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Politics makes strange bedfellows:

addressing the 'messy' power dynamics in design practice

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Abstract

The paper addresses the role of the designer in navigating through politics and power dynamics that can potentially hinder ways in which people have input into a design process. It acknowledges that such obstacles are common to design practices and much is already documented in organisational, business and management frameworks (Best, 2006, p. 97; Jones, 2003). However, the paper draws on the author's doctoral research that explored how designers work within the complexities of politics and power dynamics and the agency they bring when working within such contexts.

Firstly, the paper clarifies its use of the word politics by distinguishing between the **Political** choices that designers make, to the embedded **politics** of power dynamics and hidden agendas. It acknowledges how the Political content and intention of design is widely discussed in communication design literature where designers have created political content toward a purposeful political outcome. The paper therefore focuses more on another political aspect to communication design practice that relates to values, relationships and power dynamics. These human aspects of practice are complex, 'messy' and are often implicit. The power dynamics within projects can significantly influence the way stakeholders have input into the design process and subsequent project outcome. The politics of the individual, organisation, community or the society can often abruptly and unexpectedly surface through designing.

Based on several interviews with a variety of communication design practitioners and project case studies from the author's research, the paper highlights a role that designers can potentially play in addressing the 'messy' politics that can manifest through design projects. The research explored various design interventions to enable a variety of people with different values, opinions and viewpoints within a design project to collectively negotiate them through dialogue. It has discovered that such design interventions can be instrumental in facilitating the dialogic process amongst stakeholders to illuminate differences in values or hidden agendas. The paper proposes that the role of the designer, then, is to facilitate this dialogic process through design interventions to enrich the experience of dialogue and exchange amongst project stakeholders.

Keywords

Human-Centred Design; Communication Design; Politics; Power-Dynamics; Design 'Scaffolds'; Dialogue.

There are numerous designed artefacts that exist as examples of where designers have created political content toward a purposeful political outcome. These design examples can vary in content, from a call to action by Amnesty International, to campaigns for specific political parties. In this model where politics is the content and outcome of design, debate within communication design is often polarised. On one hand, some designers argue that they are apolitical. In this argument the designer's role and professional obligation is to provide the best possible service irrespective of the client's personal ethics. Likening the designer to a lawyer, some argue that 'prejudice must be put to one side' so that the client might be provided with the 'best possible corporate clothes' (Rich 2002, p. 192).

On the other hand, some designers argue that designer's political position is determined in their choice of whether or not to endorse a client's activities. McCoy (quoted in Poyner 2001, p. 139) suggests that the political debate centres on the choice of client. 'The decision to concentrate one's effort as a designer on corporate projects, advertising, or any other kind of design, is a political choice.' Similarly, there are many designers who have made a conscious political choice of which clients to work with, based on whether or not they shared the same values. Amongst the examples discussed in communication design literature, many of these designers work with non-profit organisations or on social-cultural issues where the activities and communication messages are endorsed through design.

The literature in communication design thus places the designer as by-standers, mediators or promoters of various forms of politics within any given design project. They are part of the political process and cannot stand outside of it. Whilst acknowledging that politics is an integral aspect to the content and choices that designers make, the paper focuses further on the politics inherent in the interaction between stakeholders in design projects. This will be discussed in the first section called *The messy realities of practice*. The discussion draws on interviews with various design practitioners, which revealed how politics relating to values, relationships and power dynamics can factor significantly in the design process. Certain stakeholders can be valued more highly than others or personal agendas may influence decision-making processes. The politics that informed the complex human interactions in practice ranged from subtle to explicit. By examining the politics and personal agendas that were shared through interviews and project reflections, the paper discusses how these factors can impact upon a human-centred framework of how people are valued in the design process.

The paper draws on human-centred design discourse as a key theoretical framework to understand when, how and whose views and concerns are addressed through the design process. Literature on human-centred design explains that it is a process of designing that values people equally to each other, including designers, project stakeholders and intended users or audiences. Human-centred design is ideologically motivated by values that relate to transparency, participation and empowerment through influences and integration of participatory design methods (Krippendorff 2006; Sanders 2002). Participatory design, which had originated in Scandinavia, utilises various design methods to enable people to participate equally in decision-making (eds. Schuler & Namioka 1993). In particular, the current discourse on

human-centred design explores the role of the designer in facilitating creative ways to enable stakeholder input into the design process (Sanders 2007).

The author's doctoral research draws on already established discourse and methods within human-centred design on designed artefacts that can facilitate communication between project stakeholders. The stakeholders can include people from different knowledge backgrounds (Arias & Fischer, 2000); be situated within a workspace (Loi, 2005) or include users of the potential designed outcome (Sanders, 2002). Sanders in particular, discusses how designers could design 'scaffolds for experiencing' to enable users or audiences to create their own experiences. Sanders explain how designers could empathise with them by accessing a deeper level of expression. The role of the designer, then, is to design 'scaffolds' to promote 'collective generativity' amongst 'ordinary people' and designers. 'Scaffolds' are therefore proposed by Sanders as new tools that can enable people to express their thoughts, feelings and dreams.

Sanders's metaphor of a 'scaffold' is used in this paper to open up and examine the variety of design interventions explored in the author's research. The 'scaffolds' are interpreted as design activities that are less concerned with giving form and materiality to artefacts than with being catalytic in enabling and facilitating dialogue. The use of the 'scaffold' metaphor avoids the physical limitation of artefacts as the term 'scaffold' can also include tools or conceptual methods. The paper discusses the variety of 'scaffolds' explored in two projects. These are discussed in the section *Designing 'scaffolds' to facilitate dialogue and build relationships*. It discusses how the design of various 'scaffolds' facilitated certain kinds of dialogue among project stakeholders, which were central to manifesting and negotiating values collectively in projects. The manifestation of values in this research echoes Sanders's claim of how such 'tools' can enable access to people's feelings, dreams and imagination so that designers can establish resonance with them.

The paper proposes that such design interventions highlight a potential role of the designer in how they can facilitate dialogue amongst project stakeholders. A continued process of discussion and negotiation can illuminate politics, power dynamics and hidden agendas amongst stakeholders. The importance of empowering stakeholders to initiate and enable discussions is also addressed. Illumination of issues and concerns through discussion can lead to a better understanding of how these things shape the design process and overall outcome. This understanding can enable all stakeholders to address and manage these influences. The designer, whose role is to facilitate dialogue through designing 'scaffolds', can assist in ways to build relationships. Building relationships can enable understanding to deepen between the stakeholders, resulting in an awareness of the value that each person contributes to the design process.

The 'messy' human realities of practice

In design case studies involving a client and a designer, the financial authority of the client often grants them ultimate power in decision-making processes. Some clients can use this authority to push certain agendas, whether personal or business-driven.

In the interviews¹, one designer shared an experience where the client's agenda had dictated the design outcome. In this example, the designer was not given an opportunity to discuss how the client's agenda could impact on the communication objective. *'I have some clients that are so tough, they're like, "it's red, that's it. It's all about red. I don't want to hear anything else, there's no other colour. I don't even want to know about what other colours are"'* (Interviewee B). The client's authority in this project context restricted the designer from proposing any other potential direction. This reveals that the client did not value the designer's input and contribution to the project, apart from carrying out his or her demand. As a result, this designer gave in to the client's demand, even if the aesthetic specification imposed by the client was potentially unsuitable for the communication objective.

Other designers share examples where design studio politics deliberately mystify the design process for the client. Vince Frost (a prominent international designer who was a partner in the design company Pentagram) explains that Pentagram had a 'policy' where 'clients were never allowed up the stairs ... where all the designers worked'. He explains that he was instructed not to 'show how easy it (design) is ... because you won't be able to build it up and bullshit' (Finn & Frost 2004, p. 33).

Whether agendas are disguised, mystified or openly shared they can have a significant impact on design processes and outcomes. Many design practitioners interviewed attested to the value of discussing these issues with project stakeholders. Discussions can help to determine whether a stakeholder's opinion is a reasoned input or one based on personal preference. Discussions can illuminate the complex context informing the communication objective. It can further the understanding between stakeholders in co-creating design outcomes. One designer explained the value of understanding the complex context under which the client operates:

We don't know the pressure the client feels. What we see is this (the design job and the client). What we don't know is, back here, he's got a boss that he answers to, and he's got a boss that he answers to. And at the end of the day, they're all accountable. (Interviewee B).

Discussions can reveal tacit or hidden agendas. Once illuminated, these can be negotiated amongst the stakeholders, leading to significant differences in the designed outcome. For example, understanding how much of someone's

¹ The interviews, which the paper draws from, were undertaken as part of the author's doctoral research to unearth complex human interactions that are situated in communication design practice. Several interviews were conducted with various communication design practitioners in Australia. These interviews were not intended to be a comprehensive survey of practitioners, but to aim to sample from a broad range of roles, contexts, activities, clientele, knowledge, backgrounds and experiences. They include an art director in an advertising agency, several creative directors that undertake web design and broadcast design, designers in a studio, a finished artist, an in-house designer in a publishing house, an interaction designer, and a director of a company who didn't identify himself as a 'designer' but still designed systems for communication. The diversity of interviewees was a key consideration in selecting the people interviewed.

input derives from their personal taste can lead to a more relevant contribution towards designing a visual message that will engage the intended audience. One designer interviewed gave this example:

When (clients) haven't been involved in creative processes, when they have that involvement, they want to make the most of it. Their personal tastes become an issue, and it's not an unreasonable thing. As a stakeholder, their opinions are valid. But there is a responsibility to discuss who the visual messages are for ... for our idea to be relevant and engaging for the audience, someone's personal tastes – even if they have the final say in it – aren't as relevant as getting the visual messages right for their audience (Interviewee A).

This designer reflected on how the client appreciated the discussion about 'who the messages are for'. The discussion highlighted an issue that the client was previously unaware of, thereby furthering the client's understanding. By acknowledging each stakeholder's personal opinion and input, these can be addressed and discussed to determine their relevance to the overall designed outcome.

A continued process of discussions and negotiations can illuminate politics, power dynamics and agendas amongst stakeholders. Illumination of these issues can lead to a better understanding in determining how they will shape the design process and overall outcome. This understanding can enable both clients and designers to be empowered to be aware of and manage these influences.

Exchanging different opinions and viewpoints can provide opportunities to learn from one another and to be more informed. This can lead to the creation of new knowledge and an 'understanding of someone else's understanding' – a second-order understanding (Krippendorff 2006, p. 66).

Krippendorff explains how the second-order understanding employs an empathetic approach in viewing the world from another person's perspective. The client has their way of seeing the world, the designer sees the designer's world, and the audience sees the audience's world. This acknowledges that people's worldview is subjective and constructed from his or her own actions and logic. According to Merleau-Ponty (2002), the association we have with others or the world is not an 'autonomous force'. He claims that this association 'acts only in virtue of the meaning it has acquired in the context of ... former experience(s) and in suggesting recourse to (those) experience(s)' (p. 21). Merleau-Ponty's phenomenological way of associating with the world can be interpreted as what Krippendorff calls a 'second-order understanding'. It is a way of establishing understanding based on meaning and acknowledges that different things can mean different things to different people.

This understanding based on *meaning* is significant to communication design, because the nature of communication can be argued to form a dialogic process of meaning-making through exchange. Communication design is a process that is based on how to apply and manifest different kinds of understanding, and to explore what designed outcomes could mean for different people. Embracing and acknowledging the diversity and multiplicity

of viewpoints of all stakeholders can allow the design process to explore the potential and possibilities of the meaning of different design outcomes.

Placing emphasis on the diversity of people's perspectives and on what design can potentially mean to people is significant to understanding human-centred design. The human aspect of our lives can involve numerous roles depending on the context we are placed in. For example, one can be a daughter, a mother, a friend and a wife in the presence of different people and contexts. The multiplicity of roles that people play can also be mirrored in design. Acknowledging the diversity of roles we adopt is central to a human-centred perspective. Our diverse roles lead to diverse perspectives that enable us to understand the multi-dimensional context of people's lives. This understanding is significant to accepting and respecting the different views and concerns that people have.

A design project can often involve those who are not physically present in the design project. The discussion in this paper so far has revolved around key stakeholders such as the designer and client as a way to begin discussing the diversity of agendas, but in this scheme, each stakeholder may represent a 'multiple' of roles. As explained by Interviewee B earlier, *'What we don't know is ... he's got a boss that he answers to, and he's got a boss that he answers to'*. The client's agenda may be comprised of the agendas of their manager and their manager's manager. The same applies to designers, who may need to express the agendas of the studio or their creative director. Similarly, the diversity of audiences who may be imagined engaging with the designed outcome could not be reductively represented. The potential for future engagement with the audience raises concerns of who they *might be* in the future, in addition to who they have been *known to be* in the past.

Designing 'scaffolds' to facilitate dialogue and build relationships

Based on the understanding gained from the interviews, several design projects were conducted to explore what 'scaffolds' could be designed to enable how various stakeholders have input in the design process. One such project was to design a visual identity for a housing association² based in

² The site of the design intervention was an association that provides office space to small socially or environmentally based non-profit organisations. The key objective of this project was to empower the community members to consolidate the values of the association that could be translated into an identity system, which could then be applied to stationery, the association's website, and interior and exterior signage. My particular focus as a designer and workshop facilitator was to create a forum where the participants, who each brought diverse backgrounds and experience to the workshop, could actively engage in generative discussion about the visual identity. The diversity of the non-profit collectives housed within the association (for example, human rights, disability, environmental, indigenous issue groups etc.) posed an interesting challenge in creating a visual identity that represented them as a whole. In an attempt to harness the diversity of the association, a group of five representatives were selected from the wider community. They ranged in age and gender and were drawn from associated grass roots-groups. Two participants who were partially disabled also took part in the consultation process, to represent the needs and views of the disabled community in steering the design outcome. These participants took part in three workshops, which spanned over two months, that generated discussions and critiqued the progress of designs for the visual identity.

Melbourne, Australia. The key objective of this project was to empower the community, who are housed within the association, in consolidating the values of the association through several workshops. The intention was to use the workshops to facilitate the stakeholders to reveal values that they identified with the association, which could subsequently be translated into an identity system.

Various design 'scaffolds' were explored during the workshop that enabled community representatives to consolidate the values of the association. Each workshop fostered generative discussions amongst the participants, who each brought with them diverse backgrounds and experiences. Each participant had unique understandings and experiences of the association, including values that they felt were central to it. To ensure a balanced generative and constructive discussion they were asked to undertake word and image association games, visualisations and brainstorming exercises. For example, a word and image association game invited the participants to look at the visual imagery of commonly-seen logos and interpret what might be associated with them. To illustrate this example, examining the Qantas logo (an Australian airline company) highlighted how the red triangle indicated the tail of an airplane, and the streamlined and stylised drawing of the kangaroo, and its red colour, conveyed speed.

Playing games with familiar logos and interpreting embedded meanings led to an understanding of how values could be expressed through imagery and symbolism. The participants were astute and receptive in understanding the complexity of how various qualities can be revealed and associated through a simple visual like a logo. The participants had a high level of visual literacy and were easily able to translate meanings from visual symbols. The logo exercise was instrumental in building the next exercise, which used word associations to capture the characteristics of the association. Various words were extracted from existing communication materials from the association. This prompted discussion of the meaning of each word. We undertook brainstorming to generate associated words. Some words were also expressed through drawing, where many participants drew circular sketches to communicate words such as 'nurture' or 'community'. After the first workshop, and following a discussion with the designers, the words, sketches and values were turned into a design brief, to then be created into a visual identity.

The informal, open and organic process undertaken ensured that all participants felt comfortable in sharing values that they felt were important to the association. During the workshops, not everyone agreed with one another and they were very vocal in expressing their agendas. These differences of values and viewpoints could then be discussed and consolidated in a supportive environment. In this environment we valued each other's input and appreciated and accepted different opinions. There was a collective purpose to the activities that were undertaken. The process fostered a sense of ownership of the visual identity through active involvement. Allowing various inputs by the participants allowed unexpected interactions to emerge. Fischer (2000) discusses such a framework of design as 'social creativity'. He explains 'bringing together different points of view and trying to create a shared understanding among all stakeholders can lead to new insights, new ideas, and new artifacts' (p. 2). In other words, the design of the consultative

workshop 'scaffold' created a generative, creative forum for all participants to explore and express the values of the association.

In contrast with the workshop example of the 'scaffolds' that enabled input by various stakeholders to be equally valued and respected, many designer practitioners interviewed shared common experiences where clients abruptly change their minds at the final stages of the project. Upon seeing the design shaped into a plausible and realistic outcome, clients often contradict themselves on what they want. To illustrate this point, a hypothetical example of a client's comment could be, *'I know I said it should be purple, but seeing how it's looking now, I don't think it's right anymore'*. When such comments are made at the latter stages of the design process it is frustrating for designers to redo the work again, especially if the designers had already addressed a concern with the colour during the evolution of the designed outcome. In this instance, the client's lack of awareness of the problem with the colour was withheld, not because they were being deliberately devious, but often because they genuinely did not see it as a problem before.

To counteract such occurrences, there are design companies that utilise realistic 'prototypes' at the earliest stage of the briefing process. Seeing a realistic representation of a designed outcome can elicit discussion on issues and concerns that surround it, which the client or the designer may not have been able to perceive before. Such visual disclosures can circumvent problems earlier. Design companies like IDEO or Livework, who undertake human-centred design approaches to projects, often design and deploy prototypes in discussion with clients as a way to 'sketch' future scenarios. For example, Manzini and Jegou (2004) have created everyday future scenarios to highlight and make real issues surrounding environmental sustainability. The scenarios are illustrated visuals of people in specific urban settings that can tangibly communicate the alternative ways people can work, consume, use transportation, interact with one another, and situate concerns of sustainability at the core of each activity. Such scenarios have a projective quality to enable project stakeholders to evaluate and critique the role and outcome of design products and services, prior to its 'realisation'.

Manzini and Jegou's scenario example illustrates how a scenario, as an artefact, can become a catalyst to facilitate dialogue, communication, collaboration, and to manifest and critique values embedded in project contexts. The artefact's role and deployment early in the design process contrasts with a view of artefacts as end outcomes to be designed. Creation of, and interaction with, artefacts can transform them into an open-ended 'language' for project stakeholders to discuss the designed outcome's potentiality. For example, the workshops in the visual identity project explored how the language of logos and visualisations facilitated dialogue on the values associated with the association. The activity enabled such values to manifest more readily.

The use of visualisations, such as sketching and drawing are common activities in communication design. Visualisations undertaken in the workshops in the identity project played a complimentary role to words and facilitated a discursive engagement between the participants. Communication based solely on words and text can be potential obstacles when working with stakeholders from a diversity of background and knowledge. This

communication 'problem' caused by words and texts was observed in another project called HDM.³ In the HDM research project there were team members from diverse fields such as sociology, nursing, HCI, interaction design and communication design. This multi-disciplinary team with their multi-disciplinary practices posed potential problems in establishing a collective understanding of the aims of the project. There was a general research objective to this project but the research-led focus lacked a concrete approach that guided the project. The team members who gathered from diverse disciplines and backgrounds had subtly different understandings of the core concepts of the project, such as 'design' or 'ethnography'. The specificity of certain words used in different contexts and disciplines led to confusion amongst stakeholders in the project. Different definitions of a word can create misunderstandings caused by the use of different nuances of terminologies and divergent bodies of knowledge and languages.

To overcome this communication 'problem' the team utilised visualisations as another form of language to clarify the aim of the project. I undertook the role of initiating numerous visual iterations that might capture the essence of the project. These visualisations were not intended to 'lock down' definitions of the project, but rather to open up other ways of thinking about it. The process of creating various visual iterations triggered different interpretations of how the project was read and understood. The variety of understandings held by different team members triggered discussion amongst the team. Thus, the visuals became a catalyst in extending our multi-disciplinary understanding of what this project aimed to achieve. As the discussions continued, it became clear that the visualisation process was another form of collaborative practice between team members. The process generated dialogue and debate. It led to a re-examination of the team's assumptions about what the project was and what we believed it could be. The discourse surrounding the visuals became expansive and generative and the by-product of this process was a sense of collaboration, ownership, mateship and a deeper understanding and appreciation of our different perspectives. These discussions enabled the project values to emerge.

Visual disclosure can allow the discovery of new meaning and engender possibility. In the context of discussing the process and outcomes of mapping, Corner (1999) explains how mappings can be agents in uncovering realities that could not previously be seen or imagined. He states '(t)here are some phenomena that can *only* achieve visibility through representation (rather)

³ The Human Dimensions Methodology project was undertaken as a part of ACID (the Australasian Cooperative Research Centre for Interaction Design). HDM investigated a human-centred consulting methodology for interaction design projects. Its aim was to develop a design-driven, ethnographically informed consulting methodology that focused on knowledge creation, knowledge management and knowledge dissemination throughout interaction design projects. I facilitated particular communication design activities amongst project participants. The activities I undertook in this context became significant to exploring ways to facilitate engagement and communication amongst the team members.

than through direct experience ... mapping engenders new and meaningful relationships amongst otherwise disparate parts' (p. 229).

Artefacts such as sketches, diagrams and visualisations can become another form of language through which to communicate amongst project teams. They were successfully used to engage the workshop stakeholders in the visual identity project. A visual language can reflect the dialogue that is taking place amongst stakeholders. It can capture the abstract and illuminate the tacit. Visualisations can become a space to reflect on or to accelerate certain concepts. The process of visualisation can affect how the team behaves and what they are able to see. On discussing maps, Kerbs (Abrams *et al.*, 2006, p. 97) explains, 'I see the maps as sense-making documents: when discussed, we all get smarter ... or start asking better questions'.

Conclusion

This research has revealed that applying a human-centred design approach to communication design practice is not as straightforward as it is outlined in theory. Politics and power-dynamics among project stakeholders are common obstacles and challenges in applying the principles of human-centred design to projects. The tacit and complex inter-relationships between various people provides a consistent 'human' context for communication design practice. A design process can thus be situated as a political negotiation between stakeholders in a project. Given this political context, enabling mutual input by various stakeholders in a design process cannot be seen as a 'default' setting that comes automatically with a project.

In this political framework the success of the designer's role relates to how well he or she expresses their personal and professional view of the world *and* enable and facilitate others expressing their view of the world. Through this process the designer becomes a key agent in facilitating each stakeholder to understand other stakeholders' understanding. It is a second-order understanding, as argued by Krippendorff, that also includes other stakeholders who may not be physically present in the design process. Thus, in undertaking a human-centred approach in design projects, the designer's role is to **initiate** and **facilitate** a discussion that can then illuminate the politics and any stakeholder agendas or assumptions within projects. Politics are inherent to all design projects and practices and the project stakeholders need to be empowered to begin discussing them.

The paper has also illuminated the significance of dialogue to overcome the obstacles and challenges of politics that is inherent to all design projects. A focus on the role of dialogue amongst project stakeholders highlights how it can build relationships, which was also shared by the designers interviewed. Building relationships can enable understanding to deepen between the stakeholders, resulting in an awareness of the value that each person contributes to the design process. The research has enabled an understanding that human-centred design is about how people are **valued** in projects and also about how **values** can be collectively negotiated through dialogue.

It is envisaged that the communication designer can create design 'scaffolds', such as conceptual tools, methods, design interventions, objects and

artefacts to facilitate dialogue, interactions, human relationships and overcoming political barriers. Such 'scaffolds' extends the role and agency already played by communication designers – it is indigenous to design practice and this birthright makes them novel and accessible to design practitioners. Design 'scaffolds' has an important role to play in enriching the experience of dialogue and exchange amongst project stakeholders. The paper proposes that the emphasis and consideration given to this role will prompt a significant shift towards a greater social contribution through design.

References:

- Abrams, J., Donath, J., Susani, M., Sack, W., Ross, R., & Krebs, V. (2006). Conversations as maps/part 1+2. In J. Abrams & P. Hall (Eds.), *Mapping new cartographies of networks and territories* (pp. 70-103): University of Minnesota Design Institute.
- Arias, E., & Fischer, M. (2000). *Boundary objects: Their role in articulating the task at hand and making information relevant to it*. Paper presented at the International Symposium on Interactive & Collaborative Computing, University of Wollongong.
- Best, K. (2006). *Design management: Managing design strategy, process and implementation*. Lausanne: AVA Publishing SA.
- Corner, J. (1999). The agency of mapping: Speculation, critique and invention. In D. Cosgrove (Ed.), *Mappings* (pp. 213-252). London: Reaktion.
- Finn, K., & Frost, V. (2004). Understanding design, *Open Manifesto, 1*, 30-49.
- Fischer, G. (2000, May 2000). *Shared understanding, informed participation, and social creativity: Objectives for the next generation of collaborative systems*. Paper presented at the COOP, France.
- Jones, P. (2003). Embedded values in process and practice: Interactions between disciplinary practices and formal innovation processes. *Design Management Journal, 2*, 20-36.
- Krippendorff, K 2006, *The Semantic Turn: A New Foundation for Design*, Taylor & Francis, Boca Raton.
- Loi, D. (2005). *The book of probes. Lavoretti per bimbi: Playful triggers as key to foster collaborative practices and workspaces where people learn, wonder and play*. RMIT University, Melbourne.
- Manzini, E., & Jegou, F. (2004). Sustainable everyday: Scenarios of urban life. Retrieved 27 October, 2007, from http://sustainable-everyday.net/scenarios/?page_id=28
- Poyner, R 2001, *Obey the Giant: Life in the Image World*, Birkhauser, London.
- Rich, T 2002, 'Who needs ethics?', (in) Bierut, M, Drenttel, W & Heller, S (eds.) *Looking Closer Four: Critical Writings on Graphic Design*, Allworth Press, New York, pp. 190-192.

Sanders, E 2002, 'From user-centred to participatory design approaches', (in) Frascara, J (ed.) *Design and the Social Sciences: Making Connections*, Taylor & Francis, London, pp. 1-8.

Sanders, E 2007, 'Design Research: From Market-Driven Era to User-centred innovation', (in) de Rossi, LC (ed.) *Robin Good, Master New Media*, viewed 25 October, 2007,
<http://www.masternewmedia.org/interface_and_navigation_design/design-research/state-of-design-research-from-market-driven-era-to-user-centered-innovation-MakeTools-Liz-Sanders-20071019.htm>.

Schuler, D & Namioka, A (eds.) 1993, *Participatory design: principles and practices*, L Erlbaum Associates, New Jersey.

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Yoko has recently completed a practice-led PhD in communication design at RMIT University. She continues to pursue a socially oriented practice in communication design, which spans over 10 years in various locations including London and Melbourne. Her research is situated within the practice of communication design where she investigated how design 'scaffolds' can capture, articulate and manifest stakeholder values that can become embedded in design projects. Yoko has been teaching communication design for six years into various undergraduate and postgraduate levels in Australian universities. She is also involved as a researcher in an Australian CRC for Interaction Design (ACID) projects. She was born in Japan, grew up in Australia, England and Japan; studied (and hated) living in Los Angeles; did her BA (Hons) at Ravensbourne College of Art and Design, England and now she 'calls Australia home'. And, no, she wasn't named after the infamous woman who split up the Beatles...