TOWARDS A STORYTELLING PEDAGOGY FOR DESIGN

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ABSTRACT

Storytelling is acknowledged as fundamental to design practice, playing a role in how designers communicate ideas and create user experiences. However, research that explores storytelling pedagogy is fragmented and focuses on specific sub-disciplinary contexts, its broader implications for design education remain relatively underexplored. This gap poses the question: how can we integrate storytelling into design education to better prepare students for industry?

Design research has suggested that designers need to be more transparent about the underpinning theory and models that support the application of storytelling. Two key rationales for this need have emerged: firstly, the shift in industry from a focus on product, to product experience, and secondly, the growing approach in industry that employs storytelling as strategy. These characteristics of industry call for a deeper exploration of storytelling in design practice, particularly in contexts where designers must mediate complex systems involving diverse stakeholders.

The author of this paper seeks to establish guiding principles for storytelling, through a cross-case comparison of data from collaborative projects between their institution's final year product design students and John Lewis and Partners. In total, forty-six projects were completed over five years, each culminating in the verbal and visual delivery of a story. Of particular interest is the comparison between the projects selected vs. those unselected for publication. Storytelling elements were notably more prominent in the selected publications. The data revealed that techniques such as analogy, action-driven narratives, and the creative naming of products played particularly significant roles in the selection process for this study.

Keywords: Design collaboration, storytelling, pedagogy

1 INTRODUCTION

Storytelling has been established as a critical skill in design practice, shaping how designer's communicate ideas, create user experiences, and engage with broader industry narratives. Although there is a lot of research that explores how storytelling functions within design practice, discussions around its role in design pedagogy remain largely fragmented. Much of the existing literature explores storytelling as an approach within sub-disciplinary contexts, or as one specific method. There is little investigation into the wider implications of storytelling and the role it can play on a broader disciplinary level as an approach to design pedagogy; asking this question can help us to integrate storytelling more effectively in the education of design students, better preparing them for industry.

Design research has continually called for greater transparency around theories and models that underpin emergent design practices. For example, Zurlo and Cautela [1] proclaim that the narrative relationship between organisations and designers needs further, more in-depth exploration, particularly "where the designer conceptualises complex systems involving different actors and interests". Forlano [2] also criticises design research that discusses the relationships between design practice and organisations for its lack of theory and methods as new practices emerge. More recently, Thoring et al. [3], propose that we need design research that assimilates knowledge-models for design through a closer critique of our practices. Hasse and Laursen [4] make a similar suggestion in their exploration of how designers employ framing techniques, akin to storytelling, for both conceptualising problems and presenting solutions. Pantzar [5] draws focus to the influential power of storytelling in shaping consumer behaviour, and how designers can leverage this as a persuasive means to garner the engagement and adoption of products and services, however, they conclude that more could be understood if designers were more explicit about the theories and methods they employ in its application.

Pedagogical research that explores underpinning theory and models for storytelling in design practice is relatively scarce, especially when compared to other disciplines, where it has been explored more extensively. For example, research in the Arts has explored storytelling pedagogy as a means to develop visual and verbal literacy, foster critical engagement, and encourage social change. This presents an opportunity for design education to draw from wider disciplinary explorations to develop its own structured approaches to storytelling pedagogy.

This paper critically examines storytelling's role within the pedagogical context of collaborative works between the author's university's final year product design students and John Lewis and Partners, with the ambition of proposing guiding principles for storytelling.

2 LITERATURE REVIEW

2.1 Storytelling as Pedagogy

Within the wider field of creative practice, storytelling's value as a pedagogy has been recognised historically. For example, Pavlou [6] positions storytelling as a valuable method for developing literacy in school children. He suggests that not only does it evolve comprehension and communication skills but also serves as a tool and medium to encourage creative expression. Parker [7] presents a 'Story Shorts' exercise as a method for developing both print and cineliteracy in art students. Again, signifying the value observed in embracing storytelling pedagogy, whilst demonstrating the diversity of methods used in educational practices across creative disciplines.

This discourse still continues today. For example, Markidous [8] identifies the use of storytelling through video as a common method in art education, exploring its potential to develop skills in visual literacy and narrative construction. Within the field of communication, Mariani and Ciancia [9] emphasise the need for a more considered construction of narratives. They propose a pedagogical model for the creation of Interactive Digital Narratives (IDNs) as a means to elicit social change and highlight their model's ability to support the representation of complex and controversial themes within a story. This work evolves the discussion around storytelling as a means to address societal issues and engage audiences meaningfully.

When considering these varying examples of storytelling pedagogy within the wider field of creative practice, the relevance storytelling pedagogy can have to design practice becomes apparent.

2.2 Common Storytelling Approaches in Design Research

Although research that translates storytelling to design pedagogy is fragmented and infrequent, there are still many instances where storytelling approaches taken by designers are identified through the reflection and observation of practice. For this study, storytelling approaches relevant to the context of presenting a design concept have been focused on.

Cross [10], and Schön and Wiggins [11] suggest that the physical artefacts produced during the design process have stories embedded within them. They argue that the production of a series of iterative sketches and or models could be described in essence as a visual story of the development process a designer has undertaken.

Another commonly discussed storytelling technique used by designers is the persona scenario. Madsen and Nielsen [12] proclaim that a persona helps to humanise narratives and therefore make a story told about a product more relatable to its audience. They also describe how within the scenario a clear order of events and states contributes to the coherence of a story, which resonates with noted psychologist Bruner's [13] criteria for effective storytelling. Further to this, Madsen and Nielsen [12] suggest that the acknowledgement of archetypal characteristics, a trial or tribulation faced by the persona, and the resolution of a problem through the means of interaction with a concept, all contribute useful and meaningful events or states of a story that can be structured around a concept. They summarise by stating a good story has a sensitivity to the condition of being human, which again, resonates with the criteria for effective storytelling that Bruner [13] proclaims; 'a sensitivity to what is canonical in human interaction'.

The use of analogy also represents a frequently referenced storytelling approach employed by designers. Brown [14] describes how analogy is a powerful tool for bridging unfamiliar concepts with known experiences. This aligns with both Lawson's [15] and Lloyd's [16] observations of the use of analogy in verbal storytelling amongst design teams, and the way ideas are expressed and described by one member to another. Lloyd [16] also emphasises the invention of names to reference concepts as a common storytelling technique adopted in a design studio setting.

Furthermore, stories that echo the experiences of their audiences or relate to them in some way or another is also recognised as a technique often employed by designers when pitching concepts. DeLarge [17] and Quesenbery and Brooks [18] both denote how this technique can often foster engagement with the audience of a design pitch. Conversely, stories that diverge from the experiences of their audiences are also recognised as a technique often employed by designers when pitching concepts. DeLarge (2004), Haesen et al. [19], McDonnell et al. [20] and Strickfaden and Rodgers [21] all debate the ability this approach has in introducing novel thinking and exciting intrigue around a design pitch.

Finally, Madsen and Nielsen [12] and Quesenbery and Brooks [18] also state that the acknowledgement of user perspectives and cultural beliefs allow designers to craft stories that resonate more powerfully with audiences.

This summary of commonly adopted storytelling approaches during the presentation of design concepts were used to build criteria for the analysis described in the following section.

3   METHODOLOGIES

3.1 Case Data

John Lewis and the author's university's final year undergraduate product design students have worked collaboratively on futurology design projects for the past five years (2019-2024). During this time, four briefs were delivered by John Lewis to the final year cohorts of students, and in total forty-six projects were undertaken in fulfilment of these briefs. Scenarios posed by the briefs ranged from limited access to resources, afternoon tea in 2029, an era of post-screen-based technology, and a world where a household supports an ecological system. These project briefs were designed to produce concepts to inspire John Lewis' internal teams charged with new product development. They required the submission of five slides/printed A3 boards comprising of both visual and textual description, presented verbally in a ten-minute presentation that was recorded. From these forty-six projects, John Lewis and Partners selected thirteen for publication on their various media platforms, leaving thirty-three that were not. They were selected based on an instinct of which projects posed a more compelling story. Each of the project submissions represents a case.

3.2 Cross-Case Comparison

As discussed in the literature review, descriptions of storytelling approaches detailed in relevant literature was compiled into a set of storytelling criteria. Each of the thirteen selected and thirty-three unselected project submissions were analysed through observing which of these criteria they did and did not fulfil. In doing this analysis, it transpired that the thirteen selected projects fulfilled more of these criteria comparatively to the thirty-three unselected projects. This demonstrates significant evidence that developing storytelling skills should be a preoccupation of design pedagogy, as the results suggest they have the potential to influence industry selection. The table below showcases the compiled criteria and the percentage of projects that fulfilled them for both the thirteen selected and thirty-three unselected projects.

Table 1. Fulfilment of Storytelling Criteria

Storytelling Criteria	Selected	Unselected
1. A name was invented to reference the concept, or the conceptual thinking	92%	48%
2. A story could be interpreted from an artefact/series of artefacts, or visual representation of an artefact/series of artefacts	77%	27%
3. An identifiable persona was used in telling the story	70%	45%
4. An order was established between events and states of the story	92%	48%
5. Analogy was used in the story	70%	21%
6. Concept development was acknowledged in telling the story	0%	6%
7. Sensitivity towards what is canonical in human interaction was apparent in the story	92%	45%
8. The archetypal characteristics of the persona were declared in the story	70%	55%

9.	The central character/persona faced a trial/tribulation in the story	62%	18%
10.	The central character/persona solved a problem and reached a goal in the story	70%	18%
11.	The designer's perspective was revealed in the story	100%	100%
12.	The story echoed the experiences/perspectives of the audience	100%	82%
13.	The story included verbal exchanges had by the designer during the design process	0%	6%
14.	The story related to the audience in some way, even if it didn't directly echo their experiences/perspectives	100%	88%
15.	The story was consistent with the real world	100%	42%
16.	The story was deemed as creative/beautiful (by assessors)	85%	33%
17.	The story was diverse and/or different	100%	90%
18.	There was a sense of closure; a definite ending	77%	61%
19.	User perspectives and cultural beliefs were acknowledged in telling the story	85%	33%

This cross-case comparison broadly follows the structure described by Borman et al. [22], where qualitative comparative analysis is used to suggest which factors may have influenced an outcome. In this instance, factors are storytelling criteria, and the outcome is industry selection for publication. The study is limited due to the subjective nature of project selection and the lack of control of other factors which have the capacity to influence this, such as the overall quality of the visual materials being presented. As such projects included in the analysis were required to achieve an academic award of 2:1 or higher. The discussion reflects on the thematic data captured in the analysis and is designed to contribute a useful perspective for guiding storytelling during similar collaborative projects where students are required to present their design concepts.

4   DISCUSSIONS

4.1 Significant Criteria in Comparisons

The analysis exposed many storytelling approaches that were more evident in the selected projects vs. unselected projects by a significant margin. These storytelling approaches included the use of a clearly defined persona, depicted either verbally and-or visually, to ground the narrative in a relatable character. Furthermore, selected projects frequently framed this central character within an explicit trial or tribulation, reinforcing the problem-solving aspect of the design concept. In addition to identifying a persona, selected projects were also more likely to elaborate on the persona's archetypal characteristics in an attempt to further engage the audience. Selected stories more commonly depicted the central character achieving a goal through the implementation of their design concept, reinforcing its effectiveness. Creativity in storytelling aesthetic was also an important factor, as projects scoring more highly against this criterion in the academic assessment were more prevalent among selected projects. The use of analogies was also a more prominent feature, in their attempts to bring clarity and comprehension to concepts through familiar references. Additionally, designed artefacts that embedded elements of the story in some way also became a distinguishing factor for the selected projects, as did the story being consistent with the real-world expectations and projections of the audience. Acknowledgment of user perspectives and cultural beliefs provided depth and relatability, strengthening the narrative impact of selected stories. Action-oriented storytelling, with a clear sequence of events further distinguished selected projects, ensuring they had logical progression. A sensitivity towards human interaction contributed to the authenticity of selected stories, while the invention of a project name provided reference to the central premise of the design concept. When considering these criteria for storytelling approach, the analysis suggests their influence on project selection was significant.

4.2 Less Significant Criteria in Comparisons

Other criteria also emerged as more evident in selected projects vs. unselected projects, but by a smaller margin. One such criteria was the degree to which stories echoed the direct experiences or perspectives of their audience. Similarly, stories relating to audiences indirectly, that presented experiences

recognisable to their wider culture, but were not necessarily lived by them, were also common among selected projects but not significantly more common than in unselected projects. A series of artefacts embedding a story, such as series of sketches and-or iterative models, were also marginally more common features in selected projects. Finally, having a definite ending to give the story a sense of closure was only slightly more frequent in selected projects. When considering these criteria for storytelling approach, although they likely contributed to effective storytelling, the analysis suggests their influence was less pronounced for project selection.

4.3 Insignificant Criteria in Comparisons

In contrast to the criteria in storytelling approach discussed in the sections above, certain criteria were found to be insignificant in distinguishing between the selected and unselected projects. It became apparent that a key reason for this was the format required to carry out an assessment, which ultimately influenced and-or limited certain creative freedoms when storytelling. No stories incorporated verbal exchanges from the design process to rationalise the development of concepts, as work of this nature was presented at an interim stage of the project. This also meant that conceptual development was omitted from final presentations. The briefs focus on envisioning alternate futures, and so in terms of context projects were inherently diverse, though not in terms of storytelling mediums. Finally, other criteria, such as revealing the narrator's perspective and ensuring the story could be interpreted or read were intrinsically met by all projects due to the basic requirements of the brief. As a result, these criteria in storytelling approach did not have influence on project selection, however, they highlighted how the constraint of assessment can influence the implementation of storytelling approaches within an academic context such as this.

4.4 Implications for Design Pedagogy

The results of this cross-case comparison demonstrate the fundamental role of storytelling in design communication, emphasising the similarities between the skills for compelling storytelling and effective design conceptualisation. Firstly, the analysis demonstrates that both require a deep sense of empathy, not only for the human experience, but also for the way a product or service integrates into a person's life. This supports the idea that storytelling should be considered as more than just a tool for communication with respect to design education; it is a fundamental cognitive process that supports the development of user-centred design thinking.

Secondly, it demonstrated that the visual beauty of design is often judged through the lens of storytelling. A story was shown to either enhance or reduce the perception of its value from a visual point of view, this was in extension of a simple explanation of the concept and touched on poetics, where industry intuitively looked for storytelling approaches within the physical artefacts produced during the design process. This suggests that design pedagogy would benefit from an interdisciplinary approach where visual storytelling techniques should complement aesthetics education to emphasise how stories shape perception.

Thirdly, it identified particular storytelling approaches that enhanced an audience's engagement with a design concept. Having a logical structure to the story, using analogies, and attributing names for referencing design concepts, all contributed to making the projects more accessible. These qualities all function in the same way as traditional storytelling approaches to help explain the intent and significance of a design concept. This supports the idea that storytelling approaches focusing on structuring narratives should be a critical component of design education, to ensure that students can communicate their ideas to the diverse audiences within the design industry.

4.5 Conclusion and Future Work

These discoveries highlight the value in embedding storytelling principles within design pedagogy. Through emphasising the importance of storytelling approaches that enhance clarity, engagement, and perception, design educators can better equip students to communicate their design concepts more effectively. When presenting a design concept, students should ask themselves: What story am I telling, and how does it reflect the user's experience? They should consider whether their concept communicates empathy, how it integrates into daily life, and how visual and narrative elements work together to enhance understanding. Students should also reflect on the clarity of their narrative; does it have a logical structure, include relatable analogies, and use memorable names or references? These guiding principles not only aid in communication but also deepen design thinking. Moving forward, research could explore

how specific storytelling techniques influence stakeholder decision-making in real-world design settings and investigate how cultural contexts alter the effectiveness of visual and narrative storytelling in global design education.

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