

Watching for Whales: Emerging Configurations of Scholarly Communication

John S. Seberger
University of California, Irvine
jseberge@ics.uci.edu

Cory P. Knobel
University of California, Irvine
cknobel@uci.edu

Abstract

This poster describes the creation of a multi-modal, interactive digital report as an example of *emerging configurations of scholarly communication*. The digital report is a web-based artifact including textual, aural, graphic, and video content presented in a loose narrative structure, and is designed to return agency of narrative creation and sense making to the user. The value, creation, and challenges associated with designing and creating the digital report are discussed.

Keywords : scholarly communication, emerging configurations, narrative structure

Introduction

Each August and September, Monterey Bay, California becomes a destination for blue whale watchers. There is something captivating in the whale's momentary breach, and whale watchers know this. Although only one of the authors of this paper has been out to sea, in our ways, we are both avid whale watchers. Like enormous cetaceans at the ocean's ceiling, new scholarly practices breach the surface of opaque infrastructure and provide glimpses at the shape of things to come. There is something captivating here, and we know this.

Below the surface of murky infrastructural waters, the production and dissemination of all species of scholarly artifacts is a complicated process. Universities, individual researchers, research teams, publishing houses, libraries, and archives are only a few of players in the knowledge production process. Even in the context of such a reductive list, the constellation of relationships can be considered a complex system, or a collection of "diverse, connected, interdependent entities whose behavior is determined by rules, which may adapt, but need not" (Page, 2011, 6). In his discussion of complex systems, Page states, "the interaction of [interdependent] entities often produces phenomena that are more than the parts" and refers to these phenomena as "*emergent*" (2011, 6). The idea of emergent phenomena, like whale unexpectedly breaching from the depths of a system, serves as an illustrative analogy: new species of scholarly artifacts occasionally emerge from the complexity of scholarly communication. This poster comprises an entry point into a conversation about the emergence of new types of scholarly artifacts by focusing on a recent digital report: "Emerging configurations of knowledge production: A digital report on an NSF workshop 'emerging configurations of the virtual and the real'" (Knobel, et al., 2012).

Sustained Artifice: The Textual Archive

Research dissemination techniques stabilize to form the artifice¹ of infrastructure through repetition and gradual modification, "regula[tion] and repress[ion]" (Voss & Werner, 1999, 1). Although this process is incremental, the potential of alternate infrastructures reveals itself at discrete moments. With the advent of the printing press and the subsequent construction of scholarly communicative infrastructure, the scholarly community witnessed and artificially sustained a once-emergent communicative means. Such an emergence signaled the form and functionality of what has been called the positivist discourse that comprises the scholarly archive (Foucault, 1972).

¹ Artifice is used in the sense of "The Sciences of the Artificial" (Simon, 1964).

We know much about the scholarly archive comprised of print materials. We are also adept at communicating through it. But, this is no longer enough. The prevalent conceptualization and structure of artifacts composing the scholarly archive no longer align with the complex multi-modal potentials of scholarly communication. As Voss and Werner express, “the leaves of the archives are again fluttering out, this time into the windless region of hyperspace” (1999, *i*). It is necessary to investigate alternative forms of scholarly communication, and to study the structure, design, behavior, and use of expressed scholarship that looks less and less like the traditional, purely textual, and easily archivable formats that are the reticent-to-change foundations of scholarship.

The Anatomy of a (Less) Hopeful Whale

While analyzing qualitative data gathered at an NSF-funded workshop entitled, ‘Emerging configurations of the virtual and the real,’ the authors began engaging with exciting new incremental forms of scholarly expression: the database-like interactive digital report. Close engagement with an extant report, *Blue Velvet* (Goldberg & Hristova, 2007) served as a guide. *Blue Velvet* is an impressive online interactive archive of materials relating to New Orleans and Hurricane Katrina. Despite its brilliance, *Blue Velvet* exists as something of a hopeful monster (Law, 1991). Its format is so radically different from previous forms of scholarly communication that it is not easily replicable as a template for continued scholarly communication. In the creation of ‘Emerging Configurations of Knowledge Expression,’ the authors aimed to create an artifact somewhere between the functionality of the traditional written report and the extravagance of *Blue Velvet*. Accordingly, the digital report consists of seven web pages accessible via <http://econfigs.ics.uci.edu>. Five topic-based pages complement an introduction and acknowledgement page: “enculturating emergence;” “engaging modalities;” “integrating research spaces;” “interoperating temporalities;” and “rewarding design.” These topics were identified via content analysis of qualitative data (e.g., semi-structured interviews, conceptual illustrations created by a graphic facilitator, PowerPoint slides, etc.) gathered at the workshop.

Each topic page consists of textual, aural, graphical, and video information. Essays providing an introduction and overview of each topic augment multi-media mosaics comprised of 16 assets. The first mosaic layer includes video interviews conducted at the workshop, slides from workshop participants’ presentations, and graphical facilitator images created during workshop charrettes. At the second layer, each of these assets is accompanied by a textual, aural, or video annotation created by the authors of the report. Finally, through the presence of a ‘submit annotation’ function, users are encouraged to create and submit their own annotations for assets they find interesting. To ensure specific citability, all assets are accompanied by microcitations.

The digital report was opened to the public in December 2012. Following six months of activity, the authors will revise the report to incorporate material included in user-generated annotations. In this way, the authors are exploring a new mode of peer-review. Following the completion of this process, the site will be frozen and archived in the California Digital Library.

Narrative and Engagement in an Interactive, Multi-Modal Digital Report

With the emergence of new communicative technologies come new forms of narrative. Liu (2012) discusses the disaggregation of the book into an entity more closely resembling a playlist. In addition to aspects of *Blue Velvet* (discussed above), this concept of disaggregation guided the digital report’s structure. By presenting a loose aggregation of five distinct but related topic areas, the report presents a structure that is organizationally functional, but not entirely prescriptive. Users and readers can choose from two paths to follow: 1) the authors’ defined path from one topic to the next; 2) an idiosyncratic, improvised path weaving to and from essays, mosaic assets, and annotations on each of the pages. In either scenario, users can document the details of their narrative journeys through the submission of user-generated annotations. In this way, the report returns the agency of meaning-making and narrative construction to readers/users (Eco, 1979).

Alternative approaches to narrative construction are risky. Readers may not know how to approach a new narrative format, thus decreasing the format’s communicative effectiveness. Developing scholars are often encouraged to read in a specialized way (see Edwards, 2008 for an example). But because of the structure of the digital report, a deeply detailed reading of (at least) some of the assets is requisite – there is no clearly defined introduction or conclusion to skim in order to glean a general

understanding. With greater narrative agency comes a greater obligation to invest time in acquainting oneself with an artifact. It is currently too early to tell what effect the digital report's structure has on reader engagement; however, careful analysis of use data will be undertaken in the summer of 2013 following the 'freezing' of the site.

Conclusion

In early September 2012, the report was disseminated to those who participated in the workshop so that they might have the first opportunities to create annotations and amend the report. A wider public launch was executed in December 2012.

Along with a loose constellation of other scholars and artists (see Goldberg & Hristova, 2007), we have seen the breach of a new, hopeful means of scholarly communication, and we are captivated. Following completion of the initial launch to workshop participants and, subsequently, to the scholarly community at-large, the authors of this poster will watch closely as the interactive dynamics of the report develop.

References

- Eco, U. (1979). *The role of the reader: Explorations in the semiotics of text*. Bloomington: Indiana University Press.
- Edwards, P. (2008). *How to read a book*. <http://pne.people.si.umich.edu/PDF/howtoread.pdf>
- Foucault, M. (1972). *The archeology of knowledge*. New York: Vintage Books.
- Goldberg, D. T., & Hristova, S. (2007). Blue velvet: Re-dressing New Orleans in Katrina's wake. *Vectors*. 3:1, <http://vectors.usc.edu/projects/index.php?project=82>.
- Knobel, C., Bowker, G., Larsen, R., & Seberger, J. (2012). *Emerging configurations of knowledge expression: A digital report of a National Science Foundation workshop on "emerging configurations of the virtual and the real."* Chicago, IL. March 20-21, 2011. NSF Grant#1042697..
- Law, J. (1991), 'Introduction: Monsters, machines and sociotechnical relations', in John Law (ed.), *A Sociology of Monsters; Essays on Power, Technology and Domination*, Sociological Review Monograph38, London: Routledge, pp 1-23.
- Liu, A. (2010). "The rebound book: What binds a book together in the digital age?" In C. Knobel, G. Bowker, R. Larsen, & J. Seberger (Eds.), *Emerging configurations of knowledge expression: A digital report of a National Science Foundation workshop on "emerging configurations of the virtual and the real."* Chicago, IL. March 20-21, 2011. NSF Grant #1042697
- Page, S. (2011). *Diversity and complexity*. Princeton: Princeton University Press.
- Simon, H. (1981). *The sciences of the artificial* (second edition). Cambridge, MA: MIT Press.
- Voss, P. J., & Werner, M. L. (1999). Toward a poetics of the archive. *Studies in the literary imagination*. 32:1, i-viii.