Evolving definitions of authorship in Ebook design ¹

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Abstract. The development of ebooks for tablet devices offers a rich space for collaboration between writers and designers. This paper examines how this emerging media affects ideas around collaboration and authorship. Specifically it considers the changing role of designers in shaping meaning and content and how this may affect existing paradigms of authorship. Using class-based projects as case studies, the paper presents and discusses examples of how designers have shifted their role from historic notions of "crystal goblet" design or expressive design to genuine collaborators and authors.

Keywords: Enhanced ebook, authorship, designers as authors, collaboration, co-authorship, digital book applications

1. Introduction

First generation ebooks are dominated by Kindle, Sony and the iPad's iBooks reader. As in many early adaptations of technology, old patterns have been mapped onto new media. In this case, ebooks function largely like traditional print – the concept of discrete pages, a linear narrative, a static interface – all endure. In some cases, one can even turn pages with the flip of a finger, accompanied by a "swish" sound effect!

Second generation technology allows for a rethinking of an application from the ground up. In this instance, the new tablet platform (e.g. Apple's iPad, Blackberry's PlayBook, Motorola's Xoom) offers an almost dizzying array of possibilities. Full use of a tablet for "book" publication requires rethinking the nature of a book itself. It might include video, animations, kinetic typography, hyperlinks, geo-location, social interaction. It may evolve more as a computer game than a linear narrative. A "story" might be presented in layers, allowing tangential exploration of one topic before proceeding to another. In fact the story itself may be too linear a concept for this new media. Here, traditional notions of authorship tend to be ill suited. If text is but one component of an ebook, then where does authorship reside? If the organization of the reader/user experience informs understanding of content, then does the designer rightfully claim a role as author? This paper discusses new directions in the development of enhanced ebooks for tablets and the collaboration between designers and writers as co-authors.

Defining the word ebook is problematic. The baggage of the word "book" in ebook and its association with the codex form can be restrictive at the moment of imagining and producing new forms of books for tablets. "Book" presupposes pages and the linear form of the argument, usually organized in sections,

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chapters, subsections, and a number of typographical elements like table of contents and indexes that allow the reader to move from one option to another; this is the typical state of first generation ebooks which also tend to incorporate some basic note making and sharing tools. In some of the ebook proposals developed in the course, content is parsed and tagged, and then searched, reconfigured and accessed in unique ways by each reader. The separation lines between ebooks, webpages and tablet applications are also difficult to establish. The incorporation of social media tools to book communities online where readers are able to share discussions has long being implemented in the Web, while touch screen and geo-location technology has been extensively exploited in tablet apps. What defines ebooks for tablets? We argue that their most defining quality is their communicative purpose in a broad sense; this includes a form of re-writing of the text through participation. As opposed to tablet applications, which by definition are meant to help the user realize a specific task, ebooks require a level of processing of textual and image content that form a specific experience. In relation to webpages and books online, the main differentiating aspect comes not from the technological capabilities but the expectations of the users: tablets offer a scale, tactile experience and relationship to the hand and body that encourages a level of contemplative and exploratory experience of textual information which is different from the more impatient, searching and skimming mode of experience of text on a Web browser. Tablet ebooks also offer a more imposing "frame" around content that separates it as demarcated yet essentially porous to the network of textual connections; paradoxically this physical referential of the layout to the tablet screen size recalls the discreet unit of the printed page yet the screen layout is fluid and dynamic rather than static.

2. Context

In communication design, the extent to which the designer participates in shaping a message has varied from the most ascetic "crystal goblet typography" and the modernist aesthetic of clarity to the more dramatically expressive and personal approaches of New Wave and postmodernist design. Contesting the modernist Swiss dogma of universal, simple, and legible messages, Wolfgang Weingart and others experimented with the semantic malleability of textual information and pushed the limits of legibility and comprehension as they experimented with spacing of letters, words, lines and the hierarchy of design. Weingart pushed the rigorous grid while maintaining it as a central aesthetic reference that became complex and layered, bringing in elements of collage and a closer integration of image and text [11]. In the 1980s the writings of French post-structuralist philosophers (Roland Barthes, Michel Foucault, Jacques Derrida) and their ideas about language influenced the way designers approached the visualization and layout of text [3]. With critical theory came the displacement of the figure of the author as the owner of meanings infused into a text and focus was brought to the reader and the intertextual character and internal workings of writings [7]. For Barthes, "The reader is the space on which all the quotations that make up a writing are inscribed without any of them being lost; a text's unity lies not in its origin, but its destination" [1]. In "From Work to Text" Barthes distinguishes "work" as a complete and affiliated piece of writing which has been fixed in space and bound by typography and printing [6] and is passively consumed by readers, whereas "Text" is a dense tissue or fabric that connects with other texts and references in the form of a network and is "experienced only in a form of production" which includes "playing the Text as one plays a game, looking for a practice which reproduces it" [2]. Designers were also influenced by Derrida's concept of deconstruction as expressed in his book Of Grammatology; most notably at Cranbrook Academy of Art under the leadership of co-chair Katherine McCoy, graduate students experimented with this post-structuralist mode of inquiry to question the dualities of content/form image/text text/texture inside/outside revealing their inner instability through typographic interpretation [7,9]. In more general terms, deconstruction in graphic design has been used to describe works that use complex grids and layered imagery and text with ambiguous hierarchies that literally show the openness of meaning and the literary notion of text as a network of references. Even though the emphasis is still on the reader as the active creator of meaning, the designer participates more actively in the authoring process.

With the advent of the Web, Barthes' notion of "Text" became more fully realized; what used to be a static piece of writing had the potential to be dynamically linked to a web of references, obliterating the temporal and spatial distance between writing in the printed page of the codex and the network of references and connections that writing belongs to. In her essay "Text", Ellen Lupton analyzes how the web has displaced the reader for the "user" as the more significant subject of our time, "a figure conceived as a bundle of needs and impairments – cognitive, physical, emotional" [6]. The significant change is that in the Web's interactive environment "[h]ow texts are *used* becomes more important than what they mean" [6].

Tablet devices offer a new and permeable space for texts that shares the connectedness to the referential structure of the Web user while preserving some of the contemplative mode of being of the reader of print books. Current scholarly research in ebook design primarily deals with static first generation epubs [4,8]. As enhanced ebooks only began to be available in 2010, with the first iPads, little research exists beyond forecasting and conceptualizing the potential of digital publishing by such groups as IDEO [5].

Enhanced ebooks in tablets offer an experiential space where, we argue, the main figure could be the "participant", a subject that realizes Barthes' idea that text is experienced through performance and production: the text is written over. What differentiates these figures is a combination of expectation and medium capabilities. Like the "user" the "participant" can experience the text as an interactive database, which is dramatically different from the linearity of the printed book, yet the participant goes beyond consuming and searching to sharing and producing content, re-writing the text. In Barthes' words, "the Text (...) decants the work (the work permitting) from its consumption and gathers it up as play, activity, production, practice" [2]. The successful realization of this possibility requires a profound collaboration between writers and designers. Even though the work of designers, through their manipulation of form and typographic treatment, has always contributed to shaping the text's message, in ebook applications the designer re-conceives the content as an experiential space that becomes part of the content, extending the writing and realizing the "Text". Enhanced ebook applications allow for a long list of activities of consumption, sharing *and* production of content, and it is through this close collaboration and co-authorship between designers, writers and other content generators that the writing can be recontextualized for this interactive and participatory space.

3. Project description

In order to test our ideas about authorship in the development of ebooks, we created a project for Aitken's 4th year "Enhanced Ebook Design" class at Emily Carr University of Art + Design. With colleague Alexandra Samuel, director of the Social and Interactive Media Centre at Emily Carr, we found 5 partners willing to collaborate on the development of ebook concepts specifically targeted to tablets. The partners had textual and other content they wanted to repurpose digitally. Each partner was assigned a group of 3–4 design students. The partners and their titles included:

- Alexandra Samuel: *Sane and Social* shows professionals how to make meaningful and intentional use of social media in their working lives and manage key social media tools.
- Reid Shier from Presentation House Gallery: *Glen Lewis* presents a catalogue of Vancouver senior artist Glen Lewis' art practice of the late 1960s and early 1970s and his interest in ephemeral collaborations, interactive experiments and prescient efforts at social networking.
- Ron Burnett, President of Emily Carr: *How Images Think*, published in 2005 by MIT Press. This title explores the new ecology of digital media, including television, film, photography, animation, video games, data visualization and the Internet, and its implication for how people perceive images.
- Hanna Cho and Viviane Gosselin from the Museum of Vancouver: Bhangra.me will reflect the 2011 exhibit of the same name that investigates the dance and music form of Bhangra as a potent manifestation symbol of Vancouver's emerging transnational/diaspora cultural productions rooted in traditional Punjabi folk practices and yet morphing into forms deeply connected and fed by their existence outside of India.
- Glen Lowry from Emily Carr and Jonathan Dewar from the Aboriginal Healing Foundation: *Truth+Reconciliation* draws on the experience and insights of more than 60 contributors and foregrounds the writing and images of First Nations, Inuit, and Métis along with other minority groups as that work is brought to bear on Canada's Truth and Reconciliation Commission.

4. Project methodology

As the project involved testing ideas about shared, or collaborative, authorship in ebook creation, we constructed a collaborative flat hierarchy of five separate groups of content creators and design students. Our research methodology followed current thinking in participatory design using a co-creation model such as the one outlined by Sanders and Stappers [10]. This process allows design students insight into the tacit knowledge held by external groups; in this case, content developers (writers, photographers and curators). Students began by developing co-creation kits that facilitated conversations and allowed the non-designer participants an easy entry point into possibly unfamiliar brainstorming techniques. These kits varied widely across the groups: post it notes were used to construct mind maps; printed text was cut up to explore navigation and contest the linear nature of a printed narrative; word and icon cards were collaged to consider content organization. Students recorded the flow of ideas through note taking and photo/video recording. From here, students and content creators were challenged to think divergently about this emerging medium. The groups met weekly to discuss concepts and consider alternatives. The design students gathered input and ideas from the content providers, considered alternatives and brought them to the meetings for feedback and refinement by the full group. All members of the group were, at least in theory, to be involved in the design. Final projects were presented as "proof of concept" presentations, rather than necessarily functional prototypes. This freed group members from constraints around their technical knowledge.

5. Results

Project results varied considerably as one would expect in an undergraduate class. All groups were (at least initially) heavily influenced by our use of the term ebook. The semantics associated with any use of the word "book" brings with it a host of preconceptions, biases and assumptions – none of which were

intended by the course instructor. Several books used traditional "pages", fitting the tablet screen. Most had some form of navigation system that while not essentially linear, encouraged a linear exploration.

What did set apart the ebook concepts from their codex counterparts was an almost universal inclusion of the reader as participant. In some cases the participant was encouraged to upload annotations, or follow others. The Truth + Reconciliation concept relied heavily on reader/participants adding their own stories to the content, creating a cooperative form of content generation and expansion. In other projects they were brought out of reading mode and into a more game-like appreciation of content. The Bhangra.me concept included a drum that could be used to play and record beats, mimicking the museum experience.

Arguably the most creative solution was for the book *How Images Think*. Here the group imagined breaking apart the text, creating a completely different understanding of content from the original codex. The result encourages exploration "vertically" rather than linearly. One navigates easily by swiping to find an area of interest, then using a 2-finger "pinch and zoom" gesture to explore deeper into that area. Random exploration is encouraged and a map is created tracking connections between ideas. As well, images and text can be uploaded, creating an organic body of content. This results in an intentionally different experience than is offered with the original book.

6. Discussion

As mentioned, results of the project were mixed. Students had the usual range of motivation and creative skills. Content providers varied in their commitment to the project and the degree to which they had preconceived notions of the final design. But several problems and successes emerged.

In most cases, there was a significant imbalance of "power". Students were mostly in their early 20s and the collaborators were older and established professionals. As well, design students are largely taught the client/service provider model of design and the collaborators may have been accustomed to working with designers *as* such clients. For both these reasons, students tended to follow the direction of their content providers, answering their stated "needs" rather than pushing them into quite different results. One notable exception was in the case of Ron Burnett. As president of the university, there was certainly a power imbalance; Burnett was not able to meet the group as regularly as other collaborators, though he was certainly engaged with the group and reviewed material via email. Here, ironically, the power imbalance led to favourable results – Burnett's comfort with saying "no" to several prototype ideas resulted in a much more interesting solution, making the project one of the most successful.

By breaking away from text as the source, we can more effectively consider meaningful methodologies to communicate experience. One of Burnett's constant demands for *How Images Think* was to explore a non-linear presentation of the work. It is likely that Burnett's familiarity with the design process and his own critical examination of the ebook media facilitated a situation where the students were forced out of their "booklike" comfort zone into re-imagining it as a completely original reading experience (Fig. 1). The requirement forced students to renounce the attachment to the text's organization in chapters and its linear argument and embrace the idea of the book as a "sandbox". This changed their understanding of the book from a mass of content that had to be "consumed" and "followed" to the book as the "occasion" of a series of participatory and productive activities, which included, of course, reading but also annotating, searching, sharing with other participants and including the participant's own content in the form of images from their tablet photo stream and their commentary. The book's interface design offers layers of content that progress from more general to more involved content, breaking away from the linearity of the codex and linking it to a mode of database. The group could eventually arrive at a level of



Fig. 1. Concept for *How Images Think* by Dulce Ayala, Renee Shen and Karston Smith. (Colors are visible in the online version of the article; http://dx.doi.org/10.3233/ISU-2012-0643.)

ownership of the text as to remix it into a new state, pulling away from the traditional roles of designers at the service of client and content needs; this level of co-authoring was also evidenced in their adding to the title the tagline "How Images Think is Really How You Think". It is this parsing, tagging, and re-contextualization of the text along with the inclusion of social media tools for sharing and extending the content how designers essentially re-write the text itself into a new mode of experience which is radically different from the experience of the printed text.

In *Bhangra.me*, the group was charged with the idea of recreating the exhibition as an ebook. However, the exhibition itself was highly engaging and interactive. Viewers could play the drums or listen to music, add stories and locations, and explore a culture through objects and sounds and videos (Fig. 2). In creating an ebook for this exhibition, a linear approach was simply unsuited. Instead, the group looked at methods of creating a similar experience in a different media. Clues from gaming were used to provide interesting interaction. A "drum" allows for experiments with sound and participants could record their creations and share them with other users. In this ebook particularly, the designers shaped meaning through careful consideration of the user experience. As the exhibition itself, meaning emerged from immersing the participant in the Bhangra culture, not simply describing it textually.

As a print book, *Truth* + *Reconciliation* provides a vehicle for many different contributors. These different authors' voices reflect the shared nature of their experiences. With the ebook, the designers chose to reflect these multiple perspectives by creating a true online community (Fig. 3). This idea of community is critical to Canada's aboriginal people. While the text was presented in a more-or-less traditional method, participants could add their own stories that they felt were connected to the book and read others' uploaded stories. The collaborative nature of the original text was expanded further by facilitating the creation of a shared space. Here, the role of the designer was critical in imagining how the concept of "community" might be applied to an ebook.



Fig. 2. Concept for *Bhangra.me* by Pansy Hui, Sophie Lundstöm Halbert and Dawei Yang. (Colors are visible in the online version of the article; http://dx.doi.org/10.3233/ISU-2012-0643.)

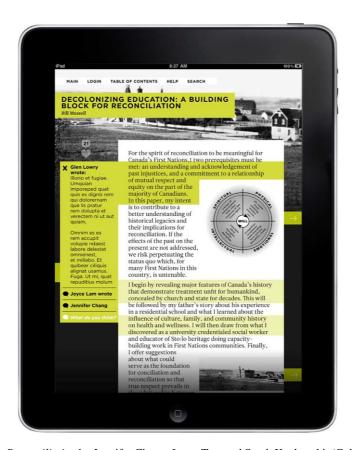


Fig. 3. Concept for Truth + Reconciliation by Jennifer Cheng, Joyce Tam and Sarah Kozlowski. (Colors are visible in the online version of the article; http://dx.doi.org/10.3233/ISU-2012-0643.)

7. Conclusion

The "proof of concepts" emerging from each group in this project showed the potential and need for designers to intervene as "imagineers" of new modes of being for the book in tablets. The complex ecology of the ebook application creates an experience that is essentially different from that of the codex. The movement between the text and other media "reframes" textuality. In its inclusion of a wide range of participatory elements, the ebook encourages a performance and practice of the text that more fully realizes Barthe's notion of "Text" as a methodology of production, linking reading to writing in a broad sense. In the most successful examples, the ebook space calls not for "users" but "participants" with the text. The conception and development of this ecology, this malleable space, this re-configuration of the interface of text and its extension and breakage becomes in itself part of the content that defines this ebook experience. We can no longer see the ebook as a copy or translation of the print book to a screen-base realm but a completely new and transformed space the designer has co-authored.

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