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# LEADING INNOVATION THROUGH DESIGN

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## DEVELOPING THE DESIGN STORYTELLING IMPACT-APPROACH FRAMEWORK

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We propose that designers tell stories, whether this is in the production of artefacts such as sketches, renderings prototypes and multimedia presentations, or verbally when discussing their ideas with one another and their clients. We suggest that when designers work with an organisation at the conceptual stage of a project process, this storytelling can lead to certain impacts on the people in those organisations, such as increasing their capacity to critique design concepts. This in turn has certain ramifications with regard to the organisational strategy. In order to explore relationships between approaches to design storytelling and their impacts on employees of an organisation we developed the 'Design Storytelling Impact-Approach Framework'. Factors incorporated in the framework are identified from relevant bodies of literature and then applied to a case study in order to develop it further. In this case study design teams acted as clients to one another, presenting design concepts as multimedia presentations.

*Keywords: Storytelling; Design Process; Organisational Strategy*

## INTRODUCTION

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Storytelling exists throughout all facets of society, with different cultures of people's stories being documented throughout history (Bleyl, 2007). We propose that in modern day, it can be argued that one such culture of people are designers, and that they have their own stories with a unique set of characteristics.

When looking at literature that discusses the constituents of a story, it becomes apparent this applies to design. Bruner (2002) lists the constituents of a story as follows:

- Action directed towards goal
- Order established between events and states
- Sensitivity towards what is canonical in human interaction
- The revealing of a narrator's perspective

When examining design artefacts (such as sketches, renderings, models, prototypes and multimedia presentations) it can be seen how they fulfil this criteria. Table 1 below demonstrates how the criteria for story set out by Bruner (2002) are met by design artefacts.

Table 1: *Storytelling Criteria and Design Artefact.*

Storytelling Criteria:	Design Artefact:
Action directed towards goal; a story told with a purpose	A design artefact is constructed with the purpose of providing a solution to a design brief
Order established between events and states; state what has occurred and when	If the design artefact is a multimedia presentation, storyboard or report the order of events and states are explicit. If the artefact is a model, rendering or sketch the order of events and states are embedded and will be made explicit when presented by the designer
Sensitivity towards what is canonical in human interaction; demonstrate expected human behaviours in some form	Human interaction with the end product of a project, for which a design artefact contributes to the production of, is of primary concern
The revealing of a narrators perspective; deliver the perspective of the storyteller	A design artefact represents one solution or part of a solution to a design brief, of which there may be many, and therefore is an interpretation of the designer or design team that created it

As well as the presentation of these visual stories, verbal stories exist in the design process in the discourse between designers and clients. Peter Lloyd (2000, p.366) extrapolates story from dialogue in the engineering process, proposing that in this sense ‘a story can be interpreted or ‘read’, different narrative ‘viewpoints’ might be included, there is a sense of ‘closure’ in a story, a definite ending, and a ‘name’ might be invented that references the complex of action’. When looking for these components of verbal stories it can be seen how the discussion of individual concepts within a project and the discussion of a project within its entirety can both constitute a story.

The outcome is that different types of stories are produced at different stages throughout the design process. To illustrate this we mapped in figure 1 below a consumer innovation project along two axis; project timeline and organisational employees and designers involvement in the project. It is based on a typical project that runs between design students at Northumbria University and employees of multinational organisations such as Unilever and Mars. Points 1 to 4 represent instances of design storytelling that meet Bruner’s (2002) criteria as discussed above.

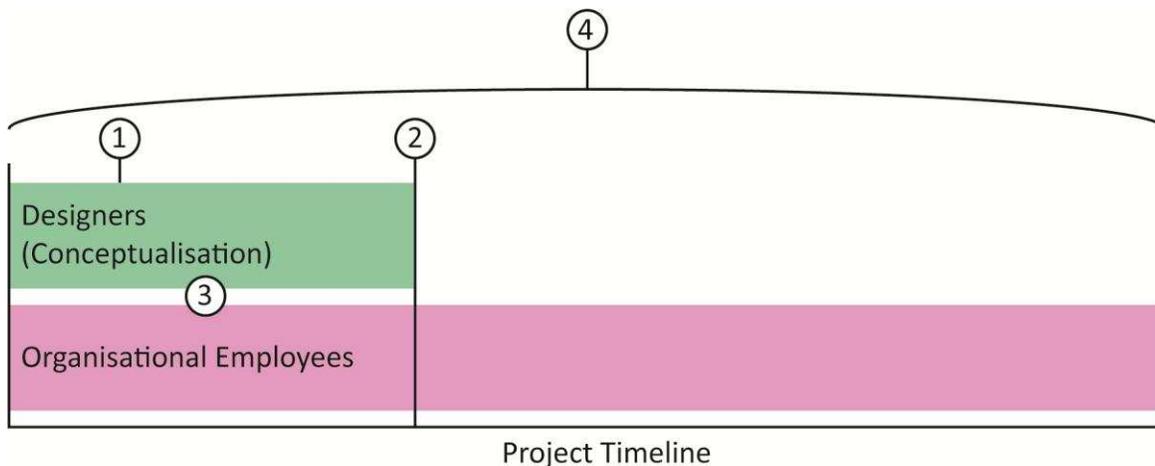


Figure 1: *Design Storytelling in the Project Process.* Point 1; stories produced by designers in the form of artefacts (sketches, renderings, models, prototypes). Point 2; stories produced by designers when they hand over/pitch finalised design concepts to the clients (multimedia presentations). Point 3; verbal stories told between designers and organisational employees. Point 4; the entire project process viewed as a story.

The storytelling that this research focuses on takes place at point 2, where the designers deliver finalised concepts in the form of multimedia presentations, which are then taken by the organisational employees and developed to the point of production. We will use a recently completed project titled ‘Festivals, Fairy-tales and Myths’ conducted between 6

universities each located in different countries, as a case study to test the potential of the proposed 'Design Storytelling Impact-Approach Framework'.

## AIM

Historically, it has been observed how storytelling influences society, a key example of this being stories told by different religions and how they have been used and interpreted to guide people along the *right* path in life.

More specifically, stories have been examined as a vehicle for critique, resulting in the improvement of something. For example, Bleyl (2007) recounts religious stories, which use the trials and tribulations of central characters, causing the audience to critically reflect on their own behaviours in the hope of imparting moral codes in accordance with religious beliefs. Similarly, Christensen's (2001) writings on organisational strategy build a case suggesting that internal brand storytelling can impact employees in that the resulting personal reflection will aid in the construction of a personal identity in the workplace, influencing the role they play in the organisation. This notion is paralleled by Cross (2006) and Strickfaden and Rodgers (2001) when they describe the narrative inquiry surrounding design artefacts and how this is used to critique the design process in the hopes of obtaining more robust outcomes.

Using this viewpoint, in a situation where designers work with organisations as illustrated in figure 1, it can be argued that the stories told by the designers have the capacity to impact the organisation's employees, more specifically, stimulating critique surrounding individual design concepts and the project process as a whole.

We propose that developing an understanding of the relationship between the approaches to design storytelling and the impacts on the organisation's employees is important. For example, if certain approaches were to lead to a higher degree of critique surrounding a given design concept, this may have implications for the organisations capacity to innovate. The relationship between critique and innovation has long since been established, proposing that in-depth critique is necessary for innovation during the project process (Verdonschot, 2006).

## THE APPROACH: LOOKING AT THE LITERATURE

In order to begin developing this understanding fulfilling our aim, relevant bodies of literature were examined abstracting and categorising the relationships between different approaches to storytelling and their potential impacts on clients. The findings are organised in a table entitled the 'Design Storytelling Impact-Approach Framework'. The key aspects of the literature that led to the construction of this framework are highlighted below.

Transformative Learning is a body of literature that explores the role of storytelling in society. It is proposed by writers in this field that storytelling is the foundation of a culture of people's morality (Bleyl, 2007, Turner, 2008). Similarly, Film Theory explores the role of storytelling within society, Lapsley and Westlake (1988) propose that films are worlds organised in terms of a story. Amongst many things, film theorists have a pre-occupation with reality, and how this impacts the interpretation of a film; breathing life into a story. Exploring these bodies of literature in conjunction with literature that relates design process and organisational strategy to story can help deconstruct themes in approaches to storytelling and their relation to impacts on people.

### AUDIENCE AS AUTHOR

Firstly, a theme that is important to highlight is the authoring of a story. In relation to the areas of literature highlighted as important, many examples claim that for a story to transform beliefs the author must belong to the audience's community. For example, in the field of Transformational Learning, Hawkins and Georgakopolous (2010) found that using

community members to author stories for their community was much more likely to have positive impact than if external people authored those stories. This is paralleled when Ohara and Cherniss (2010) detail an instance where an organisation's employees authored stories, successfully influencing the organisation's culture in a positive way.

#### ARTISTRY

The power of artistry discussed as a theme in relation to storytelling is also a common theme among the bodies of literature explored. Tufts (1990) describes how filmmakers believe that to move an audience to action, the power of artistry has an important role to play in the story's construction. Artistry is defined here as being skilled in the use of stunning visuals. Both Denning (2007) and Christensen (2001) also propose that artistry in the construction of story can be integral in empowering people, with respect to successful change management and building strong brands.

#### CHARACTERISATION

Characterisation, or persona building, is another theme across the areas of literature explored. Both designers and organisational strategists talk about using central characters in the delivery of a story in much the same way, suggesting that using central characters whom the audience can relate to will increase the chances of a deeper understanding of the story's message (Madsen and Nielsen, 2010, Denning, 2007). Signes (2010) discusses examples of how traditionally, moral messages are imparted on the audience through using the experiences of central characters in a story, often based on deity, with Greek Mythology representing one of the best examples of this.

#### FAMILIARITY

Building familiarity in terms of character, environment or scenario, into a story is a theme in approach that links the bodies of literature described here. DeLarge (2004) discusses using familiarity to embed humour into storytelling through inducing the critique of an everyday problem that a design solution has the potential to solve. In Turner's (2008) accounts of transformational theatre production, the environment, characters and language constructed in the play are always familiar to the audience and are seen as key in allowing them to critically reflect on their own behaviours within their community.

#### IMAGERY

The use of imagery, including metaphor, similitude and analogy, is an approach to storytelling discussed at length within the bodies of literature explored. Strickfaden and Rodgers (2001) detail accounts where metaphor and analogy have been particularly affective in communicating an understanding of design concepts. DeLarge (2004) details an example where the analogy of a board game was used in an organisation that focused on getting employees to critically reflect on the organisations processes. Observing Bleyl's (2007) historical accounts of parables, fables and proverbs, it is apparent that imagery has been a long established approach to storytelling, as it exists as a technique in all cultures and religions he discusses when imparting morality and value systems.

#### SEMIOTIC LAYERING

A theme in approach to storytelling that links organisational theory to storytelling in society is the appreciation of layering semiotic environments and the quest to understand the impacts of using various layers simultaneously. Saunders (1990) holds the belief that a leader's responsibility is to use more than one medium in delivering information so that it is easily digested by the audience. Denning (2007) has written lengthy discussion on mastering performance spaces and the various combinations of verbal, gestural and visual semiotics, which can aid in delivering a deep understanding to the audience and aid change. The appreciation of technique in layering semiotic environment directly relates to the wider

context of film theory. Stam (2002) and Easthope (1993) both discuss approaching the use of visual and verbal semiotics simultaneously and debate the relationship between the two in terms of how they affect interpretation.

#### TIME BASED

Finally, time based or a sequential focus is highlighted as an important theme in storytelling within the bodies of literature discussed. For example, film theorist Lapsley and Westlake (1988) discusses the careful construction of a block of reality in relation to sequencing events. Signes (2010) discusses pacing as an important factor in conveying a story, relating timing to meaning construction in the story. This is comparable to Madsen and Nielsen's (2010) sequencing strategy for the creation of a persona scenario as a technique for telling a design story that allows the audience to construct meaning from it.

Based on this literature, the first iteration of the 'Design Storytelling Impact-Approach Framework' we devised is shown Table 2 below.

Table 2: The Design Storytelling Impact-Approach Framework

Impact:	Approaches:
Affect Humanity	Audience as Author, Artistry, Characterisation, Imagery, Semiotic Layering
Construct Meaning	Familiarity, Semiotic Layering, Time Based
Inform	Audience as Author, Characterisation, Familiarity, Imagery, Semiotic Layering, Time Based
Question/Critique	Familiarity, Imagery
Synthesise	Imagery, Time Based
Transform	Audience as Author, Artistry, Characterisation, Familiarity, Imagery

A case study that interviewed groups of designers, acting as clients to other teams of students located in other university, about the *story* submitted to them by their partnering team was analysed in relation to this framework, in the hopes of building and developing the understanding of the proposed relationships between approach and impact.

#### FINDINGS: CASE STUDY

Eighty teams of students from various universities across the world took part in a Global Studio project entitled 'Festivals, Fairy-tales and Myths' (see <http://theglobalstudio.eu/>). Their brief was to design product/service concepts for a festival native to their partnering team's homeland, acting as both client and designer to one another. After the project had finished, 11 of the teams based at a university located in England were interviewed about their partnering team's *story*; in this instance a multimedia presentation of the final concept. The interviews were semi-structured and took approximately 30 minutes. The interviews began with a viewing of the *story*, acting as a point of discussion centred on the understanding gained of the design concept, changing perceptions of the design concept, critique of the design concept and a reflection on the project in general. The interviews were then transcribed and coded, as this research is exploratory in nature a line-by-line inductive coding strategy was used searching for thematic patterns between approach and impact (Denzin & Lincoln 2011). The relationships highlighted in this section, derived from an initial analysis of the case study, are those which supported the predictions of the 'Design Storytelling Impact-Approach Framework'.

#### DISCUSSION

Firstly, a relationship that was supported by all interviews was familiarity reinforcing meaning construction and the critique of design concepts. For example, one team had designed a set of boules that glowed in the dark and the story presented about this concept involved them being used during night time with a fireworks display taking place in the backdrop. When discussing how easy it was to grasp an understanding of this concept from the story, the

team acting as client proclaimed that the use of a fireworks display was a familiar scenario to all and so viewing the design concept in this context built an understanding about the intended use of the product and the experience it was intended to deliver. It was also suggested that seeing the product in use in this environment stimulated critique surrounding practical design considerations to further develop the concept.

Secondly, a relationship that was supported by all interviews that discussed it was imagery altering perceptions and the critique of design concepts. For example, one team developed a ticketing system for a festival and the story that was presented to showcase this concept involved the use of fairy-tale characters such as 'Puss in Boots' (see figure 2), as they had symbolic relevance to aspects of the ticketing system.



*Figure 2: A mask from the 'Puss in Boots' story*

When discussing this approach, the team acting as client proclaimed that the understanding of the design concept they developed during its development radically altered when viewing its 'fairy-tale' presentation. Further to this, they suggested that new lines of questioning had been unearthed that could further develop the design concept along many alternative routes.

Thirdly, a relationship that was supported by all interviews was having the audience as author and the informational value this could have with regards to understanding the design concept. All teams discussed the degree of involvement they had in the design of the concept and how much this impacted them in terms of gaining an understanding of the design concept from viewing the story. With a higher degree of involvement a higher degree of understanding was achieved, with a lower degree of involvement a lower degree of understanding was achieved. In all cases where audience involvement in the construction of the design concept was minimal it was suggested, by the team acting as client, that if the project were to run again this would be rectified.

## CONCLUSION

In conclusion of this case study, storytelling that uses familiarity has proved to have positive relationships with constructing meaning and critique of design concepts. Storytelling that uses imagery has proved to have a positive relationship with altering perceptions and critique of design concepts. Finally, storytelling with a higher degree of audience involvement in authoring is positively linked to developing a deeper understanding of the design concept. If the 'Design Storytelling Impact-Approach Framework' were constructed from the initial analysis of this case study it would be as follows:

Table 3: Developed Design Storytelling Impact-Approach Framework

Impact:	Approaches:
Construct Meaning	Familiarity
Inform	Audience as Author
Question/Critique	Familiarity, Imagery
Changing Perceptions	Imagery

This goes some way to supporting the relationships suggested from the literature review, suggesting that applying a storytelling perspective to this context may have substantial value. It is important to highlight the fact that this case study only examines an instance of the impact of designer's storytelling approach on other designers. To further develop the 'Design Storytelling Impact-Approach Framework' and the theory that underpins it in relation to the specific context of this research study, case studies where designers have worked with organisations will have to be examined in the future.

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