

THE FUNCTIONS OF THE DESIGN BRIEF

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1. Introduction: The design brief

'The design brief is an early definition of the design problem and the possible descriptions of the strategy to solve it.' [Phillips 2004, p. 16]

1.1 How to create the perfect design brief

The brief is an important component of many design projects and can play a number of roles within a project. For example, a brief can facilitate to clarify the scope, aims and objectives for the variety of parties involved in the development process [Phillips 2004]. Alternatively, the brief could provide a rough outline of a project direction, allowing freedom and broad scope to those involved [Brown 2009]. Research in the area has been limited, partly due to the way in which every individual and organisation appears to have their own hybrid method and format of design brief and use it for a number of different reasons. The most significant bodies of research have offered approaches that include; prescriptive check-lists that make suggestions towards the kinds of information in which to include in a brief such as aims, objectives, deadlines and even more specialist information such as the Intellectual Property and ethical considerations [Brun et al. 2009], [Phillips 2004]. Contrasting views suggest that high levels of freedom or 'fuzziness' in a brief can have positive transformational effects [Brown 2009], [Koen et al. 2002], [Sanders and Stappers 2008], and describe fuzzy approach as experimental, ambiguous, and often chaotic, with a great deal of uncertainty. Trot [2002] also argues directly against perspectives approaches such as Phillips [2004] and states that the single biggest barrier to organisations trying to innovate is the 'excessive formalisation' in the brief writing process, and claim such approaches will de-motivate and sap the energy of a team.

1.2 Briefing context and function

With a variety of viewpoints regarding the fundamental approach to briefing, it is important to contextualise this debate with a closer look at the variety of contexts in which briefs are used.

It is important to consider how both prescribed approaches as well fuzzy or open approaches may both be suitable from one organisation to the next. A key fundamental factor is; what the brief is aiming to enable and also the level of significance that is placed on design as a strategic tool within the organisation or project [Brown 2009]. Organisations such as Philips and Xerox have for many years placed design at the forefront of their development and innovation strategies. As a result the function of a design brief is to inspire new and innovative ideas and consequently the design brief in this context is understood as to 'enable' these processes [Bruce and Bessant 2002]. Alternatively, organisations which do not place the same significance on design and more often deem it unnecessary to use the design brief to enable innovation activities. Indeed the literature that commentates on the design brief often assumes that it will be used as part of a more transformational strategy and often neglects a more progressive development progress. Therefore, when discussing this area, it is important to make a clear distinction at an early stage as to what the role and overall mission of the

project is before attempting to put forward a 'one size fits all' approach to design briefings. A 'one size fits all' approach is rarely a viable option without extensive adaptation and personalisation to better suit both the product and organisation contexts [Brown 2009], [Phillips 2004].

When striving for break through innovation, an open-ended approach with design placed in a strategic role, may give rise to a very loose design brief that is open to multiple or miss-interpretation and hence a variety of ideas. Within these differences, it is claimed that the viewpoints from different members of the team should be negotiated openly and debated in order to explore the true potential of the project [Brown 2009]. However, a prescriptive approach to the design briefing process may in fact be extremely appropriate for organizations looking for an incremental or iterative developments of an existing product or less radical product updates, whereby a measured approach would ensure there was no opportunity for confusion or deviation from the tasks described in the brief [Phillips 2004].

1.3 Relationships of stakeholders

As discussed above the need and function of a brief can vary to reflect the motivations and purpose of a project. In a consult-client context, a development team may initially submit a request for proposal (RFP) to a client, whereby they have outlined their proposed approach and describe how they will meet the client's requirements. This initial request is often termed a 'creative brief' and is usually a creative response to the client's initial briefing that might include the goals of their organization, the market opportunity identified, an estimate of the budget, as well as the key deadlines [Graell-Colas 2009]. Upon receiving the commission or contact, a further 'design brief' is often developed and is typically a further response to the client's initial brief. This design brief however will often reflect the knowledge, experience and skills of the design team, as well as outlining how to fulfil the strategic objectives of the project [Best 2006].

'Deciding what to include in the design brief (and what to leave out) will invariably be based on the specific project needs, but as an example the likely information it will include is: the business case; key findings; project goals, aims and objectives; background research and future aspirations; target audiences and end-users; functional requirements and specifications; key project and process stages; timescales and deadlines; milestones, performance measures and project deliverables.' [Best 2006, p. 94]

The quote from Best [Best 2006] above describes a check-list that could be useful when the working relationship with the client dictates that the consultant may be working with outside agencies or contactors. In such situation, clarity and removing the room for errors and miss-understanding will be a vital to the successful running a delivery of a project [Phillips 2004]. Once the organisations know what to include in the brief, the design or project manager usually writes the design brief in close consultation with the client and the design team. The client-consultant relationship outlined above often contrasts to that of a large in-house organisation that typically may have a more developed relationship with other organisational departments and a defined remit of project scope. Within an inhouse context, a marketing or research departments would typically work closely with the other management functions that could include design, engineering or production managers and draft out a new project brief. The project brief would typically utilise the expertise of each functional departments from within the organisation and less frequently use outside contractors. These departments may not always be located in the same building or country, but there is a certain level of familiarity and a number of common factors that somehow bring an element of implicit mutual understanding [Kleinsmann 2006]. Initial project briefs are often discussed collectively with concerns raised early in order to define workload into an achievable brief that acts as a plan of action with specific deliverables for each team. It is often reported how the discipline-based perspective or background of those involved in the formulation of the brief will further influence the choice of its contents and how the design problem is definite and approached [The Design Council 2009]

1.4 Barriers

Phillips [2004] discusses some of the briefing pits-falls that can often slow design progress. He describes how a verbal-only delivery of a brief can add significantly to the time it takes to complete the project and usually lead to unfortunate misunderstandings, hard feelings, angry confrontations,

major frustrations and design solutions that are not as great as they could have been. Another barrier to successful briefing is described as an 'over the wall' approach or a game of catch, that would see the project brief be passed onto each department team to carry out their contribution and pass it onto the next department in sequence, see Figure 1 [Walsh et al. 1992]. Philips [2004] also describes this approach as chaotic and calls for an integrated relationship that he compares to a game of rugby whereby each department must perform their own specialist function but overall must work closely together and combines their efforts, see Figure 2. This approach and arrangement of teams are widely known as multidisciplinary teams and are increasingly common with the design industry [Brown 2009], [Kleinsmann 2006], [von Stamm 2008].

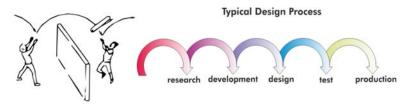


Figure 1. Over-the-wall product development process. source: Walsh, Roy, Bruce and Potter [1992, p. 139]

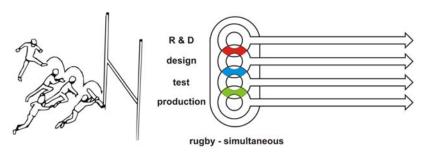


Figure 2. Over-the-wall product development process. source: Walsh, Roy, Bruce and Potter [1992, p. 139]

With this trend comes a challenge of balancing the inputs and perspectives of all parties into a brief that is workable for everyone. However, most of the research expresses clearly that design briefs should not ever be set in stone and should always be able to adapt to suit each audience, as long as there are mechanisms in place to keep all parties updated and involved in the changes [Bruce and Bessant 2002], [Kleinsmann 2006], [Phillips 2004].

1.5 Ability to transform

Phillips [2004] compares brief to a road map to success and a project compass whereby each party will always to be clear about what direction they are heading. Having a consistent point of reference is key for effective use of resources and essential in order to complete a project on time with no room for confusion or error. As well as these operational benefits Philips [2004] believes the brief has the potential to be even more transformation as outlined in the following case study from:

'General Motors realised its premium automobile brand, Cadillac, needed a major re-design to improve sales and increase market share. It was determined that the engineering of the luxury motor car was still considered state of the art, but the overall design of the vehicle was not exactly what the target audience wanted. A comprehensive design brief was created to guide marketing, engineering, and design through this major project. This major re-design has been credited for restoring the Cadillac brand to its former position as an icon of luxury for American cars. It can be argued that the design brief was the most important factor in the overall success of this project.' [Phillips 2004, p. 46] Whether it is possible to empirically measure such effects of a design brief, is a question that would be extremely challenging to answer. However, Phillips [2004] does truly believe the brief has the potential to turn around the fortunes of organisations. This example of measured clarity in a very complex engineering project is very similar to those seen in concurrent engineering, rather than more

modestly scaled innovations in product development [Cooper and Press 1995]. Empirically concluding that the brief can have such a defined transformation effect in other sectors is hard to confirm. The complexity of large scale projects given in this case will inherently benefit from a more prescriptive approach in order to maintain order in a project that could involve thousands of specialists spread across numerous countries.

Conversely many describe how the design brief should be serendipitous and 'fuzzy' in order to enable the greatest opportunity for transformational innovation to occur [Brown 2009], [von Stamm 2008]. These approaches discuss how it is the contributions of the actors within the development teams who hold the key to a successful project. Their relationship and how they interface their expertise with each other is held at much higher esteem that the brief. The brief in many of this case is seen as a mere starting point for the actors to elaborate from.

There are a number of factors that determine the level of detail, method of delivery and format of a design brief. These factors are linked to more fundamental aspects such as what the brief is being used to achieve, i.e. a breakthrough or simply an incremental development and whether the organisation is comfortable with ambiguity.

Research has suggested that the level of prescription will produce vastly different results, as will the style of management and composition of the project team. The variety of disciplines involved in a project gives rise to another set of factors linked with how details are interpreted and understood. This understanding is linked to the way in which ambiguity is favoured by certain disciplines within a project team, which in turn can lead to challenges in achieving a shared understanding. With these factors considered, creating a generic briefing framework that is universally understood and flexible enough to suit a wide number of projects, organisations and management styles becomes increasingly difficult. For many design organisations, the variety, fluidity and freedom of the brief are paramount to their ability to innovate and create new products.

2. Case study

The case study involves undergraduate design students arranged in small teams of between 3–4 members working collaboratively with design student teams located at universities located in a different country. Contact between these distributed student teams was conducted exclusively through ICTs [Bohemia and Ghassan 2011a]. Through exchange of information with their counterparts, each team of students was required to develop and prepare a final presentation which was to focus on creating a narrative depicting the scenario related to an outcome addressing issues given in the brief [Bohemia and Ghassan 2011b]. The theme of this international project was 'gift-giving'. More information about the project is available at http://theglobalstudio.eu/global_studio_projects_gift.htm The idea for the theme was inspired by the anthropologist Marcel Mauss' classic book 'The Gift' [Mauss 1950, 1990]. Close to 250 students from universities located in Japan, Korea, Australia, China, Taiwan, England and Canada participated in this project (see Figure 3). The project aimed to encourage students to explore various questions related to intercultural communication and design. Such issues included:

- How do relationships form between people?
- How do bonds form between people of different cultures?
- Should cultural differences be bridged or should they be celebrated?
- What strategies might be employed in order to encourage relationships?
- What are the material effects of Design?

A lecture based on the literature review covered previously in this paper was delivered to the students' conveying the theoretical background and salient issues around the design brief. The key themes of the presentation were as follows:

- The importance of clarity in communication.
- Semantic awareness and recuing miss-understandings.
- The importance of the balance between open-ended and prescriptive briefing approaches.
- The ability to use the brief as the project assessment criteria.

The students were then asked to write their own design briefs based on the project context which was described in an earlier session. After receiving a basic template and information about how to construct a brief, the students were encouraged to choose their own format, style and method of briefing. The initial project brief would then be evaluated by their peers and the academic staff.

Figure 4 illustrates the relationship between the design teams and their counterparts who will receive the design brief that proposes the gift and offer feedback towards its suitability for its intended context, i.e. a gift inspired by the students own university, offered to their counterparts who are based in a different university overseas.

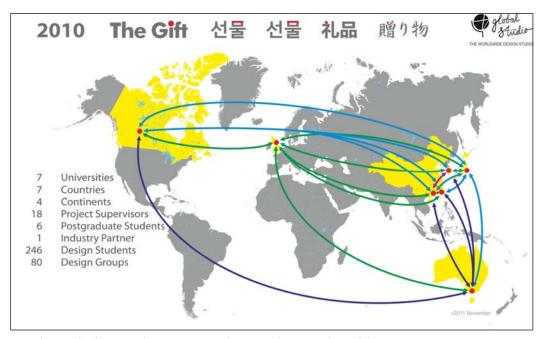


Figure 3. Connections between international universities student workgroups

The initial box with an arrow includes inputs that will influence the design brief and outline for a gift. The students will conduct cultural research towards their counterpart's culture and way of life, client research (about their counterpart's university) and finally research regarding the concept of gift giving.

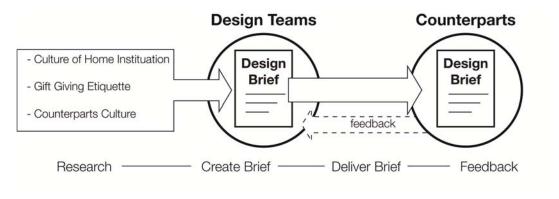


Figure 4. Factors influencing the design brief and feedback cycle

3. Discussion and conclusion

3.1 Initial review stage

After reviewing the progress of a selection on the student teams, a number of differences were evident in the way the teams had engaged with their counterparts and used their feedback. In the case of the

teams who did use the feedback of their counterparts, a number of issues began to surface primarily concerning the scope, clarity and overall communication of the design briefs.

A number of teams had taken steps to address to issues of clarity and taken steps to reduce ambiguous or misleading terminology and had ensured the language they had used was not misleading or overly colloquial. The teams that adopted this approach found that the potential for confusion had been greatly reduced when compared with those teams who had not. However, in some cases the focus on clarity had limited the scope of the briefs and many of the comments from the evaluating counterparts appeared very generic and lacked deeper engagement with the subject matter. While being too specific, it seemed the information had removed the serendipitous aspects that could have inspired the counterparts to put forward their own thoughts and build upon the suggestions of the student groups writing the briefs.

Our belief with regards to 'what makes a good gift?' is that it is not on any level the material good itself, but the time and effort that the giver has invested into researching and critically thinking 'what would the recipient like to receive?' Other questions that lay on par include: how useful is the gift to the recipient? and what does the gift say? Important variables such as the relationship between the giver and recipient, their background?, culture?, and personality? are all vital to answering any of the previous questions, and should never be under estimated when considering a good gift, - as in our view, the material goods are nothing but a bonus if the gift is 'good' - as the true gift is the unspoken message that has been exchanged, and with it carries no expiration date. Assignment University asks that you address its culture and design a gift that represents itself and surrounding culture, - suitable to be presented in China to the University. You should address both University and University's culture as well as the history behind gift giving and transactions with great care. The gift you are to design does not have to be physical, but must follow the same transaction a typical gift would. (i.e. -Gift is given, received, including any third party variables, obligation,

Figure 5. Group 12 brief

When presented with briefs like that shown above, the counterpart often found it hard to offer comments and constructive input. This may have been partly due to a language barrier, but the lack of images seemed to be holding many back. The counterparts often requested imagery and more straightforward explanations (see Figure 6 and Figure 7 below)

- "Can you give us more information, such as images?"
- Feedback from counterparts (Group 12)

This issue seemed to affect a number of the groups, many of whom commented that the feedback they received seemed to be nothing more than a proverbial nod of approval to go ahead rather than a thought provoking challenge that could have pushed the initial proposal further.

"The feedback was fine, they liked everything and said just go ahead"

-Student (group 12)

There were also positive effects of the feedback from the counterparts. A number of groups received very detailed feedback that built upon their initial thoughts and inspired greater confidence in their own proposals. The vast majority of these groups also used enhanced levels of imagery and graphic descriptions within their briefs as well as supporting text.



Figure 6. Design brief presented by group 9



Figure 7. Design brief presented by group 10

This use of imagery seemed to have a significant effect on both the engagement and level of detail in the constructive feedback provided in the comments from the peer groups. This relationship between the use of imagery and levels of engagement, although prominent, was not conclusive. There were a small number of groups who used a very simple text layout without imagery to enhance the brief and still received positive, constructive feedback. When examining these groups closer which used only text, the proposals were very well crafted, enabling the room to provoke thoughts and provided a controlled amount of scope that allowed feedback and suggestions to fall within a similar relevant area and build on the proposals.

3.2 Team dynamics

Reflective accounts of how the groups found creating a brief together would present further issues. Many students commented that trying to balance the views and ideas of three or more individuals, all of whom had different ideas and visions for the project was challenging. They commented that collectively agreeing upon a theme was as difficult.

- "The problem we are having is that nobody can agree and a direction"
- Student (Group 12)

These comments represented issues typical with collaborative team work and the writing of a brief was a very apt example of how these issues affect the quality of the final outcomes.

Within industry these issues of collaboratively creating a design brief are multiplied in their complexity by the fact that briefs often involve decision making and contributions from a variety of competing interests, i.e. departmental teams. Each team will be competing to serve their own individuals interests and fight to maintain their own perspectives [Best 2006], [Kamara 2001].

The comments from the students again reinforced the challenge of collectively contributing and negotiating through a process and reaching a final decision.

3.3 Fixation

"We got some good feedback, but it's too late now and we're happy with our direction." -Student (Group 12)

The concept of fixation was suggested by Jansson and Smith [1991] who in their research, compared how groups who were given a simple, written brief, with those that were given the same brief but with additional of an illustration of an existing solution to the problem set. The research showed how the latter group appeared to be fixated on the example design, producing solutions that contained many features from the same example design than groups whom were not shown the example design. Jansson and Smith [1991] concluded that this type of fixation could hinder conceptual design if it prevents the designer from considering all of their relevant knowledge and experience that could help aid the design process.

Many teams commented that the feedback given by their peers and the academic staff was difficult to incorporate and include in the development of their proposals. Many groups used the brief as a tool to outline a very clear direction and included examples of concepts which they were intending the design themselves. As a result, some briefs prescribed plans of action that left no room for manoeuvre when presented with feedback by their counterparts. In the case of one group, this over prescription was partly due to overly compensating for language and cultural differences. The group had tried to be overly specific to avoid any confusion. However, this made giving feedback difficult and many commented that they felt like the feedback was criticising their proposals. The intention of the initial proposals was to outline a direction and hope to receiver critical and constrictive feedback, yet it seemed some groups had gone beyond this stage and lost sight of the balance between outlining scope and clarifying too much.

Not being able to dismiss an early idea and committing to it whole heartily had the potential to reduce the benefits that came from the evaluation and collaboration with the counterparts who were acting as the client. This fixation with early concepts also risks taking away the chance for the team to negotiate collectively and explore the boundaries of the project. This concept of design fixation has been discussed by Cross—who discussed how fixation can also cause 'stakeholder tension' within collaborative projects. This tension particularly affects the team usually when one person has such a strong opinion that the other team members feel they lose collective ownership over the direction. The affects of this feeling of lost ownership can often result in a team labouring to a what Cross calls 'satisfactory results' missing out on the opportunity to excel.

However, fixation is not always described as detrimental to the creativity process. Cross [1998] and Lawson [1994] have commented how fixation in certain scenarios can provide a solid base or guiding theme to which all the designers effort can be channelled, which often produces impressive results.

3.4 Too much too soon: Influencing feedback

As mentioned above many teams commented that the feedback given by their peers and the academic staff was difficult to incorporate and include in the development of their proposals. In discussion about the levels of prescriptive details within the proposals, many groups described how they had had an idea early and wanted to proceed with, which in inadvertently appeared to render the constructive

feedback useless. Many commented that the feedback seems very generic and hard to use in a constructive way. An explanation for these barriers in using the feedback successfully could lay in the effects that the very high levels of prescriptive information had on the evaluating peer groups. Cross [2004] discusses an interesting point on how in a designer-client relationship within industry, that often clients requirements are not understood by the designer. Once the designers begin to craft their creative responses to the client's initial proposal the designing actually inadvertently starts to take place, which obscures the client's perspective upon evaluation. This can also in turn influence the client and cause them to deviate from their initial intentions. To contextualise this point in the example of the student proposals, it could be fair to say that some groups did not find a balance between an openness and high levels of prescriptive information, or as Cross [2004] describes- 'understand the clients requirements.' Through precisely describing the intend path to the outcomes at such an early stage, the evaluations and comments of the evaluating peers were in fact influenced by the high levels of decision already made making constructive feedback very hard to provide.

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