

**The Innovative ETD: Innovation and Obsolescence
ETD 2005, Sydney Australia**

**By Dr Craig Bellamy
Assistant Lecturer
Information Systems
The University of Melbourne**
cbellamy@unimelb.edu.au
www.milkbar.com.au

Keywords: ETD, Digital Preservation, History, Oral History, Oral History
Online

The saying 'Getting there is half the fun' became obsolete with the advent of
commercial airlines

Henry J Tillman

Abstract

As a way of taking advantage of some of the benefits that new media technologies present for post-graduate education, the innovative adaptation of the Electronic Thesis and Dissertation (ETD) offers a robust means. Most notably this is because it is similar to the traditional print thesis and thus provides a rigorous transitory position into new technologies from a position that the broader academic community can understand. However, there are a number of hazards that face the unsuspecting postgraduate student who ventures into the online word, thesis in arm. In this paper I will discuss some of the decisions faced on my own 'journey of discovery' through the experience gained through communicating my own postgraduate work through the framework of an innovative ETD. A major decision faced by an author of an innovative ETD is between technical innovation and long-term technical preservation.

1: Introduction

From an author's perspective, the discourse and practices that constitute the Electronic Thesis and Dissertation (ETD) have two key characteristics. The first characteristic of the ETD is that it utilises the power of the Internet as an inexpensive and widely assessable global distribution mechanism. Global distribution (and I use the term 'global' loosely) promises to enhance postgraduate education by facilitating greater access to ideas that support, contradict, or contend a particular student's research (and by facilitating greater access to bibliographies, primary resources, methodological approaches and the cultural contexts of all sorts of postgraduate output). It also promises to build and maintain what Robert Putnam's refers to as

'human capital' through the transfer of fresh knowledge to particular universities, geographical locales, and specialist and non-specialist audiences (Putnam:2000).

But, however important the expansion of the capacity to communicate research results is for the researcher, there is also the medium-contingent pedagogical innovation to consider. In other words, although the Internet does provide an unprecedented opportunity to share post-graduate labour on numerous branches that may bare fruit, it also provides the opportunity to innovate in how the fruit is grown.

This is the second major characteristic of the discussion and practice that constitute the ETD. The 'innovative ETD', or the ETD that capitalises on some of the other features of the Internet, such as audience reciprocity, media convergence, and hypertextual narrative; provides an effective way to advance the medium itself (for communicating academic knowledge). But as I discovered from authoring my own innovative ETD, this is not without numerous tradeoffs in terms of inviting greater obsolescence than one would through the engagement with less technically innovative explorations.

2: Technical Obsolescence

Obsolescence and innovation are inextricably linked. There is virtually no research that does not become obsolete over time, and newer and more prolific fields often unwittingly promote obsolescence through the sheer quantity of research they produce. The field of new media, for instance, is a large field with many researchers engaged in a plethora of innovative enquiries. The very nature of the field means that researchers have to contend with far greater 'obsolescence' than they would if they occupied older, more stable (and less popular), fields.¹

Accordingly, when an author utilises the ETD to advance the pedagogical potential of online new media, they invite increased obsolescence. This is because they may be experimenting with untested technologies or technologies where preservation and archival practices have not yet been fully developed. There is a decision an author has to make from the outset between the conviction that it is important that their work be available for a long period of time and the belief that innovation is far more important.

In my own electronic thesis, I lean towards the later as there are a lot of humanities researchers who are working to advance the archival techniques relating to new media and the Internet, but not as many researchers who are working on the important pedagogical questions relating to hypertextual structures and other fresh communication techniques that may be useful to the broader humanities.

3: Innovating Oral History Online

¹ There is also innovation in digital preservation techniques which is a research enquiry all of its own. See: Turnbull, Paul et.al "The South Seas Project: Voyaging and Cross-Cultural Encounters in the Pacific (1760-1800)", The National Library of Australia and partners, <<http://southseas.nla.gov.au/>> (Accessed 20 July 2005).

Technical innovation is vital for the humanities because if we do not learn how to adapt and apply new technologies, then we could become marginalised by communication practices outside of our respective disciplines. In my work, I was interested in the possibilities that online, searchable interactive video offers for recording and analysing oral history. As I discovered, oral histories were particularly well suited for the Internet² because the participants could be seen and heard. Oral histories are fundamentally oral, meaning that for a number of historical enquiries, it makes sense to hear them rather than bury them within the pages of a book.

Oral history methodologies usually require the researcher to provide a theoretical perspective on an historical problem and then undertake the oral interviews. They then look for converging trends and contradictions among the evidence and analyse it through the written form of a book or monologue. In my electronic thesis, the methodology is a little different as I relinquished some of the analytical control over the material (through hypertextual structures) and give it to the user who can search the video and look for the trends and contradictions in the oral evidence themselves. This method does not champion one voice, nor does it reveal that historical knowledge is gained easily and simplistically. I have recorded and provided the historical information, then applied a structure to understand this information; the user can view the interviews from a number of perspectives and then make their own narrative connections between them (Swan:1994:122). As the educational-technology researcher Karen Swan states:

[History]...entails more than a simple familiarity with important facts and concepts; it involves being able to conceptualise historical events from multiple perspectives and to relate a myriad of seemingly diverse historical data within such perspectives. Historical thinking is an understanding of human situations and the complex web of relationships embedded in them (Swan:121).

The authorship in my work is embedded in the technology itself; it is embedded within the selection of material, its interpretation and integration within the assembled technical contexts, juxtapositions and representations of the past. Together this forms an argument. However, this argument is within a broader set of parameters than those allowed by the sequential reading of the printed codex. The reader becomes in part author, or at least they can make their own way through the archive and perhaps gain different insights from the material than I originally intended.

Likewise, in most oral histories projects, the interviews are locked away in archives and libraries and are very rarely used outside of the original *raison d'être* of the historian.³ It makes sense to place oral histories online because the user not only

² This is also partly because copyright legislation restricts the scholarly use of our aural and visual archives. There was no copyrighted material used in my work simply because as an independent scholar it was not pragmatic. Perhaps this is why many other independent authors work with archives that are either copyright free or held in family collections.

³ The *FROM LUNCHROOM TO BOARDROOM* project produced by the University of Queensland Library (Stories and Images of Women's Achievements in the Labour Movement 1930's - 1970s) also utilises a publishing engine and relies on the text from transcribed oral interviews. It was developed for the library environment by *The Distributed Systems Technology Centres* (DTSC) through their *SuperNova* project.

has direct access to the historian's evidence, but the user is also able to get a much better understanding of the character and the context in which the interviews were recorded. As the historian Linda Shopes argues:

One thinks of irony, for example, as something that is communicated by tone, not words, and so can be lost if not rendered orally. Similarly, hearing, rather than reading, narrator's accounts can render them more compelling, more humane or chilling, more three-dimensional. Quite simply then, by reproducing actual recorded sound, web publication of interviews is perhaps more appropriate than print publication (Shopes:2001).

4: Meta Analysis Film Engine

The prototype video-publishing-engine utilised in my project (coupled with interactive hypertextual techniques) reveals some of the chaotic nature of oral history whilst still retaining a broad authorial control over the material recorded. This particular software was not designed with historians in mind, but was designed for media studies students who required close analysis of pre-existing films. Applying it to my own project was a useful exercise in testing interactive narrative techniques for historians; however in terms of its archival potential, the software has serious limitations.

Firstly, it is someone else's software, meaning that a third party owns the intellectual property and the software cannot be reproduced for archival purposes without their permission. And secondly it is 'server side' meaning that it cannot be copied easily onto a disk for long term storage (and it does sit on a somewhat vulnerable university server in far Northern Europe). Thus although my project advanced the techniques for authoring oral history online, this has been at the expense of its long term preservation.

However, in reflection, I consider that using software that has a limited life span for particular historical applications is not such a bad thing. This is because the interactive techniques advanced may be much more valuable over time than the very software that they were advanced upon. In other words, the legacy of authoring online history and the legacy of its methodologies and techniques are perhaps far more valuable overtime than the legacy of the software. There are of course, certain precautions that an author can take from the outset to 'future proof' their work, but to future proof one's work often means that it must be technically, conceptually and intellectually conservative. Innovation in whatever discipline requires risk and if it was not for risk, then arguably network technologies would not exist today. However, they do exist even if the original traces of their history do not.

So, when engaging with the innovative ETD, it is not always wise to think about it simply in terms of its 'future-proof-ness'. If an author was concerned with archiving and analysing Captain Cook's diaries or documents from the Old Bailey or engaging with other canonical components of our culture, then the avoidance of technical

"FROM LUNCHROOM TO BOARDROOM" Stories and Images of Women's Achievements in the Labour Movement 1930s - 1970' *The University of Queensland Library*
 <<http://media.library.uq.edu.au:8080/lunchroom/index.html>> (Accessed 20 July 2005)
 "Research Projects: SuperNova" *Distributed Systems Technology Centre*
 <<http://www.dstc.edu.au/cgi-bin/redirect/rd.cgi?http://archive.dstc.edu.au/research>> (Accessed 20 July, 2005)

obsolescence would be a major concern. But the innovative ETD should be measured by its contribution to broader communities of practice, not just its contribution to 'longevity'.

5: Conclusion

So, to briefly conclude innovation and obsolescence are inextricably linked and obsolescence is not necessarily a bad thing. However, I am not advocating that one should purposely ignore innovations that help preserve one's work for later generations of researchers, but I think that there are certain choices that an author makes from the outset when they begin a digital work. If an author is dealing with a seminal history and the mark-up of canonical documents, then it is logical that preservation is the major motivational factor. However, if one is primarily concerned with innovation, then the exercise is not purely archival. An author may be discerning about the technology they employ to advance a particular thesis, but I am not sure if it is the role of the author to ensure that their work is technically canonised for eternity. There are some important unanswered questions here but it is unrealistic to assume that addressing them all is the role of the author. In the innovative ETD, perhaps the responsibility for archiving it, shift from the institution, to the author.

References:

1. Putnam, Robert Bowling Alone: The Collapse and Revival of American Community, Simon and Schuster, New York, 2000.
2. Shopes, Linda "Oral History Online" *History Matters, George Mason University* <<http://historymatters.gmu.edu/mse/oral/online.htm>> (Accessed 20 July 2005).
3. Swan, Karen "History, Hypermedia, and Criss-Crossed Conceptual Landscapes", Journal of Educational Multimedia and Hypermedia, vol.3, no.2.1994, p120-139.
4. Turnbull, Paul et.al "The South Seas Project: Voyaging and Cross-Cultural Encounters in the Pacific (1760-1800)", The National Library of Australia and partners, <<http://southseas.nla.gov.au/>> (Accessed 20 July 2005).
5. "FROM LUNCHROOM TO BOARDROOM" Stories and Images of Women's Achievements in the Labour Movement 1930s - 1970' *The University of Queensland Library* <<http://media.library.uq.edu.au:8080/lunchroom/index.html>> (Accessed 20 July 2005)
 "Research Projects: SuperNova" *Distributed Systems Technology Centre* <<http://www.dstc.edu.au/cgi-bin/redirect/rd.cgi?http://archive.dstc.edu.au/research>> (Accessed 20 July, 2005)