

Active Tense: 'writing' through design practice

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Abstract

"Active tense" stems from a collaborative research project "designing, writing", which aims to disseminate current knowledge and best practice on the relationships between designing and writing and their mutual interest in speculation, expression and research. This paper builds on preliminary findings to the various ways that design practices and design processes contextualize and explicate an intellectual proposition, i.e. how design contributes to advancing knowledge. While most discussions around this topic adopt one of two distinct positions-- that where authority is given to written text and that where design work has the ability 'to be read'-- our investigation looks at various media of design articulation directly linked to design as a system of inquiry, such as comics, storyboards, diaries, diagrams and choreographic notation. Each of these identify an ability to 'write' through design. These media expand design research as non-linear, theoretical and yet practical tools.

Keywords

design writing, design media, design articulation, systems of inquiry

Introduction

While our paper recognizes the large and significant developments occurring globally on this topic of design research and its relation to textual discourse, it repositions that which has been articulated as 'design writing' to 'designing, writing'. This slight change shifts the emphasis from design as a form of writing or writing about design to designing as an active process of inquiry and hence, acquiring knowledge. Any tensions between design and text are dissipated by the elaboration of a cluster of notational media shown to be productive articulators operating explicitly within

design's own domain. This paper draws on terminology defined in specific ways by expert researchers in the field. "Knowledge articulators" refer to the means by which information is shared through media. (Weggeman, 1997) "Media" is a term we borrow from Marshall McLuhan (1964) with reference to media's concretization of a creative process and its power to communicate in concert with any techniques of representation. In this case "creative process" is defined by Cziksenti Mihalyi (1997) who defends it as a process that can enable change in a symbolic context, such as design, and this approach opens up understanding of the participatory aspects of design (and the designer) to an acceptance of the receiving field (field of application of design). This view of creative process is considered in relation to Friedman's view of "design process" as goal-oriented process to solve problems, meet needs, improve situations, or create something new or useful. Finally, and most germane to our paper's subject, Cross highlights "design writing" as a conversation and that design research can help to construct a way of conversing about design. (Cross, 1999 p.8) In these terms, design writing is needed to support conversations within the discipline and across disciplines; it is the paradoxical task of creating an interdisciplinary discipline. (Cross, 1999 p. 8)

Knowledge

In writing about design articulation, there is a need to clarify the differences between knowledge, information and 'raw' data. This paper makes the distinction in which data are merely figures, information is meaningful data, and knowledge can be understood as information which is part of a meaningful social context like a social group, a specific knowledge system or a culture. (Weggeman, 2000) Following this definition, knowledge cannot exist outside an individual or a group. As a consequence of this approach, knowledge itself cannot be stored or transferred between individuals. The only way knowledge can be exchanged is when knowledge is articulated into meaningful information. Articulation can be interpreted broader than just the codification of meaning into texts. Codification of meaning can occur by means of oral (speech, sounds, music), visual (body-movement, graphics) or even tactile codification. Information in digital form can be stored and manipulated as data.

In this regard, this paper will look at different types of media that can support the exchange of knowledge and facilitate the storage of information. Moreover this paper considers writing through design as a means to articulate tacit knowledge, knowledge that people can act upon, but cannot readily express in words. (Polanyi, 1964) The model below illustrates how this research understands knowledge creation and exchange and how this study has been organized around the distinctions between knowledge, information and data.

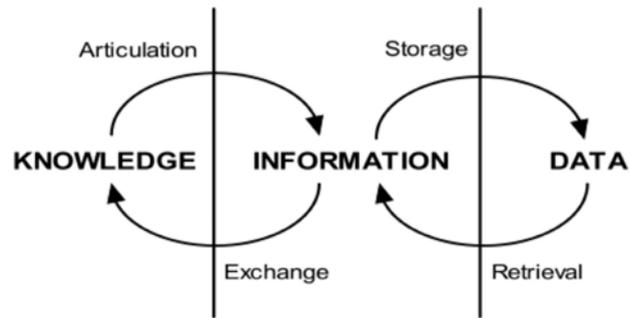


Figure 1: Knowledge creation diagram. (Thomassen 2003).

Then how do we articulate and analyze knowledge creation, and which inquiry system do we use in order to articulate and validate the knowledge created through inquiry? This paper augments the philosophical research of Churchman. In his research, he elaborates on the foundations of inquiring systems, hence the system for rigorous research. He proposes design as a means of inquiring and therefore systematically creating and exchanging knowledge through the validating system of inquiry. The rigor of the creative design process is in knowing the method of identifying the creative act. Cziksentiimihalyi (1997) argues that creativity is a process that can enable change in a symbolic context, such as design, and this approach opens up understanding of the participatory aspects of design (and the designer) to an acceptance of the receiving field, in this case, the field of design. (Thomassen and Bradford, 2009) Even though we cannot set up the creative design process beforehand as a fully clinical experiment, we can, through reflection, analyze it.

This paper will look into different media that facilitate the enabling of the knowledge creation process and that supports other discourse than the traditional textual discourse. This paper will focus on creation and reflection and will place less emphasis on the legitimacy of design as validated scientific research outputs. Therefore, the paper agrees with understanding that design knowledge has three sources; 1) people; designing is a natural attribute of humans, 2) processes; of tactics and strategies of designing leading to methodology and 3) products; knowledge resides in products themselves. (Cross, 1999) This paper will not attempt to overtake the textual discourse, it will merely provide an overview of other heavily used media.

Five exemplar media

The five media have been prioritized on their level of operability during the act of design. In their ability to approach design as a process of synthesis, they place emphasis on notation during construction of the design process rather than as a reflection or analytical tool. Each media is shown to support and enable a range of outcomes and inquiry at various steps within the design process; they are thinking tools used while designing with a context.

Context is a heavily used term and in the context of this paper, it is being used to denote all factors that influence the experience of a design. (Visser, 2005) Dourish (2004) states that a context is a relational property. Its features include dynamic development and growth, each differing from the other.

Comics

Comics enable an intimate relationship between the process, the creator and the reader. Whether it is an individual process or a collective journey, many designs occur in isolation, and remain internal to the specific team of designers. Textual discourse has enabled explication of the particular process, however, the textual forces the process in a manner that causes the designer to drift away from the design process. "All medium communication are a by-product of our sad ability to communicate directly from mind-to-mind." (McCloud, 1993, 194) Comics convert the personal experience (mind) to hand to paper to eye to mind. Understanding the experience (or the author) is what comics aim to establish.

While there is a wealth of comic books at hand to illustrate this section, the authors of this paper will focus on the work of McCloud's (1993) use of comics as the medium to discuss the essence of comic books. McCloud discusses six founding design principles that can be seen as six different sequential design steps, which are:

1. The idea/purpose can be perceived as the first impulses of the work's content. When starting off with this foundation, the designer sets out in a linear and sequential pathway that works towards a goal.
2. The form will complement the idea of a notion of what it will be; will the idea be materialized in a song, a book, a sculpture, amongst others?
3. The idiom provides the designer with a genre that can embody different styles of art and aesthetics but also different styles of gestures. The manga idiom differs from the western approach.

4. The structure outlines how to compose the narrative, how to arrange the narrative, what to include and what to leave out are just basic concepts of structuring the narrative.
5. The craft gives the design refinement through skills, applying practical knowledge, and triggering inventions that leads to problem solving.
6. The surface can be compared to both the last steps in a generative and evaluative phase of designing.

This sequence can be followed in different ways, depending on various factors that influence the start of creating outputs. The six different steps show value to the field of design. McCloud's steps are transferrable to a field wider than comic books. (Fig. 2)



Figure 2: Six steps of comics. (McCluhan, *Understanding Comics*, 1993, 170-171).

Interestingly, McCloud also discusses the relation words and images have within comic books.

(1993, 153) He defines seven different types of combinations:

- Word specific combinations; words dominate the panel and pictures are used to support the word. They illustrate the text and therefore create an extra layer,
- Picture specific combinations; in this combination, words are used to illustrate the visual meaning. In most cases the words provides a sound bite to the image.

- Duo specific combinations; pictures and words are delivering the same message. Their combination provides an additional explanation two both entities.
- Additive combinations; both words and pictures can be supportive of each other in a panel, they either amplify and/or elaborate their meaning and vice versa.
- Parallel combinations; words and pictures are both used in the panel but they independently follow a different course without intersecting each other.
- Montage combinations; words are treated as integral part of the picture.
- Interdependent combinations; both words and pictures need each other to convey an idea. This is the most common one. However, the balance between picture and word may not always be in equilibrium- they may remain interdependent of each other.

These combinations can be helpful for a designer as tools to understand the different aspects of the design as such. It also provides a tool for the articulation of the design itself. Comics provide an opportunity to tell stories (of design) while framing an idea and the development of using words and pictures into a sequence that enables time and space to happen within one frame. Comics and, in particular, the different steps and combinations of the content of the panels, have the possibility to support the articulation of writing through design. It is a tool to help construct the process instead of evaluating the process, an attribute that is considered to be an integral part of design framed within a specific context.

Storyboards

Storyboards are a tool that supports different disciplines within design such as film, animation, interaction design and game design. Storyboards illustrate a sequence of narratives within a design process, a series of experiences, or a string of events framing a design output. Storyboards also provide an extra layer to their meaning; they serve as a tool for negotiation and agreement between different stakeholders in a design process. Varying in their appearance and meaning, two main types of storyboard are presented; 1) story boards, which support the flow sequence of a design and has the potential of being a collective tool (Fig. 3) and 2) mood boards, which support the single visual statement. (Fig. 4)



Figure 3: Storyboard exercise. (University of Tasmania student, Richard Burnham, 2009).



Figure 4: Mood board student project Game Design. (Utrecht School of the Arts, 2007).

In addition to the potential usage of storyboards by designers themselves, storyboards are often used to support co-creative design. According to Visser (2005 et al) mapping, drawing and story boarding engage users in the design process to fully understand the dynamics of the context and the interactions within it. Storyboarding enables a visual construction of reality through imaging and mapping their sequence and extends to areas such as futurism and collective memories.

Diaries

Ethnography and in particular, auto-ethnography, use the diary as a means for understanding a specific discipline or culture. (Reed-Danahay, 1997) They connect the personal to the cultural and thereby placing the self in a social context. Such media usually adopt a first-person voice and include dialogue around emotions and self-consciousness as relational and institutional stories affected by history, social structure and culture.

Dairies offer two distinct but related benefits to writing through design practice. Diaries provide a designer a vehicle to carry out self-reflective modes of inquiry and analysis as well as include subjective, associative, automatic dialogue with the process. They are also a medium that binds design creation and design intention. Generally regarded as private explorations of everyday life, including emotional and psychological ponderings, dairies are considered a conversation unfettered by editing and socially constructed boundaries of appropriateness. Journals, sketchbooks and workbooks, all variations on the diary, figure prominently in art and design studies as the repository of emerging ideas and forms, often blending the diary with the scrapbook. Such pages reinforce the influence of one's hand and handwriting as a form of visual expression and capture a space of time, usually chronological, but importantly, the space of design reflexivity.

Reed-Danahay (1997) outlines that auto-ethnography is constructed on three interlocking views; 1) graphy (eg. research), 2) ethnos (i.e. culture) and 3) auto (i.e. self). He argues that a design process revolves around these three elements. Because of its ability to articulate the stages within the design process more fully, auto-ethnography has the capacity to advance design as a process and as a form of research input. Tierney (1998:66) writes, "Auto-ethnography confronts dominant forms of representation and power in an attempt to reclaim, through self-reflective response, representational spaces that have marginalized those of us at the borders."



Figure 5: Example of journal writing. (Bradford PhD project, 2009).

Found to be suitable for practice-led research, the diary is effective in eliciting specific elements of a design activity comparable to verbal expression. (Pedgley, 2007) Design as a process involves connecting the subjective to the social cultural objective. The process of arriving at the end-design might be formatted in an auto-ethnographic approach as it will enable elaboration and openness of the trajectory. Auto-ethnography enables the 'writer' to articulate the personal journey through text and visuals; it is an attempt to bring the reader into 'his' inner world. (Holt, 2001) However, in order for dairying to be considered as a means for articulation of design, rigor needs to be applied to the reflection process. Such rigor can be established through coding of data, for example, categorizing the result according to how it relates to previous experiences. It is important to acknowledge that auto-ethnography, and in particular, keeping a diary, does not necessarily require following qualitative guidelines that lead to verifiable research outputs. Rather it looks at constructing reality and then evaluating that reality.

Diagrams

The existing literature around this category suggests that there are profound differences between how various design disciplines apply diagrams and what purpose they serve. Evidence of this variety can be found in the significant work of the Writing PAD project and their internet site MADD (Matters around Art and

Design Dissertation) based in the UK. (Edwards, 2004) Kokotovich (2008) draws from the comparison that Restrepo and Christiaans (2003) make between concept-mapping as an open and generative problem-seeking activity and mind-mapping as a typically linear and hierarchical problem-solving process. Understood as two-dimensional maps, diagrams are known for their ability to order complex scenarios with an abstract and graphic clarity capable of bearing the essential nature of the subject at hand. Their power lies in their ability to draw out relationships between and amongst concrete entities and abstract notions, a characteristic that often reveals the "emergence of contradictions, paradoxes and gaps in information." (Kokotovich, 59) According to David Wang (2007), diagramming serves as an analytical tool capable of bridging research nomenclature across disciplines. "Far from taking anything away from the design process, the use of the diagramming tool strengthens design itself as a form of inquiry. In short, the diagramming tool not only integrates design with research, it also promotes a more systematic interdisciplinary understanding of the design process." (Wang, 33) While Wang advocates the use of diagrams as a vehicle to prevent researching designer from getting lost, Kokotovich champions context-mapping as a non-hierarchical cartographic form of diagramming that seeks questions rather than leaping too quickly to a form-driven response. Context-mapping highlights a greater probability for true innovation as it registers a deeper ill-structured design inquiry. (Kokotovich, 59)

Like most design media, the formal structure of one's diagramming practice influences the findings. Yin et al. (2005) point to five different key concept-mapping structures: (1) Linear issues and ideas that are sequentially linked together; (2) Circular issues and ideas that are sequentially linked together with the ends joined; (3) Hub or Spoke issues and ideas that derive from a centre concept; (4) Trees or linear chain of issues and ideas that have branches attached; and (5) Network or Net, a complex set of interconnected issues and ideas. The network structure is seen as non-hierarchical and considered the most complex (54). Despite the chosen diagramming structure, diagrams grapple with 'big picture' ideas and phenomena at the same time that they engage minute details. (Kokotovich, 67)

The two figures below illustrate dominate types of diagrams used in design practices. Figure 6 approaches diagramming as a set of formalized relations whose order has been established hierarchically, i.e. the diagram represents a process of inquiry that has already occurred. While Figure 7 appears to record an ensuing conversation (with one's self or amongst a group of design stakeholders), it demarcates a certain degree of complexity amongst a field of factors. In this case, the diagram reflects a network

PAS DE BASQUE

(7)	(0)1	(6)0		(7)1	(6)0
(7)	(1)1	(2)0		(2)1	(2)0
(7)	(0)		2	2	f(0)
(7)	(6) R f	(2)1	f	(5) R f	(0) R f
(7)	2	↑	↓	(5) 2	↑
↓	↓	↓	↓	↓	↓
	↑	↑	↑	↑	↑
v	L	↓	↓	L	↓
	2	1		2	3
(7)	↑ (0)	↑ (1)		↓ (0)	↓ (7)

(Reading direction →)

Figure 9: Illustration of Eskol-Wachmann notation. (Guest, 1984, 109).

Contemporary discourse on choreography joins body movement and computer software technology in an attempt to resolve the multivalent nature of movement and the seemingly impossible task of describing a fluid body state. According to Brightman (2004), “The complexity of movement is very difficult to render in symbols, such as those used in music notation. Dance has no ‘literature’ to be studied, except for the pallid, incomplete renditions provided by films and videos, or the scores that exist in Labanotation and in other invented languages, such as Sutton Movement Shorthand or Benesh.” (p.393) Critiquing these early forms of notation for the manner in which the shape of motion (existing as duration) is driven by shape as movement (parametric and graphic representation), Brightman’s analysis (2004, p. 393) of the potential in a dance: computer technology merger are resoundingly similar to the attributes of knowledge information, i.e. the act/actions of research:

- 1) Replication: To record existing dance movements in complete detail, in order to be able to reconstruct later a convincing model of the original. (Record and repeatable)

- 2) Multi-Media Performance: The purpose here is to intersect, influence or alter dance movements with the aid of computer technology to form a new artistic entity. (Innovation)
- 3) Generation: The purpose here is to create new movement ideas, or new movement configurations, for later performance. (Advance or aesthetic refinement)



Fig 10: An example of the choreo-computer hybrid. (<http://festivalenter.wordpress.com/category/performance-dox/>).

In this new vision of choreographic scripting media there is a focus on action, what Jescke calls “body activity.” (1999, p.4) (Fig. 10) When action is the centre of attention, and not body movement as image or postures, but understood as “natural language” (Brightman, p.394), Jescke claims that traces of non-literary performative knowledge can be realized through such notation systems in their resemblance to theories, descriptions and iconographic sources. Their ability to transfer concepts is employed as they divulge evidence of appearance, an attribute that shifts choreographic notation’s relation to writing from writing as documentation, as memory, and/or discourse to “an act of choreo-graphing, to the structural relation between knowing, writing, and inventing body movement in space.” (Jenscke, p.4) This dramatic shift reveals a greater potential for these new

forms of notation to be employed in other fields of design where spatial issues of temporal inhabitation are paramount.

Conclusion

This paper emerges out of the preliminary findings of a research project and introduces examples of five media types for the potential they offer for design articulation of knowledge and their ability to 'write' through design research. And we acknowledge that, to qualify as research, there must be reflection by the practitioner on the work, and communication of some re-usable results from that reflection. (Cross, 1999 p. 9) Our discussion of this issue lies outside of the debate around whether or not design research outputs are different from the textual discourse. The five types of media come from different established fields in which an agreement exists on how to read the outputs. We can therefore consider these as possible type of outputs for knowledge of the design process, its products and the people. Future research will start investigating different existing lenses in the field of design that can be used to perceive and contextualise the knowledge derived from the media.

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Open Space Technology: co-creation, research and writing

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Abstract

This paper begins with a discussion of Open Space Technology (Owen, 1997) a model of collaborative, research-informed writing mostly used in higher education conference settings. The discussion reveals aspects of this approach which enhance co-creation and peer to peer facilitation as well as high quality research-informed writing. Significant features of the OST model are assessed to understand relevance for educators and practitioners in art, design and media as an anti-hierarchical approach to research-informed writing. The paper goes on to analyse the experience of a group of art and design educators brought together for a conference using OST to co-create an edited collection of research-informed writing about the student experience in art and design education. This analysis draws on evaluation reports of the event and the subsequent publication of the book of the conference (Drew, 2008). The paper concludes with suggestions for further development in art, design and media HE contexts.

Keywords

Open Space Technology, collaborative writing, co-creation, research-informed writing, peer facilitation, participation.

Introduction

Open Space Technology (OST) is essentially a methodology or 'tool', which can be adapted to a range of contexts, for example, meetings, conferences, staff development events. It encourages participants to engage actively and take responsibility for the process, hence drawing comparisons with 'student-centred' and 'deep' approaches to learning (MacDonald, 2007). Feedback and reflection from