of evidence for the value and impact of design for social development. In its analysis, the value of designers in adopting roles similar to that in other professions, such as marketing, futures thinking, organisational development etc. also began to show. This was really important because it not just created a distinction for what designers do, but on a more general level showed how designers can be part of large-scale co-operations for positive social change[3]. Some key parts of my role as designer as articulator of value was about bridging vocabularies, for example writing for a medical journal audiences and speaking to non-design professionals at conferences. The importance of communication, written, verbal and visual could not be more important here, and it is unfortunate that most designers prefer the visual and verbal over the written because it is the latter which many other disciplines we work with, or who commission design, find the most compelling form of evidence on which to base their decisions. Writing and publishing has the ability to present just enough evidence to inspire and influence business and government, and it has been a personal commitment to encourage practicing designers to do more publishing and take on a larger role of the designer as articulator of value.

The only problem now with this role is that when my PhD is completed, how sustainable is it financially? While I was doing my PhD the Design Council and Northumbria gave me the freedom to adopt such a role, but it needs to be either absorbed into the design companies themselves, academe or continued by the Design Council and other players with respect to the fine details of design practice.

The role of the designer as articulator of value showed me that when one embarks on a PhD, there are many, many opportunities to do more than just produce a thesis and gain new

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[2] Amsterdam (Netherlands), Cologne (Germany), Berlin (Germany), Dublin (Ireland), Glasglow (Scotland), Leeds (UK), London (UK), Lisbon (Portugal), Madrid (Spain), Paris (France), São Paulo (Brazil), San Francisco (USA), Stockholm (Sweden) and Sydney (Australia).

[3] New York-based research initiative Visionarc are currently exploring this area: http://visionarc.org

research skills. A big part of this was attributed to knowing the industry, and intuitively feeling that the research does not stop at the data collection.

Research is not a snapshot in time

In 2008 I completed my data collection. Thirty-one interviews gave insight into each of the 7 Dott 07 projects. The realisation that design practice, and the projects kept on moving and evolving became very clear to me and helped me realise that when you do research, the world does not stop. You must find a way to keep up with what is happening in practice, especially if your research is about an industry, and especially if it is an emerging subject matter. The data collection should not start and stop with one interview, but knowledge should continue to be gained long after the data is collected. Sometimes the capture is supposed to be a snapshot in time, but many things that happen in the future, give the opportunity of hindsight to catalyse the research analysis. Many of the Dott 07 projects created a life of their own after the programme finished at the end of 2007. Projects such as Alzheimer100 and LowCarbLane found their way to national UK policy and have since been implemented three years after the projects first started. Other projects, like DaSH had recommendations integrated in different ways and Urban Farming continues to run to a similar model to the Dott 07 project, including using the same name, and inspiring many new and connected ideas for improving health and well-being in Middlesbrough. The measurement of impact of the Dott 07 projects needs to happen over a long period of time, and so too does the research that investigates Dott 07.

New questions for the future

During the course of this PhD journey, many of the questions I brought up in the Prefacehave now been answered. Many of them were personal questions and not for publishing here. But the liberation of these questions has been replaced with new ones.

One key question that has come out for me from this PhD journey has emerged form having observed the small design industry I know, often called service design. Since 2007 I have watched the industry of around a dozen companies throughout the UK grow (2007-2008), retract (2008-2009), grow again (2009-2010) and retract (2010-2011) with the last retraction due to public sector spending cuts and the volatility of the UK and global economy. The growth and retraction was largely attributed to the economic and political climate in the UK which has experienced a turbulent ride over the past 4 years. The impact of this was felt and filtered down to even the smallest design companies. Some of them rode out the waves, others did not do so well, resulting in many redundancies along the way, but all of them survived. These observations get me thinking about questions around the 'business of design'

rather than the more popular topical area, 'design for business.' To add another layer, many of the projects done in Dott 07 took a co-design approach, which has an uncomfortable fit with the consultancy model upheld by almost all design companies. Co-design is about involving stakeholders in the design process and also transferring methods and skills of design to clients (i.e. those not professionally-trained as designers) where does this leave the consultancy model? Is consultancy the most sustainable model or is there another model which a design business should adopt? Another issue is the size of these companies. None of them reached more than 20 people full-time, and I often wondered if scale was needed to do big projects, say with the NHS who are one of the largest employers in the world. thinkpublic have told me that over their 6 years of practice they have worked with lots of hospitals throughout the UK,one or more in every region of the UK. Maybe this is the right model; small but slow, organisational change after all doesn't happen overnight but over time. This brings me to something John Thackara, Programme Director of Dott 07, first questioned the very first time I met him. He asked about scaling Dott, both as a programme and its projects in other regions and also other countries. One thing that has also become of interest to many designers of the companies that led the Dott 07 projects is how they might scale their practices overseas. live|work have found particular success, having started in the UK, then Norway, then Brazil. But does the scaling of Dott and of these design companies require a particular set of conditions to create the space for design for services and social issues? Conditions such as; a responsive political context, and 'players' like the Design Council, NESTA and the RSA, which help simulate interest and invest in demonstrations. Mary Cook's forthcoming PhD research (2012) takes a historical perspective on how the design industry of design for services and social issues has emerged. But can the mix of conditions be replicated elsewhere?[4]

The PhD journey has given me the answers to questions I had entering the PhD investigation. It should be no surprise that the PhD experience and its learning raise many new questions. Learning in life has no stopping point. The next phase of my own journey will no doubt be trying to discover answers to the numerous new questions this PhD has given me.

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[4] Studies of recreating Silicon Valley in other parts of the world have not usually held strong evidence for this, but analysis of details needs to be explored to understand these arguments.