

Extract of the

**Proceedings of the 3rd European Conference on Design4Health** Sheffield 13-16th July 2015

Editor: Kirsty Christer

ISBN: 978-1-84387-385-3









# Immersing the artist and designer in the needs of the clinician: evolving the brief for distraction and stress reduction in a new Child Protection Unit.

Chris Fremantle<sup>1</sup>, Leigh-Anne Hepburn<sup>1</sup>, Alexander Hamilton<sup>2</sup> and Jackie Sands<sup>3</sup>

<sup>1</sup>Gray's School of Art, Robert Gordon University, UK

<sup>2</sup>Artist, UK

<sup>3</sup>Arts & Health Senior, NHS Greater Glasgow & Clyde, UK

#### **Abstract**

Engaging clinicians in the design of new, less stressful spaces in healthcare is an interdisciplinary challenge for artists and designers. The design brief is the primary means of ensuring shared understanding and success criteria for creative projects (Press and Cooper, 2004) and highlights ambitions and constraints for the project. Conventionally the brief is prepared by the client and issued to the artist or designer. This assumes that the client knows at the outset of the process how to articulate their needs and is able to envisage the outcome. Alternative processes emerging through co-design and interdisciplinary working assume that the brief is developed or evolved jointly as part of the process and even during the process, and is focused on the experience of the user. This paper focuses on the evolution of a meaningful 'brief' through a process driven by the art and design team, aimed at opening up mutual understanding with the clinician to look at specific issues around the patient experience.

Keywords: Brief, Interdisciplinary, Visual research methods, Participation, Co-creativity



#### Introduction

This paper explores the nuances of the co-created design brief in practice, within the context of a health care setting. There has been increasing research interest in interagency collaboration within the health and social care setting (McMurtry, 2010). Within a participatory design context, co-creation and co-design can be considered as 'the creativity of designers and people not trained in design working together in the design development process' (Sanders and Stappers, 2008). Little research exists about the creation of the brief within a collaborative and interdisciplinary setting and more specifically within this context.

#### Context of the research

The context is the commissioning of interior design elements for a child protection unit in a new Children's Hospital. The project for the Child Protection Unit built on the larger project focused on the interior design of interview, family and quiet rooms across the hospitals. The lead artist had been appointed through an open selection process for the wider project, and developed the work for the Child Protection Unit as a result of meeting the Clinical Director during the consultation process for the wider project. In terms of a conventional design brief, all parties had architectural plans of the space and an understanding of the practical parameters of the building. The ambition for the project was expressed in words in the proposal put to the Children's Hospital fundraisers, rather than in a document entitled 'brief' and the outcome of the process was probably best described as a concept design rather than a more detailed 'design brief'. Our focus is on the dynamics of initial interactions between the design team and the client during which the scope and ambition of the project were developed, a shared understanding of practices was achieved, and the new patient journey was articulated.

## **Design Briefs**

Design briefs are used as a key element in the commissioning process across the built environment sector. However despite this there are no rules governing the content of design briefs, nor are there specific ways in which a design brief should be developed and written (Cooper and Press, 2004). Furthermore, very little is written about the role of the design brief in facilitating and enabling processes of collaboration, interdisciplinary working or participation between designers, clients and users.

The importance of collaboration, interdisciplinary working and participation are on the other hand, well documented. Professionals are increasingly required to engage and work collaboratively in an interdisciplinary way (De Amour *et al*, 2005; Ramaswamy and Gouillart, 2010). However the term collaboration is ambiguous and can refer to interaction of varying forms from co-operation to co-creation (Sanders and Stappers, 2008). The role of collaboration as a method of gathering and



generating perspectives on a problem, as well as delivering solutions, which can influence the decision making process is well documented in the literature (Olson *et al*, 1992; Geisler and Rogers, 2000) and the participatory nature of collaboration, collectively working towards a shared outcome is recognised as being a critical element (Huxham and Vangen, 2005).

In terms of designers' motivations, individual benefit, prestige, the opportunity to take risk, or the pursuit of strategic interests often comes before the needs of the user or client (Ivory, 2010). Beyond constraining the designer, involving users in a design process is recognised by Reich *et al*, (1996) as a critical component in successful collaboration. Specific to collaboration, Van Gassel *et al*, (2014) recognise that as well as working towards a shared output, collaborative practice also provides the opportunities for participatory learning. Each participant brings discipline specific knowledge and experience and as such it is often challenging to avoid conflict and contradiction. Collaboration can fail due to factors including lack of shared understanding.

Additionally, the role of reflective practice within a collaborative setting is important. Schön (1983) claims, "our knowing is our doing" and when considered within the context of the design brief suggests that the doing of co-creation may facilitate the shared understanding required for collaboration. Similarly, Friedman (2000) acknowledges that the shift of knowledge from tacit to explicit is needed to form shared understanding and a common vision. This is true for the context of the design brief in practice to ensure clear articulation and at manage participant expectation.

Von Lehn *et al*, (2001) discuss ways in which participants configure what is experienced, highlighting particular elements and dramatizing certain elements and operations. In this way, the presence of others also has a significant role in how individuals interact, experience and ideate. This practice of configuration, of creating an experiential and participatory connection, offers possibilities for understanding the design brief as a point to develop collaborative understanding and idea development, rather than simply a mechanism of constraint on the designer. Is it possible that the practice of co-creating a design brief can encourage an increased engagement with the project, a better understanding of contributing factors through exploring together how collaborators experience and interact while working towards an enhanced and shared resolution?

#### The Setting

The research element of this project followed two face-to-face participatory workshops comprising of a clinician, an artist, an audio-visual (AV) specialist, an interaction designer and a design researcher. The workshops took place following earlier meetings that established the general parameters of the project as well as the (given) architectural layout of space. The focus of the workshops was to explore how the proposed new child protection unit would be used, to identify its anticipated user group needs as well as considering what artistic and AV approach could be adopted to enhance the architectural planned layout particularly focused on two issues: the patient journey and the provision of effective distraction. The workshops took place within



the clinical setting of the existing child protection unit and included a walk-through and in-situ conversation of how that space is currently used. Further discussion took place within the office of the clinician to gather additional data relating to the proposed space.

## Research Methodology and Data Collection

The research methodology adopted a design ethnography approach (Blomberg *et al*, 1993), combining methods such as direct observation (Bate and Robert, 2007), researcher embodiment (Buchenau and Fulton Suir, 2000) and visualisation and interaction mapping (Jordan *et al*, 1995). Direct observation was collated by observation focused on the conversations between participants, noting their interactions with each other and the physical space inhabited. Researcher embodiment is a critical process of design research that allows the researcher to experience first-hand the situated space of the 'user' and to facilitate a better understanding of the conditions and impact. Finally, visualisation and interaction mapping was used to document the interactions in real-time, illustrating key touch points that arose in unstructured observation.

## **Findings**

The findings suggest that co-creating a shared brief within an interdisciplinary collaboration in this context worked successfully to mitigate the issues inherent in traditional design brief development. As an outcome, participants had a shared ambition achieved despite different ideological positions. The main considerations arising out of the study were; disciplinary perspectives, shared language and interpretation, metaphor as understanding and roles and hierarchy.

#### Disciplinary perspectives

The disciplinary perspectives brought to the collaboration by participants were accepted and explored by the group together, encouraging each other to share their thoughts in an open and accepting way. This relaxed process facilitated easy questioning and clarification of points without the conflict that frequently occurs in collaboration. This broadened the scope of the conversation and appeared to generate a level of shared understanding of each participant's knowledge and experience, their skills and their role within the collaboration. This exposure to multi-disciplinary knowledge and perspectives can facilitate experiential learning opportunities, contributing towards a more equal and valued participation (Stellje, 2008) and this was apparent within the workshops.



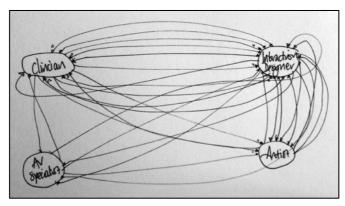


Figure 1: Workshop Visualisation

## Shared language and interpretation

The workshops began with facilitated open questioning by the interaction designer, working to establish the flow of conversation. In figure 1, this is illustrated by the increased flow of conversation between the interaction designer and the group and was facilitated by a line of questioning asking the clinician to share their role, the role of the child protection unit and an exploration of how the space is used. Early discussion generated a shared language, a common vocabulary around which it was possible to engage in a collaborative way, initially led by the clinician who explained the terminology and practices specific to the operation of the child protection unit. Other participants actively engaged the clinician in seeking clarification and articulation of key themes.

Further into the workshops, other participants began to share their own vocabulary, often in response to a question posed by the clinician but also as a way of summarising and re-purposing the information shared in a way that was accepted and understood by all participants. The artist often worked as an interpreter, repeating the stories of the clinician and translating them across experience. This was apparent when the artist condensed the verbal account of the clinician, reiterating the key elements of the story without the clinical focus and then placed them within the space of the proposed new unit, taking into account usability and potential points of interaction.

This change of individual definitions to shared terms worked to create a sense of unity among the participants and the development of a common vision began to emerge. At this stage, participants appeared to become more engaged and began to ideate, offering suggestions and potential solutions and this demonstrated a fluid evolution towards generating a design brief with actions.



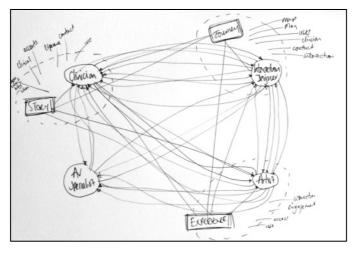


Figure 2: Workshop Visualisation

## Metaphor as understanding

Metaphors were used throughout the workshops to externalise tacit knowledge and build a shared, experiential understanding of the context of the space, how it might be used and the experiences of those who might use it. As discussed in the framework developed by Schon (1979), metaphor can be used to help understand unfamiliar design problems in a creative way by juxtaposing them with known situations (Casakin, 2007). Metaphors were observed around three main themes: storytelling, experience and journey, as illustrated in the workshop visualisation in figure 2.

Storytelling was a significant part of the workshop interaction, led primarily by the clinician. Using experiences and practical examples to identify, illustrate and challenge became an important part of the collaborative process. The clinician had a strong personal vision, which was supported by the artist however during the workshops, it often fell to the interaction designer to facilitate and refocus the workshop.

The journey of the user was a significant element of the exploration undertaken by the artist. The use of journey as a metaphor is common across design disciplines (Cross, 2011). Consideration of the journey through the space of the unit, both physical and mental including how users might interact with the space was discussed and generated significant insights into how the project might progress. This was often used to question the clinician and to facilitate areas of discussion not yet covered.

This process and practice of collaboration, the articulation of ideas through storytelling, the illustration of experience through metaphors, including specifically journeys, and grounding of the vision through a facilitated element allowed for an exploring of individual and collaborative ideologies towards a shared outlook and further to this also worked towards an articulation of that



shared vision. It was key to allow for the sharing and articulation of these ideas and it is from this articulation that the structure and content of the co-create brief begins to emerge.

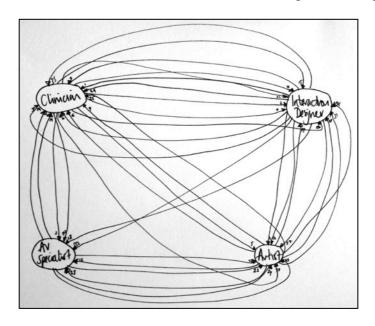


Figure 3: Workshop Visualisation

## Roles and hierarchy

As discussed earlier, the challenges of the traditional brief include ownership and direction as well as considerations of power and control. Suchman (1994) considered the construction of boundaries by designers, whereby the user is represented by external evidence rather than being an active participant and therefore the designer maintains a sense of design control or specialist authority.

From the outset, there appeared to be no clear lead for the brief development other than the discipline specialisms clarified. The visualisation in figure 3 highlights the shared nature of the engagement, no participant leads or monopolises discussion and the flow between participants was well distributed. While the artist was the established creative lead on the project, this was not made explicit and while there appeared to be implicit understanding of this, it in no way appeared to influence the ability of participants to make suggestions or engage outwith their identified specialism. Similarly, there were no identified expectations by individual participants other than a general understanding that a positive resolution should or even must be achieved. This was apparent in the relaxed and open interaction that took place within the clinical setting and places trust central to the process of co-creating a shared outlook, or a shared brief.

With regards to control, the workshops were led in the first instance by the clinician, appearing to be due to the physical location of the workshops within the clinical setting. This facilitated an



embodied interaction with the space, in which to explore their experiences. However, this did not translate in terms of power, indeed the clinician often looked to the wider group for reassurance of their thoughts and permission to explore ideas further.

The clinician had a practitioner background but was now working in a management context and occasionally appeared to feel challenged by the bureaucratic and hierarchical nature of their role when discussing the constraints of the project, from financial budgets to physical location of sinks. However this did not appear to impact negatively on the collaborative process, rather it facilitated further discussion and shared ideation with a view to address some of the concerns.

#### Discussion

This research explored the example of a co-created brief as a meaningful evolution of the traditional design brief. The methodology has highlighted the key role of developing shared understanding across disciplines and the role of metaphors in particular in providing a means to that shared understanding. Establishing the initial relationship between participants is a critical part of the process of collaborative design to facilitate the open atmosphere required. In terms of process, the co-created design brief allows for the testing of constraints, but still needs to articulate external parameters. This research has asked questions of the design brief, considering that the brief is neither a starting point nor an end point but as a method of co-creation that can foster engagement and work to explore, generate and articulate a shared vision. The circumstances of this particular exercise, built on earlier work involving some participants, means that the observations need to be tested in other contexts.

The tacit knowledge, experience and discipline specialism of each participant contributed significantly to the progress of this project. The clinician demonstrated a strong personal drive to ensure the child protection unit vision was realised while the artist was keen to explore and push the boundaries of what could be experienced within such a space and within the traditional architectural confines of a health setting. The collaborative brief in this context worked as process linking the formalised architectural plans, technical and building parameters, while enabling the teasing out of the issues.

Enabling an immersive environment in this way provided participants with opportunities to identify and share their vision and views before then moving on to create a shared outcome, illustrating the ways in which understanding how to achieve a co-created design brief has the potential to contribute to the evolution of the design brief as an important tool, not merely to constrain the designer, but to enable better communication between designer and client.



#### References

BATE, Paul and ROBERT, Glenn. (2007). Toward More User-Centric OD: Lessons From the Field of Experience-Based Design and a Case Study. *Journal of Applied Behavioural Science*, **43** (1), 41-66.

BLOMBERG, Jeanette, GIACOMI, Jean, MOSHER, Andrea and SWENTON-WALL, Pat. (1993). Ethnographic Field Methods and Their Relation to Design, In D. Schuler and A. Namioka (Eds.), *Participatory Design: Perspectives on Systems Design*, Lawrence Erlbaum Associates, Hillsdale, NJ, 123-156.

BUCHENAU, Marion and FULTON SURI, Jane. (2000). Experience Prototyping. *In Proceedings of DIS 2000*, Brooklyn, New York.

CASAKIN, Hernan, P. (2007). Metaphors in Design Problem Solving: Implications for Creativity. *International Journal of Design*, **1** (2), 21-32.

CROSS, Nigel. (2011). Design Thinking. Oxford: Berg.

DE AMOUR, Danielle, FERRADA-VIDELA, Marcela, SAN MARTIN RODRIGUEZ, Leticia, and BEAULIEU, Marie-Dominique. (2005). The conceptual basis for interprofessional collaboration: Core concepts and theoretical frameworks. *Journal of Interprofessional Care.* **19** (1), 116-131.

FREMANTLE, Chris, HAMILTON, Alexander, SANDS, Jackie. (2013). *Dignified Spaces: participatory work de-institutionalises rooms in the heart of the clinical environment*. Sheffield: Proceedings of the European Design for Health Conference.

FRIEDMAN, Ken. (2000). Creating design knowledge: from research into practice. *Proceedings of the International Conference on Design and Technology*. Loughborough, UK.

GEISLER, Cheryl and ROGERS, Edwin H. (2000). Technological mediation for design collaboration. ASM Special Interest Group for Design of Communications. 395-405.

HUXHAM, Chris and VANGEN, Siv. (Eds) (2005). Managing to Collaborate: The Theory and practice of collaborative advantage. London, England: Routledge.

IVORY, Chris. (2010). Client, User and Architect Interactions in Construction: Implications for analysing innovative outcomes from user-produces interaction in projects. *Technology Analysis & Strategic Management*, **16** (4), 495-508

JORDAN, Brigitte. and HENDERSON, Austin. (1995). Interaction Analysis: Foundations and Practice, *The Journal of the Learning Sciences*, **4** (1), 39-103.



MCMURTRY, Angus. (2010). Complexity, collective learning and the education of interdisciplinary health teams: Insights from a university-level course. *Journal of Interdisciplinary Care.* **24** (3), 220-229.

PRESS, Mike and COOPER, Rachel. (2003). The Design Experience: The role of design and designers in the twenty-first century. London: Gower.

RAMASWAMY, V. and GOUILLART, F. (2010). The power of co-creation. New York: Free Press.

REICH, Yoram, KONDA, Suresh, L., MONARCH, Ira, A., LEVY, Sean, N. and SUBRAHMAUAN, Eswaran. (1996). Varieties and issues of participation and design. *Design Studies*, **17** (2), 165-180.

SANDERS, Elizabeth and STAPPERS, Pieter .Jan, (1998). Co-creation and the new landscape of Design. *CoDesign*, **4** (1), 5-18.

SCHON, Donald. A. (1979). Generative metaphors in problem solving setting in social policy. In A. Ortony (ed.), *Metaphor and Thought (137-164)*. Cambridge: Cambridge University Press.

SCHON, Donald. A. (1983). The reflective practitioner: How professionals think in action. New York, NY: Basic Books

STELLJE, Andrew. (2008) Service Learning and Community engagement. NY: Cambria Press

SUCHMAN, Lucy. (1993). Working relations of technology production and use. *Computer Supported Cooperative Work.* **2**, (2) 21-39.