Briefing and Reframing

Bec Paton

University of Technology Sydney, Sydney, Australia

Kees Dorst

University of Technology Sydney, Sydney, Australia

Eindhoven University of Technology, Eindhoven, The Netherlands

Abstract

The ability to reframe a problematic situation in new and interesting ways is widely seen as one of the key characteristics of design thinking, and as one that would lend itself to application beyond the traditional design professions. In this paper we study how experienced designers have professionalised the crucial art of frame communication and new frame adoption with their clients. During briefing, professional designers elicit a client's frame, reframe it to be more workable and desirable, and reflect it back. The iterative exchange at the start of a project is loaded with framing and reframing episodes.

In this study fifteen highly experienced visual communications designers were interviewed and asked about briefing activities for what they deemed to be 'typical' and 'innovative' projects. This yielded rich descriptions of strategies that these professional designers used to enable reframing of the situation with non-designers, insights into possible difficulties and patterns of briefing practices.

The paper concludes with an overview of activities and strategies that help with framing and reframing, as well as modes of communication that assist with sharing frames.

1. Introduction

The ability to frame a problematic situation in new and interesting ways is widely seen as one of the key characteristics of design thinking (e.g., Cross 2006; Lawson 2006; Schön 1987; Schön 1995). It is surprising that apart from a few groundbreaking theoretical papers, there is very little design research literature on how this 'framing' actually works. And it is all the more surprising that the scant empirical evidence to be found in design research is often based on the study of design students, while framing is generally associated with higher levels of expertise (Akin 1990; Cross 2004; Lawson & Dorst 2009; Lloyd & Scott 1994).

Within a design context, framing is often seen as the key creative step that allows an original solution to be produced. Designers report on the need to get to 'the problem behind the problem' (as initially presented by the client), and about creating a 'fresh perspective'.

The eighth Design Thinking Research Symposium (DTRS8) has concerned itself with interpreting design thinking for other disciplines, given that aspects of the way designers work and think have been popularised. The main reasons given for this clamour of interest, have been observations about the ability of designers to deal with complexity in innovative, appropriate and illuminating ways (e.g., Brown 2009; Martin 2009; Verganti 2009). If we consider 'framing' to be one of the characteristics of design that could lend itself to application beyond the traditional design professions, we need to study how experienced designers have professionalised the crucial art of framing and reframing.

Within this paper, we have chosen to study the briefing processes that define design projects as a locus for framing and reframing activities, for two reasons: (1) this is where the framing and reframing strategies have to be employed quite explicitly, and where the results of the framing need to be made clear *with* the client; and, (2) this allows us to study the strategies designers have developed for reframing the problem as it is initially presented by the client. This second reason is particularly important against the background of our overall goal for *DTRS8* to introduce framing and reframing activities into non-design domains, as it will provide us with insight on how professional designers deal with framing and reframing while working closely with non-designers.

1.1 Framing

Framing is not a concept that is unique to design theory. The idea of a frame was initially articulated in the field of artificial intelligence (McCarthy & Hayes 1969; Minsky 1975; Sandewall 1972), where, when the view of the present problem was changed or a new situation encountered, a cognitive structure called a 'frame' was selected from memory and adapted to fit reality by changing details as necessary. The idea was based on the idea of 'schema' by Bartlett (1967) and 'paradigms' by Kuhn (1970). This idea was taken up in philosophy (e.g., Denett 1978; Fodor 1983). The idea of framing can also be found in fields diverse as economics (e.g., Tversky & Kahneman 1986), cognitive psychology (e.g., Bateson 1972; Kahneman & Tversky 1984), linguistics and discourse analysis (e.g., Minsky 1983; Tannen 1985, 1986; Tannen 1993; van Dijk 1977), communication and media studies (e.g., Entman 1993; Pan & Kosicki 1993; Scheufele 1999), science and policy studies (e.g., Schön 1994; Triandafyllidou & Fotiou 1998), and most extensively in sociology (e.g., Benford & Snow 2000; Fisher 1998; Goffman 1974; Kaufman, Elliott & Shmueli 2003; Oliver & Johnston 2000; Sherkat 1998; Steinberg 1998; Williams 2000).

It is interesting to observe that there appears to be two distinct ways of defining a frame in this literature—as a product of mental knowledge and meaning structures, (particularly the cognitivist approaches to defining frames, with mind at the centre of things), or as a product of social symbolic structures, (consistent with textualist approaches to defining frames, where discourse is the basic unit) (Reckwitz 2002).

Deborah Tannen has argued that the terms 'knowledge structure schema' and 'interactive frames' are more helpful as a way to combat this duality in understanding frames. For Tannen, 'knowledge structure schemas' are "expectations based on prior experience about objects, events and settings", whereas 'interactive frames' are "a superordinate definition of what is being done by talk, what activity is being engaged in, how a speaker means what s/he says". Although both are in the mind, interaction frames are more palpably in the interaction (1986). To be clear, in this paper, we will take the term 'frame' to be equivalent to this definition of 'knowledge structure schema' and 'framing' to be equivalent to this definition of 'interactive frames'. Given the context for this study, 'reframing' will refer to building a new frame for oneself, based on changing one's view due to briefing interactions, (although it is acknowledged that reframing can also occur as a result of reflection).

The notion of a frame in design theory is largely based on Donald Schön's work on reflective practice (Cross 2004, 2006, pp. 102–103; Dorst 2006b; Dorst & Dijkhuis 1995; Hey, Joyce & Beckman 2007; Krippendorff 2006, pp. 214–217; Lawson 2004, 2006, pp. 275–277, 292–293; Lawson & Dorst 2009, pp. 34–35, 50–51, 202; Nelson & Stolterman 2003, pp. 199, 209; Stumpf & McDonnell 2002). In Schön's view of framing, a certain perception of a problematic situation (a 'view') is combined with the adoption of a terminology and a way of reasoning that allows the 'framer' to think about it and develop a set of possible actions (Schön 1984, 1987, 1994, 1995; Waks 2001). This is in line with cognitivist definitions of frames and framing.

Each party in a design situation holds their own 'frame'. In order to interact with others, each party must have a mental model of the area of interest so that they can begin their exchange. Nelson and Stolterman talk about the initial frame for clients in terms of 'desiderata', the initial conception hoping to gain expression (2003, pp. 48–51). In Darke's extrapolation of Hiller, Musgrove and O'Sullivan's 'conjecture–analysis' model of the design process (1972), the 'primary generator' informs the designer's initial 'frame' and gives deeper insight into how designers pre-structure a situation (Darke 1979). From a more recent study, "both designers' and their customers' perceptions of what is appropriate and admirable, as well as what is possible, are shaped by their own experiences of similar artifacts" (Eckert, Stacey & Clarkson 2004, p. 1).

These expectations contribute to each party's 'frame', which not only consists of a way of seeing or representing a situation, but is also suggestive of ways to move or interpret relative to this. Frames not only simplify and create alternative views of a problematic situation, they also evoke particular outcome spaces that afford a range of responses. The key aspect for a successful frame is that an outcome *is* possible.

At the fuzzy front end of a project during briefing, 'framing' takes place between the designer and client, where a designer's professional knowledge, including schemata, guiding principles, recognition and gambits (Lawson 2004) will inform the way they attempt to reframe the situation. Additionally, the client will be intent on framing the situation, based on their often more expert knowledge about the nature of the problem space, as well as their experience with encountered design solution types . They may well have framed the situation but be unaware that frames can change.

1.2 Briefing

Whilst the idea of a brief as a starting point for projects is widely accepted, the activities associated with the creation of a brief and the negotiations for its redefinition are not often examined. From the initial expression of the project by the client, (which can be in written or verbal form, and can be detailed or fuzzy), there is a set of interactions that take place in order to come to a mutual understanding of how the project will unfold. The aim of briefing, then, is to reframe both the client's and designer's preliminary appreciations of the situation in order to create an actionable view of the project for both parties. This includes: a desired end state or goal; prioritisation and selection of relevant features; problem scope, solution scope and resource constraints; and projected value (Hey, Joyce & Beckman 2007).

Given our definitions based on Tannen's work (1986), 'framing' can be seen to be the sharing and clarification of each party's 'frame' and 'reframing' can be seen to be how frames are changed as a result of social interaction. An accepted brief can be seen to be a frame that is understood and agreed upon such that the designer's and client's frames overlap or align to a certain extent.

The iterative exchange at the start of the project is loaded with framing and reframing episodes. By studying this locus of activity, we are able to learn about designerly framing and reframing, without the generative aspects of design being the focus.

1.3 Field of Study: Visual communication

Visual communication as a discipline includes graphic design, web design, illustration and emergent activities such as experiential environmental installations (Box 2007, p. 4). According to Frascara, "The visual communication designer works on the interpretation, organisation and visual presentation of messages" (2004, p. 3). Rather than image-making alone, visual communications designers graft word and image to create hybrid texts (Jobling & Crowley 1996, p. 3). Poyner encapsulates the content and knowledge aspect of visual communication,

accentuating that these designers, "… develop a sphere of knowledge and expertise, select a subject, conduct research, gather material, then create an appropriate final form, using all the resources of design, both worlds and images, to communicate the story or argument" (2001, p. 187).

Given that the majority of visual communications projects occur with non-designers as clients, in either private or public sector organisations of varying magnitudes, we are able to look at framing in these contexts and discover barriers that the designers encounter interacting with these non-designers on projects.

1.4 Research Questions

In this study we focus not on the question where design frames come from, but on how designers reframe beyond the initial frame as presented by the client—that is: ensure that new frames can be adopted in a problematic situation. The two research questions we are exploring in this paper are therefore:

1. How do expert designers experience framing as a socially situated practice?
2. What are the patterns of variation for different experiences of framing?

2. Research Method

2.1 Phenomenographic Approach

In order to understand how designers have professionalised new frame communication and adoption during briefing, we need to ascertain the range of experiences designers have had with their clients and what the critical components of variation are. Phenomenography [1] is well suited to studying the conceptions that expert designers have of briefing and reframing in professional practice, since phenomenography reveals the different ways people experience the same phenomenon and characterises that particular conception in terms of the variation in critical aspects discerned. Key to understanding phenomenography is that "its epistemological stance is grounded in the principle of intentionality". Cognition is not seen as dualistic, since experience is viewed as an internal relationship between people and the world (Ming Fai 2003, p. p. 145). Given the backdrop of our interest in looking at briefing as a situated practice, and that frames (as we have articulated them presently) are similarly non-dualistic, phenomenography was chosen for this research.

Phenomenography looks at a particular phenomenon from a second-order perspective, where a first-order perspective looks at the world and makes statements about it, and a second-order perspective looks at people's ideas or experiences of the world and makes statements about them. First- and second-order perspectives are considered complementary views (Marton 1981). There is an assumption that there are limited number of ways of experiencing reality, so for phenomenography, describing the pattern of these variations is the main aim. Varying experiences of a phenomenon do need to be accounted for in language, so the outcome of the inquiry is logically and hierarchically interrelated categories of description, where a conception is characterised by the intertwined "referential aspect—i.e., a particular meaning of an individual object (anything delimited and attended to by subjects)—and a structural aspect—i.e., the combination of features discerned and focused upon by the subject)" (Marton & Wing Yan 2005, p. p. 336).

One critique of phenomenography is its claim to identify 'ways of experiencing', and that it is more likely that the data can be understood as "indicative of accounting practices—ways of talking and reasoning … and that the experiential accounts given by individuals are grounded in discursive patterns" (Säljö 1997). Even if this is so, (and there are good arguments against this, especially from the grandfather of pheonomenography, Ference Marton (1995)), this

would mean that phenomenography looks at the formative and social nature of language that surrounds particular human practices and how people learn to mean in those practices (Giorgi 1966, 1975a, 1975b; Schultz 1967; Schultz & Luckmann 1973). This is a good start for understanding how experts frame with clients during briefing!

Another critique has been levelled at the hierarchical structure of the categories of description—that there is the presumption of a definite structure; and, that the meaning of such a structure, since hierarchical, assigns the highest category more value than the lowest, based on some 'authorised conception' (Ashworth & Lucas 1998). For this paper, the hierarchy has been established based on the level of framing activity between client and designer. We acknowledge that the categories could be interrelated in another way if the same data was used with a different focus, however, looking at designers' levels of framing experienced during briefing will give us critical components of variation for understandings of framing.

2.2 Data Collection

Phenomenographic data is most frequently collected through in-depth, semi-structured interviews. The idea is that there is a productive interaction between the interviewer and interviewee, where experiences and understandings of the topic are jointly construed (Marton 1994).

Initially, semi-structured pre-research interviews were conducted with three expert designers and one account manager. Based on this, the research questions and the interview design were refined so as to achieve greater empathy towards the designers' lived experiences, and better bracketing of the researcher's preconceived ideas about: importing earlier research findings; assuming theoretical structures or particular interpretations; presupposing the researchers' personal knowledge and belief; and, researcher concerns to uncover causal aspects, (which are not the objective of phenomenography) (Ashworth & Lucas 2000). These aspects of bracketing were held in mind both for the interview process and the analysis stages.

Fifteen highly experienced (with a minimum of eight years professional experience) visual communications designers were then interviewed for an hour to an hour-and-a-half. Some example questions are:

- Can you tell me about a 'typical' project you've experienced as a designer?
- Can you tell me about an 'innovative' project you've experienced as a designer?
- What do you think your client perceives your role to be during briefing?
- Can you give an example of a project where you have changed this understanding?

When asked about 'typical' and innovative' projects, the designers essentially had to *define* their conception of the difference between the two in order to answer the question.

There was a conscious attempt to interview designers with seemingly strong abilities to reframe with clients. This appraisal was based on the degree of innovation shown in the formulation of projects, as evidenced by innovative design outcomes. The designers worked in small to medium visual communications studios of two to fifteen practitioners and worked predominantly on commercial projects for small to large clients. Small clients were often small businesses (of one to ten people) in a wide range of industries. In these situations, the designers were usually directly liaising with the business owner. Larger clients were either large companies or government departments (of ten to hundreds of people). In these situations, the designer usually dealt with someone from marketing or middle management who was responsible for the particular project.

This study is part of a larger project currently in progress. The findings offered are a preliminary exposition of outcomes based on a subset of the data. The data set that has been used is extensive (5 hours of transcribed audio).

2.3 Data Analysis

We followed the recommendation that for good phenomenographic practice, the interviewer do the transcription, to move from interaction to analysis (Dortins 2002).

For this paper, sections of data that related to reframing on projects were isolated from the transcripts for phenomenographic analysis. Analysis of the transcripts started very generally, looking for emergent descriptions of experiences and modifying the categorical descriptions to encapsulate sets of experiences articulated by different designers. The process was iterative, and the meaning of categories stabilised over several iterations. In terms of reliability, it is recommended that rather that the traditional approach of using 'inter-judge reliability' to validate data, (which has issues with procedural fidelity to interviewee conceptions and gives rise to methodological and theoretical inconsistencies within phenomenography), reliability be established as interpretive awareness, maintained through the reduction during analysis (Sandberg 1997). Both researchers were involved in discussing and validating the descriptions of the stabilised categories, comparing these with the data until agreement was reached.

We report on the sections of data analysed for this paper. We expect that once the study is complete, the conceptual framework we have identified here will be further refined and more detailed in its expositions. Additionally, the practice of briefing, as experienced by expert designers, will be reported on more comprehensively.

3. Results

3.1 Briefing as a Professional Phenomenon

In order to understand what designers consider 'briefing' as a particular professional phenomenon to be, we asked the designers about how projects start in their practice and about the content of briefing conversations.

In all cases, the designers saw briefing as a *process* of negotiation with the client—to define a 'vision' (mutually shared understanding) of what the project would be, an approach, and a shared appreciation of value to be achieved. The designers talked about multiple conversations with clients, briefing and re-briefing documents, and in some cases, aspects of the brief still being formulated once generative work began, indicative of highly iterative project formulation in those cases.

3.2 Briefing Modes

We asked each designer about what they perceived their role to be during briefing, as well as what they thought their clients perceived their role to be. We supplemented this by asking for concrete examples of good and bad briefing experiences that they'd had. All of the designers interviewed took a comparative approach to answering this line of questioning, outlining a number of ways of experiencing their role during briefing, and giving concrete example projects.

Category 1: Technician

The least favoured mode was where the designer was given a solidly defined brief and was expected to carry this out, only questioning to clarify particular aspects. For such situations, the client is accepted as knowing exactly what is needed, which the designer then carries out for them. The designer is brought in at the end of the project's formulation.

An oft cited example of this was following brand guidelines to produce a document, with text and images supplied—mostly experienced when dealing with middle-management or market-

ing professionals. In these cases, the client solely frames the project with little to no negotiation about the problem or solution spaces with the designer.

Category 2: Facilitator

For the given situation, the client is accepted as knowing what they need but not what is required to achieve it completely. In this case, the designer advises on specialist aspects relating to making the solution space workable. The designer is brought in to the project near the end of its formulation.

Examples given of such a mode of practice were: designing a website where the functionality and content were specified but an overall way of integrating the elements visually and technically was needed from the designer; or, designing a book cover where the concept for the cover was mostly conceived but not visualised. In these cases, the client is largely responsible for framing the project but the designer is required to have input into the solution space, thus shifting the framing of the project relative to this. This was also viewed as an undesirable mode of practice.

Category 3a & 3b: Expert/Artist

A much more favorable case that was identified from the designers' experiences, was where the client came with a partially formed idea of what they needed and the designer was required to use their expertise to negotiate a formulation of the brief that was workable *with* them. In these situations, the client is accepted as knowing what they need and the designer is responsible for framing the project with them to achieve a workable outcome. The designer is brought in midway through the project's formulation.

The typical example given for this mode was where the client required branding or a logomark, and provided information about the business so that the designer could come up with a visual language to communicate this on their behalf, (3a). A special case of this mode was when the designer worked in an 'artist' mode—where the aim of the project was given by the client but the designer was free to frame the project in line with their 'style', particularly for largely image-based communications such as posters or music packaging, (3b). In these cases, while the client defines what the problem is, the way it is framed, (in terms of the solution space), is largely formulated by the designer.

Category 4: Collaborator

In all cases but one, the designers related the experience of working as a collaborator on projects from almost the beginning of its conception, as being the most desirable mode for project formulation. In these situations, both the client and the designer mutually worked on framing the project, both in terms of problem and solution spaces.

The examples of these projects were the most diverse, including interactive environments, experiential design, websites and branding systems. In these cases, the exchanges between client and designer were highly iterative, transparent and playful.

3.3 'Typical' vs. 'Innovative' Projects

We asked the designers for examples of both 'typical' and 'innovative' projects in order to discern what the difference was to them. Each designer needed to define what 'typical' and 'innovative' meant, in terms of their practice. Once again, a clear hierarchy emerged.

Typical projects were defined as being either projects where they were behaving as a 'technician' or 'facilitator'. These projects were seen as only requiring a sub-set of their expertise,

routinised and uneventful. They often occured for repeat projects, as a roll-out of a larger project for a different application, or where the client was resistant to engaging with the designer's expertise. Here, the designer was only able to elicit a client's frame but not reframe. Essentially, the problem as given needed to be solved, indicative of a 'rational-problem-solving' mental model of design.

The designers reported on examples where they felt the need to challenge the client's treatment of the project as such a problem-solving exercise. In cases where it became apparent that reframing was not possible in such a situation *before work commenced*, it is common for a designer to choose not to work on the project—to 'walk'. If it emerged *during the project* that this was the case, generally the designer complied with the problem-solving request and completed the project, (although they often said that they haven't taken further work from that particular client). "We've turned down projects because we can kind-of see the way they will go" (Designer_D 2010) [2].

Innovative projects were defined as being either projects where they were behaving as an 'expert', 'artist' or 'collaborator'. In these situations, the designer was engaged in framing with the client in light of some problematic situation. Examples included changing the form that the design should take (e.g., from a website to an interactive experience), making salient or introducing the client to previously unconsidered approaches (e.g., creating a visual language that communicated the integrity of activities, rather than traditional marketing approaches to promotion), and being engaged in research on behalf and with the client to reframe the situation (e.g., user-centered design techniques revealing the situation, rather than conforming to a list of functional requirements).

In light of these elaborations, the briefing modes gain deeper significance, since it becomes clear that the given form, value/intent, content, and style (in the Bourdieusian sense) (Bourdieu. 1984 [1979]) are modifiers of a frame in visual communication.

3.4 Changing Frames

We asked the designers for examples where they negotiated to change the brief as given, in order to make the project more successful. Often designers described how the project's formulation changed in terms of the outcome but rarely explained how they negotiated the change with the client. Probing questions were used to elicit the way they managed to reframe in these cases.

We find from the interview data that one clear way that designers manage to get clients out of a problem-solving mentality and then, to adopt new frames is through abstraction. Highlighting the uncertainty that surrounds a future context assists with steering conjectured ideas away from specific outcomes to deeper situational values. In this study so far, the use of *metaphor and analogy*, *contextual engagement* and *conjecture*, were three ways designers destructured [3] the situation with clients to allow for reframing.

Examples of metaphor and analogy given by the designers included both visual and verbal forms.

One example of an activity designers use to do this visually is mood board discussions. These are capable of creating more objectified conversation about a project, as the project is abstracted through both metaphor and analogy. This abstraction allows the designer to highlight desirable aspects for the outcome that may not have been a part of the initial frame, or at least held as much value in the way the client was initially framing the situation. "We create a mood board, which generally tackles a design brief, but not specifically. And that's usually quite good because people find it easier to talk about unrelated things. And you both get a sense of what needs to be done" (Designer_D 2010).

An example of verbal abstraction can be seen through this designer's analogy to 'tone':

> It's really easy to talk about physical things—graspable things—but tone is something that's just really hard to grasp. And it's the most important factor for me—it's the thing that people read without reading. Even if they don't read a single word of a document, they just pick up the tone of it—the feel of it. … So, we talk a lot about tone and try to get them into that headspace as to what tone can do (Designer_C 2009).

'Tone' relates to projected value, intention or quality. By conversing about tone, the designer is abstracting from a presupposed outcome, to talking about the values and qualities a desirable frame might have. This facilitates the adoption of new frames by creating awareness of desirable and workable attributes.

In order to objectify and create a mutually agreed, shared frame for a project, the interviewees all cited *contextual engagement* through questioning and exploring the situation *with* the client. There is a sense that the interviewees were curious to find out about the client's world and incorporate that into the situation being framed. The contextual exploration is an exchange that shifts both the client and designer's preconception.

> So we're really trying to get everything—that's the 'desk research' phase. That's so we don't re-invent the wheel, or we don't miss out on an opportunity that exists already from their content. It also helps us plan the workshop, because we were immersed enough to think about how the workshop should run—how it should be different (Designer_B 2009).

This example indicates that contextual immersion is not only to learn about the situation, but also to strategically understand how to create meaningful modes of interaction and helpful activities to facilitate reframing with the particular client (uncovering opportunities for the workshop). The contextually designed workshop would facilitate leaps through co-exploration of the situation—some leading the client to new frames, and others openly exploring the situation with the client to learn things that could produce new frames for the designer too.

Reframing (for both parties) was assisted by co-exploring abstracted, *conjectured views* of the situation—including areas of uncertainty. Multiple conjectures were often posed and were kept rough in description and/or sketching. Far-fetched or recognisable, the designers saw this as a way to 'loosen' fixation on a particular outcome.

3.5 Language Co-Creation

From the interview data, it became clear that the dynamics of conversation and the language that was evolved with clients was important to allow for new frame communication and for gaining acceptance on these new frames. In this study, the use of *engineering a dialogical approach*, using a *context specific language framework* and asking *leading questions*, were the three ways designers destructured the situation through language co-creation.

Every designer interviewed used the spatial metaphor of 'a journey', which implies a dialogical mode of interaction. A dialogical approach uses question and response as well as representation and reflected re-representation to create a shared horizon of understanding (Coyne & Snodgrass 1997).

> And I always insist on starting with a meeting. … I can't imagine ever hiring anyone to do almost anything for me without speaking to them! So, immediately I'm on guard when someone just emails and says, "Can you email me a quote?" I immediately think, "This isn't someone that I'm going to be able to work with." So, then at that point I'll

> just call them and try to start a conversation, (a dialogue), which can be difficult. (Designer_C 2009).

It is clear here, that the designer is recognising that it is prohibitively difficult to get the client to adopt new frames without dialogue. Additionally, all of the designers expressed that decision-makers need to be a part of the dialogical framing stages so that they too, adopt the new frame. "If you include them in that really casual way, and you can be conversational about these projects, they usually have a massive influence on what you do. And they hold the key to what will make you make the decision one way or another" (Designer_C 2009).

Imposing a language framework that has a specific and limiting agenda is unhelpful to communicate new frames. Clichés, jargon and buzzwords are key examples of this. The problem is that there are 'default' (Designer_E 2010) ways of thinking tied up in these culturally specific structures, whereas framing really needs to be explorative and interactively co-created, and needs a language that supports this. Such a language has to be iteratively co-created through dialogic questioning and answering. The key to understanding how to communicate new frames is by regular conversational interaction. Not only does this clarify meaning and intention more deeply, instinctively and fluidly, but also it allows for a shared language to evolve through 'play'.

Clients can be close to what they are doing and the problem that they present may well need to be loosened up in order for reframing to take place. By asking good, targeted and *leading questions*, the client's initial frame can be destructured such that it is possible for new frames to be adopted:

> One of the things with meeting with a client and starting on a project is asking the right questions to get the right information … because they'll just sit down and tell you a lot of data. And it's very data driven but I'll often ask people, "Who do you think you are? How do you see yourself? How do you see your business? And how do you want to see your business? How do you want people to feel about you? And how do you actually behave? How would you like to behave? Would you behave differently?" (Designer_C 2009).

When the designer is talking about using questions to move away from the data focus, they are facilitating reframing by 'revealing' the situation in a different way through questions. In this example, the designer is trying to get the client to reframe in terms of value, identity and behaviour. These questions are highly strategic, aimed to divulge more desirable and workable features that a better frame may have. They are directional and intentional in character.

A co-created language also creates a level of trust that supports reframing. It was found from the interviews that a shared language with clients, built up over projects, was highlighted as a significant strategy for reframing.

4. Discussion

The briefing modes, 'technician', 'facilitator', 'expert/artist' and 'collaborator', translate into a hierarchy based on: the point of entry into the project; the designer's involvement in the problem and solution space formulations; and, the level of iteration in the briefing process (see Table 1). Higher levels in the hierarchy are associated with a greater ability for the designer to reframe with the client during briefing.

Mode	Point of Entry to Project	Involvement in Problem Space Formulation	Involvement in Solution Space Formulation	Level of Iteration
Technician	End of planning	No	No	Low
Facilitator	Near end of planning	No	Partial	Low
Expert/Artist	Mid-planning	Partial	Yes	Med
Collaborator	Beginning of planning	Yes	Yes	High

Table 1: Briefing modes and ability to reframe during briefing

This outcome space is reminiscent of the model of service by Nelson and Stolterman (2003, pp. 56–59), with five distinct categories, hierarchically related. The major differences for our findings are: the order of the categories (which are based on increasing opportunities for the designer to reframe the problem as given, whereas it is unclear how Nelson and Stolterman identified their hierarchy); the names attributed to the modes; and, that we were able to identify critical components of variation between the categories of description. Reframing is best achieved with earlier entry into the project with the client, and co-evolution (Dorst & Cross 2001) of the problem and solution spaces during briefing as a highly iterative exploration of the design situation with the client.

There have been two dominant paradigms used to describe design thinking: 'rational problem-solving', as expounded by Herbert Simon; and 'reflection-in-action', as set forth by Donald Schön (Dorst & Dijkhuis 1995; Schön 1995; Simon 1984). It was clear from the interviewees that during the briefing process, rational problem-solving approaches were not apparent from the designers' perspective and in fact, the designers deliberately and strategically acted to facilitate reflection-in-action approaches with their clients, when observing a problem-solving mental model of design. Higher briefing modes were indicative of a reflection-in-action paradigm of design.

The clear difference between typical and innovative projects was whether the project, (as initially presented by the client), was able to be reframed during briefing. Modifiers of a frame were the project's *given form*, *value/intent*, *content*, and *style*. If a frame is created through a process of abductive reasoning (Dorst 2010), then it can be seen that the 'what' is the *given form* and *content*, the 'how' is the *approach* and *style*, and the 'value' is the *value/intent* (see Figure 1). It should be noted that style could also easily be a component of the 'value' aspect of a frame (see Stacey 2006), however, given the way designers were talking about it, style was more reminiscent of an approach.

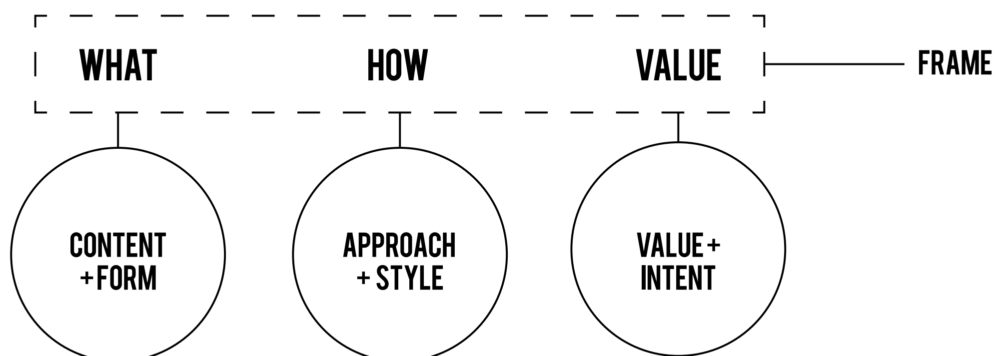

Figure 1: Modifiers of a frame

The significant barriers to reframing, as experienced by the designers were: *fixation* [4] by the client on their initial idea for the project; a *problem-solving mental model of design*; and, *resistance to journey*. Abstracting from a client's currently held frame is a significant way in which designers destructure a situation so that new frames can be communicated and adopted. The strategies given by designers to achieve this were: the use of *metaphor and analogy* [5]; *contextual engagement* through research [6]; and, *conjecture*, where reframing was assisted by co-exploring the abstracted conjectured view of the situation (see Figure 2).

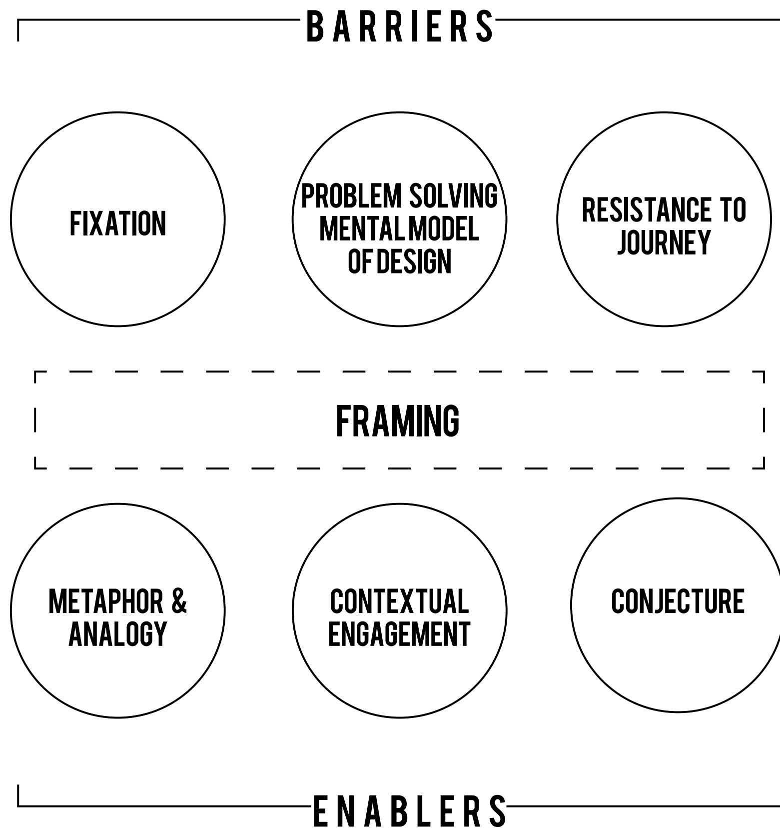

Figure 2: Barriers and enablers to reframing during briefing.

Language co-creation that is capable of communicating new frames and facilitating reframing thinking frameworks, includes strategies such as: engineering a *dialogical approach*; using a *context-specific language framework*; and, using *leading questions* to facilitate 'leaps'.

5. Conclusion

Reframing during briefing has the goal that both parties negotiate a mutually apprehended frame so that the project can progress. We have seen that designers strategically and actively modify and gain acceptance on more desirable and more workable frames with their clients during the briefing process.

Other disciplines wishing to employ the framing aspect of design thinking can learn from the ways designers have professionalised the reframing with non-designers. It is essential to discontinue viewing the situation as a problem-solving exercise, deconstruct presuppositions, and create dialogical ways of interacting with stakeholders and the situation. Activities that support new frames being adopted tend to abstract from the situation to allow for objectified exploration of the context. Successful communication of new frames is only possible by co-creating a language through the hermeneutic process of gaining common understanding. These preliminary findings make helpful inroads into understanding framing and reframing during briefing. A more full understanding will be obtained, once the study is completed.

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Notes

1. Phenomenography is an empirically derived qualitative research methodology, which was developed at the University of Göteborg, Sweden, in the mid-seventies to investigate the qualitatively different ways in which people experience a certain phenomenon (Dahlgren 1975; Marton 1974; Säljö 1975; Svensson 1976). It has been used primarily in educational research to study conceptions of learning (Marton, Dall'Alba & Beaty 1993; Pramling 1983; Säljö 1982), and particular educational subjects (Lybeck 1981; Lybeck et al. 1998; Neuman 1987; Renström 1988), but has also been used to study conceptions of death (Wenestam 1982), conceptions of political power (Theman 1983), Nobel laureate views on intuition (Marton, Fensham & Chaiklin 1994), and recently conceptions of being a designer, design across disciplines and sustainable design (Adams et al. 2009; Adams et al. 2010; Daly 2008, 2009; Daly, Mann & Adams 2008; Mann, Radcliffe & Dall'Alba 2007a, 2007b).

2. Interviewees have been de-identified for the purposes of publication.

3. The designer will actively try to 'destructure' (Hekkert, Mostert & Stompff 2003) the frame in order to allow for adoption of new frames, if the initial frame stated by the client is deemed to be unworkable or unnecessarily limiting.

4. Fixation has been described in terms of designers' during conceptual phases, however, not for clients (e.g., Jansson & Smith 1991; Purcell & Gero 1996; Youmans 2010)

5. Metaphors are an intuitive structure that can be useful to harness a client's physical and social experience to provide understanding of less familiar ideas (Hey 2007; Lakoff & Johnson 1980). Analogy is a key way that designers have been found to creatively describe and generate new frames (Caskin & Goldschmidt 1999; Cross 1997; Dorst 2006a). It turns out that this is not just something they do themselves, but something they share with clients to allow for reframing.

6. One of the biggest barriers to getting clients into the framing mindset, (rather than problem-solving), is the strength of prejudice in their presupposition (fixation). Contextual engagement activities are a powerful way to help make this shift and also to clarify each party's individually held frame (Hey, Joyce & Beckman 2007).

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Edited by
KEES DORST
SUSAN STEWART
ILKA STAUDINGER
BEC PATON
ANDY DONG

DTRS8

INTERPRETING DESIGN THINKING

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EDITED BY
KEES DORST
SUSAN STEWART
ILKA STAUDINGER
BEC PATON
ANDY DONG

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DTRS8 INTERPRETING DESIGN THINKING

These are the proceedings of *DTRS8: Interpreting Design Thinking*, a two-day symposium set up to stimulate discussion between design thinking researchers, business researchers and practitioners about the ways design activities, design skills and abilities (aka 'design thinking') can be interpreted for other professional fields. *DTRS8* was hosted by the University of Technology, Sydney—Faculty of Design, Architecture and Building. The symposium took place on October 19th–20th, 2010.

The papers for the *DTRS8* symposium have been double blind refereed by eminent scholars, in a process that took a year from the first call for papers.

Introduction

It has now been almost twenty years since the first DTRS symposium, and research on design thinking has matured immensely since those early days. It has resulted in a steady and growing stream of publications. Recently a number of books were published that capture design thinking from various perspectives.

In the last few years, the notion of 'design thinking' has also become popular outside the design professions—it is a buzzword in the business world (amongst management scholars and professionals), and we can find 'design thinking' mentioned as an exciting new paradigm for dealing with problems in sectors as a far afield as education, IT and medicine. This creates an opportunity for the design community to be heard and valued in its approach, and for people that were trained as designers to exert their influence outside the traditional design professions.

This success does raise the question what that 'design thinking' really is—what it consists of, what its strengths and weaknesses are, what skills, abilities and character traits support someone's capacity to be successful in design thinking, and which key elements of design thinking are transportable beyond the core design disciplines.

While we do not have all the answers yet, the challenge that the *DTRS8* organisers see before the design thinking research community is to play a role in interpreting design thinking for other disciplines. In doing so, we will overcome the relative intellectual isolation of 'design thinking'—traditionally, it has always been defined by distinguishing it from other kinds of thinking and problem solving approaches. Yet defining 'design ability' and 'design expertise' as separate and exclusive to the inner circle of design graduates limits our ability to engage with other disciplines. The *DTRS8* symposium is built on the premise that our knowledge of the nature and qualities of design thinking is now strong enough to reach out. The researchers and educators in the DTRS community have developed perspectives on design thinking—some of these are broad and endeavouring to be all-encompassing, others are much more detailed in focussing on key aspects of design thinking (like the role of creativity, etc). The *DTRS8* challenge was to look at what these particular perspectives, insights, theories, models and sets of tools for design thinking can bring to other fields that are seeking to incorporate it.

DTRS8 brought together a rich mixture of eminent design researchers from across the world, in a setting that was quite small (approximately 50 people), resulting in high-quality discussions. The objective of *DTRS8* was to use these conversations to start up a broader intellectual discussion on the nature, strength and value of design thinking.

In these proceedings you will find papers that report upon a reflective conversation with people from a different discipline, papers that are theory-driven: for instance creating an in-depth, logical comparison between abductive design thinking and problem solving behaviour that is at the basis of other disciplines. And you will find empirical and applied papers, such as reflective case studies tracing the adventures of practitioners from different disciplines involved in design-thinking-led projects.

We hope that the publication of the papers in these proceedings will stimulate further ideas and discussion!

The *DTRS8* Organisers would like to thank the reviewers of the papers, the volunteers who facilitated and recorded the workshop sessions and the participants for their inspiring discussions.

DTRS8 Organisers:

Kees Dorst
Susan Stewart
Ilka Staudinger
Bec Paton
and Andy Dong