

# Digital Texts 2.0: Towards Social Networking of Texts

Johnny Rodgers  
*MA Candidate, Interactive Arts &  
Technology, Simon Fraser University*

[johnny@creativecreature.ca](mailto:johnny@creativecreature.ca)  
<http://www.creativecreature.ca/>

RR#2 Lakeside  
ON, Canada  
N0M 2G0

Dr. Stéfan Sinclair  
*Associate Professor of Multimedia,  
McMaster University*

[sgs@mcmaster.ca](mailto:sgs@mcmaster.ca)  
<http://stefansinclair.name/>

TSH-328, Department of Comm.  
Studies and Multimedia  
McMaster University  
Hamilton, ON, Canada  
L8S 4M2

Shawn Day  
*PhD Candidate, History, McMaster  
University*

[shawn@shawnday.com](mailto:shawn@shawnday.com)  
<http://www.shawnday.com/>

CHN-619, Department of History  
McMaster University  
Hamilton, ON, Canada  
L8S 4L9

## Introduction

Since the early part of this decade, social networking sites such as Facebook, Flickr and del.icio.us have thoroughly transformed the way many people, from various demographic groups, connect with and share information and media online. For several years, the nature of online communication patterns, and their offline impacts, has been dramatically shaped by this emerging paradigm of social objects and their relationships to people. The staggering statistics from these and other popular services help to illustrate their widespread influence: over 2 billion photos have been shared on Flickr [[Flickr Blog](#)], and over 80 million active Facebook users make it the 6<sup>th</sup>-most trafficked site on the web [[Facebook Statistics](#), 2008].

Although much of the impact has been limited to sharing information and assets related to personal lives (such as sharing photos), there is also the potential for benefiting from social networking practices in a professional context ([Zotero](#), is an example of a “next-generation research tool” with experimental features for sharing and recommending research sources).

The Digital Texts 2.0 project (<http://dtext2.org/>) is a preliminary attempt to better understand the phenomenon of web-based social networking and how it might be adapted to benefit the ways in which humanities scholars interact with electronic texts, with the potential of transforming them as thoroughly as social networking has transformed other aspects of human interaction.

This paper will describe the theoretical conception of the Digital Texts 2.0 project and then summarize some of the relevant aspects of implementing a first prototype, with particular focus on the challenges and successes encountered.

## Motivation

The availability of high-quality digital texts has increased dramatically in the last decade. These collections are valuable resources for scholars working in relevant areas, especially if they have mastered basic techniques of working with electronic texts (customized encoding, analytic procedures, etc.). However, the adoption of digital texts by humanities scholars has been relatively limited. The hypothesis of Digital Texts 2.0 is that this phenomenon is not due to the quality or usefulness of the digital texts themselves, but rather the fact that the dominant paradigm of interacting with digital texts is still primarily based on uses of static texts (both in print and electronic forms). As such, we wish to experiment with new ways of finding, managing, and using digital texts, with a particular emphasis on social networking practices.

Though deliberately simplified, the following table is useful to understand the contrast between existing conceptions of digital texts and the innovative conceptions that we are proposing:

## Digital Texts 1.0

- embedded hypertextual links
- independent objects
- focus on content (encoding)
- analytic procedures

## Digital Texts 2.0

- associations through social tagging
- objects associated with people
- focus on uses
- “mashability” (recombination of texts with each other and with other sources of information)

These characteristics are not binaries: we envision Digital Texts 2.0 as representing a cumulative, evolutionary change that maintains the traditional strengths of digital texts. It is important to emphasize that we are not proposing essential changes to digital texts themselves, but rather, to ways in which we as humanities scholars interact with them.

Texts will no longer be merely autonomous, free-floating objects in cyberspace (at best as part of some digital collection): Digital Texts 2.0 will always be associated with other humans, and thus inherit all of the interest and knowledge that those human associations enable. This is an innovative way of conceptualizing texts: as inherently associated to “consumers” and “producers” of those texts.

This project is situated at a critical crossroads between past work on web-based text analysis tools ([HyperPo](#), [TAPoR](#), and [TaporWare](#)), and what is envisioned for future work: the creation of environments that foster collaboration and networking through the meaningful exchange and annotation (commenting) of digital objects.

As such, we are interested in applying some of the most interesting and promising features of current web trends (social networking, folksonomies (tagging), web service mashups, ajax interfaces, and an emphasis on interactivity) to the realm of electronic texts to discover how these tools will influence how humanities researchers find, manage, share, and annotate digital texts.

## Implementation

### Technologies

Numerous web technologies were considered for the initial prototypes of the Digital Texts application. The opportunity to integrate our work with an existing social network led to the adoption of the [Facebook Platform](#). This web development platform offered integration points for the social functionality we were pursuing, while allowing freedom to develop text and scholarship-specific features alongside. After some early development in the PHP programming language, the [Ruby on Rails](#) framework was selected for its web-application focus, quick feedback loop, and vibrant developer community.

### Challenges

The Facebook Platform has allowed us to get up and running quickly, but so far we have met with limited interest from academics, in part from a resistance to what is seen as the ‘trend’ of social networking. As such, the requirement of a Facebook account to access the application has proven to be a stumbling block to some individuals. Overcoming this bias and communicating the academic potential of these new tools has been our greatest obstacle to date. We are considering alternative approaches that would maintain the benefits of hooking into Facebook while allowing non-users to participate. We have yet to find the right balance of useful tools and social integration to entice a wider group of users to buy in to the project.

A further challenge – one that’s been intellectually stimulating – is how to define a text in our system. We began with a relatively simplistic vision of collecting, organizing, and sharing texts, but very quickly we were confronted with practical questions, including: Were textual records referring to the

metadata from texts or the actual textual content (or both)? What are the relevant metadata fields of a text for this experiment? How do we store and represent the identity of a text and its variants (different editions of print volumes, updated web content, etc.)? Answers to these and similar questions are not definitive, but we've tried to make the most appropriate choices for Digital Texts 2.0.

## Successes

The range of open-source tools and web services APIs we have used (such as [Amazon](#), [Google Books](#), [Google Charts](#), and soon [Freebase](#)) have allowed us to develop a mature, feature-rich prototype in a short time frame. Additionally, the feedback and activity of a small group of beta testers has allowed us to refine the direction and feature set of the application during development. The active participation of a group of academics representing our desired audience has helped to improve some specific features that are not typically necessary in more generic social networking applications. For example, detailed statistics and activity reports, tools for browsing larger data sets ("Show All" views, browse by letter, multiple sorting criteria), and interfaces for displaying a wide range of information about texts in a small space have all been developed in response to user feedback.

Ongoing project management has been handled with [Trac](#), which has allowed us to document the process of development and simultaneously maintain both short and long term goals for the project (ie. short term bug reports alongside long term 'blue sky' goals).

## Conclusions

The shifting dynamic in how we interact with our information is evident in how we share media such as photos, videos and links, and how we discover and traverse our social networks. It is time for textual scholarship to take advantage of this paradigm shift, especially in light of the rapid diffusion of these tools and usage patterns amongst graduate students who will become the next generation of academic professionals. By recognizing and addressing the changing shape of information creation, use, and distribution, and the growing reliance on social networks for information diffusion, new tools and methodologies for textual scholarship and text analysis will be revealed. Digital Texts 2.0 represents the first in a series of steps needed to embrace the potential of these new technologies and social structures, while maintaining the depth and rich analytic affordances of traditional textual scholarship.

## Additional Resources

- The current prototype version of Digital Texts 2.0 is available at <http://dtext2.org/>.
- A blog entry about Digital Texts 2.0, including screenshots of the application, is available at <http://www.creativecreature.ca/blog/?p=43>.
- A wiki page about Digital Texts 2.0, outlining the original RDI grant proposal in greater depth and offering notes on the current development status of the application is available on the TADA (Text Analysis Developer's Alliance) wiki at <http://tada.mcmaster.ca/Main/DigitalTexts2>.