Engaging the Twitter Backchannel as Digital Scholarship: Methods for Analyzing Scholarly Engagement in Alternative Media

Abstract: Social networking and online spaces offer scholars venues for expanded interaction and alternate means for pursuing professional endeavors. They offer ways for expressing thoughts, ideas, asking questions and sharing information. This study examines the use of Twitter as a backchannel during academic conferences, focusing on the Digital Humanities community. It explores the relationship between participatory technologies and scholarly practices to better understand how scholars connect digitally and the implications for such avenues of discourse in the pursuit of scholarship.

Introduction

New technologies and digital media offer possibilities to bring together a broad range of scholarly practices in the humanities and across disciplines. Many scholars realizing the benefits of technology for research and teaching are adopting new practices such as providing open access to their work, making their intellectual projects digitally visible and encouraging ongoing critique of their work through peer review. Others are assimilating new tools into their working practices (e.g. Twitter, instant messaging, blogs). Social networking and online spaces offer venues for expanded interaction and alternate means for pursuing professional endeavors. They offer ways for expressing thoughts, ideas, asking questions and sharing information.

Recognizing the need to support digital scholarship universities and funding institutions are establishing centers that support students and faculty in their research and scholarly activities. These centers provide a range of resources and vary in there epistemic approach. For example the Digital Scholarship Co-operative (DiSCO) at the University of North Texas (UNT) follows a community-based approach. It provides resources for student projects, born digital art and collaborative works. It offers fellowship opportunities for students to develop skills in digital tools, project management, collaboration and research. Open access is encouraged. Evaluation of data management, and curation practices are part of the institution-wide infrastructure and help develop recommendations for future practices. The goal is to foster an environment of coordination and collaboration across campus and minimize the siloing of skills and expertise.

From its inception DiSCo has hosted ongoing events to stimulate conversation i.e., webinars, workshops and symposiums. It has integrated social networking to promote its activities leveraging Facebook and Twitter to build its community and keep its constituents engaged and informed. One of its recently hosted events was Digital Frontiers, a conference and Technology and the Humanties Camp (THATCamp, the unconference model for collaborative discourse on digital humanities topics where participants propose their own topics and follow workshops to demonstrate tools and methods of common interest). Attendees included scholars, students, librarians, archivists and museum professionals. The idea was to bring together likeminded individuals for collaboration and to engage in meaningful discourse.

Research Questions

This paper examines the use of Twitter as a channel for communication during the conference and THATCamp presentations it analyzes scholarly twitter prompts to understand how scholars connect digitally. It explores the relationship between participatory technologies and scholarly practices and the implications for such avenues of discourse in the pursuit of scholarship.

Background

The American Council of Learned Societies (ACLS) defines digital scholarship as "any element of knowledge or art that is created, produced, analyzed, distributed and/or displayed in a digital medium for the purpose of research or teaching" (2007). Experts view it as a way to support open access to scholarly knowledge and to promote the use of innovative research methodologies (Spiro, 2007). Social networking is defined as the practice of expanding knowledge by making connections with individuals of similar interests from anywhere, at any time. Technology and innovative software applications make this possible. Twitter a microblogging service with social networking features allows users to write brief text updates (140 characters long) through mobile devices/desktop computers and to publish them on the web. More, recently its service allows for the posting of images. Essential features are user generated content (sharing/co-editing/co-creating/remixing) and the use of participatory practices to foster interaction, collaboration, and contribution (Greenhow, 2009; Gunawardena, 2009).

Following socio-constructive practices learning is seen as a shared activity, transactional in nature, a social negotiation between participants who come together to share a common purpose. Cognition, knowledge and expertise are not merely the property of the individual mind but are distributed across individuals, environments, symbolic representations, tools, and artifacts (Brown, Collins, and Duguid, 1989). Learning is situated in broader cultural and social contexts (Salomon, 1993, Pea, 1993). Vygotsky (1978, p. 29) referred to this as "mediation" and argued that when we interact with each other using tools we allow for the extension of human capabilities. Emphasis is on the co-construction of knowledge and the benefits gained from the collective intelligence of the group (Gunawardena, 2009). Therefore, social networking tools change how we think, how we learn, and how we interact with each other. While much research exists on students and their use of social networks there is limited research on the use of social networks for scholarly use (Greenhow 2009; Veletsianos & Kimmons 2011a).

Method

Setting: The Digital Frontiers conference and THATCamp was a two-day event consisting of formal (keynote address, panel discussions) and informal talks (break away sessions) where the topics were mutually agreed upon and of interest to the group as a whole. Participants of THATCamp were students, scholars, humanists, historians, educators, technologists and independent consultants that represented a diverse mix of backgrounds. Interaction and contribution of participants were central for exchange of ideas and scholarly discussions.

Data collection & analysis: A qualitative method of analysis was used to analyze the content of archived tweets from the two-day conference. 131 tweets were transcribed and coded using Microsoft Excel. Researchers then engaged in a constant-comparative process established

by Glaser & Strauss (1967) to analyze the content contained in the scholar's tweets, to discover salient categories and data patterns and to reach an agreement for modifying, or eliminating redundant codes. These codes were then sorted into relevant categories after several additional reviews key themes emerged from these categories that were then identified and color-coded. **Findings**

Conference Twitter activity revealed 94% of the information was tweeted in real time which consisted of multiple monologues and loosely joined dialogues with 5.4% re-tweets of others ideas and content. Scholars tweeted directly to the official conference Twitter ID and individual hash tag (@conf, #conf). Adding more than 2 hash tags to tweets to push the information further was a common occurrence. The real time interchange reflected the context of the conference program i.e., keynote presentation and panel discussions. Table 1 presents the conference program.

Table 1 – Conference Panel Presentations

Panel Presentations			
Notes on re-occupying the past digitally - keynote			
Futures of establish online collections			
Improving content delivery for online collections			
The application of innovative technologies to enhance learning			
Benefits and issues arising from the availability of online content			
Social media and digital communities – a roundtable discussion			
Online access through digitization and participation in the Lone Star State			
Digital scholarship			
Closing address			

Other tweets focused on topics such as establishing an online presence, status updates on location and feedback on panel presentations, and sharing professional work and related resources. A few scholars expressed themselves by tweeting images of ongoing events. Overall, seven categories emerged they are presented in Table 2 along with an example of the content of each category.

Table 2 – Scholars' Twitter practices

Theme	Theme description	Example of tweet
Establish online presence	Online presence/expectations	I'm kind of hoping nobody at this Friday's @conf talk follows me on Twitter – a peril of using this medium for note-taking
Share information	Status update on location/discussions/events	Attending @conf? Hear more about @texasarchive digitization partnerships at a 2:30 pm session
Reflection on panel presentations	Response to panel talks	GR8 talk on developing keyword thesaurus 4 Vietnam Archive @ Univ. Going 2 b helpful as we develop one for R site. #user, #conf
Share thru media	Post Images and video	Talking and learning about the interesting things

		being done with digital technology @conf! #confpic.twitter.com/TYxNqGH6
Feedback on events	Feedback on general events	Done with two days of @conf and my first #conf. Lots of food for thought!
Share professional work	Share professional interests and related resources	Hanging with Jane Doe and learning about prototypingfutures.net (she's so cool!) #conf #univ #tech #art
Comment (miscellaneous)	Random post	I think of @user @user Q: How many digital humanists does it take to change a light bulb? A: Yay Crowdsourcing! #conf

The use of Twitter allowed conference participants an informal means of expression to ask questions, provide feedback and critique, share references and related resources. Three dimensions of discourse were evident establishing an online presence and digital identity, responding to keynote and panel discussions, and sharing of professional work and related resources. Further details of the seven categories and three dimensions will be discussed during the conference presentation.

Conclusion

As the debate continues scholars find themselves differing in their stance about Tweeting live during conference presentations. Many academics such as @smith an assistant professor of English are of the opinion that "[I]t's presumptive to assume that we should share other peoples work w/o asking". Others disagree @brown another English assistant professor states "when I speak & others tweet, I learn a LOT about my own ideas." Yet others see etiquette for tweeting at conference sessions one way to provide balance. "If somebody says they'd prefer not to be tweeted or blogged, respect that; not everyone shares the same values about openness" (Fitzpatrick, 2012). Traditionally, conference presentations are about scholars presenting their ideas and unpublished work to peers however, this does not mean they share the same eagerness as their peers to broadcast those ideas via media. The results of this study although promising present interesting insights on how scholars in digital humanities choose to engage with social networks to pursue scholarship. The emergent and fluid nature of online social spaces requires further research and exploration to better understand scholarship and engagement especially online.

References:

- Brown, J., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational researcher*, 18, 32-41.
- Glaser B.G. & Strauss A.L. (1967). The Discovery of Grounded Theory. Aldine Publishing, Chicago, IL.
- Greenhow C. (2009) Social scholarship: applying social networking technologies to research practices. *Knowledge Quest* 37, 42–47.
- Gunawardena, Charlotte, N., Hermans, Mary Beth., Sanchez, Damien., Richmond, Carol., Bohey, Maribeth., & Tuttle, Rebekah. (2008). A theoretical framework for building online communities of practice with social networking tools. *Educational Media International*, 46,(1), 3-16.
- Kolowich, Steve. (2012). The academic twiterrazi. *Inside Higher Ed.* Retrieved from http://www.insidehighered.com/news/2012/10/02/scholars-debate-etiquette-live tweeting-academic-conferences
- Veletsianos, George. (2011). Higher education scholars' participation and practices on twitter. *Journal of Computer Assisted Learning*, 28, 336-349.
- Vygotsky, L.S. (1978). Mind in society: The development of higher psychological processes (M. Cole, V. John-Shteiner, S. Scribner, & Souberman, Eds.). Cambridge, MA: Harvard University Press.