

How we work:

A critical approach to program development to serve library/dh partnerships

Abstract

Science and Digital Humanities exert influences on one another, particularly as practices and tools developed in the sciences are imagined, borrowed, and manipulated by DH, but also as practices and insights from the humanities are applied to scientific inquiry. With this poster, we present an analysis of studies of how digital humanists and scientists work, testing the oft-referenced distinctions and similarities claimed between science and DH models and interrogating the ways that scientific disciplinarity affects digital humanities processes and products. Our research critically evaluates the comparisons drawn between epistemological and labor models in DH and the sciences.

The Problem

Are we witnessing a co-evolution of disciplines through the influence of information technology? Or are disciplines remaining distinct, applying new tools and systems that align with existing norms? Insight into the practices and norms of digital humanities, sciences, and social sciences communities - and how they perceive their and others' work - are essential to informing or disputing one-size-fits-all approaches to digital scholarship partnerships and program.



Developing a Model of "Work"

How do we define scholarly work? The information practices approach provides insight into the components of and influences on scholarly research work. Palmer and Cragin (2008) argue that this approach is pragmatically focused with an emphasis on understanding practices that can inform the "develop[ment] of digital content and functionality for the actual daily and long-term needs of researchers" (p. 198).

Information work can be seen as "the actual labor of locating, gathering, sorting, interpreting, assimilating, and producing information," with connections "to both the work itself and to the structural contexts in which that work is situated" (Ibid., p. 172).

Our working model poses that the structural contexts of scholarly work, which further guide scholarly communication, include:

- Funding
- Structure and system of rewards; motivation for work
- Labor models
- Collaborative, interdependent, and solitary scholarly processes
- Models and norms of authorship and acknowledgment
- Epistemic processes of knowledge creation
- Norms of feedback, dissemination & publication

Work-- which we consider to include both the labor and context of scholarship-- can be analyzed at the individual level but might be expanded to consider communities of practice, domains defined by disciplinarity or other factors.

CVs as Indicators of Collaborative, Interdependent, and Solitary Processes

"In humanities, we often emulate what we *think* the sciences do, but our emulation may not actually bear that much resemblance to the reality of what goes on in science (Unsworth, 2012, p. 232). Earhart (2014) further observes scenarios where digital humanists have responded to science and science models with "idealization" or "demonization," particularly around the laboratory as a site of collaboration or hierarchy (p. 4).

Amy E. Earhart

Books
Traces of the Old, Uses of the New: The Emergence of the Digital Literary Studies. University of Michigan Press. Forthcoming. 160 typescript pp.
Earhart, A.E. *The American Literature Scholar in the Digital Age*. Ed. Amy Earhart and Andrew Jewell. Digital Culture/ Editorial Theory and Literary Criticism Ser. Ann Arbor: U of Michigan P, 2010. Print. 294 print pp.
Editor of Special Issues of Journals
Digital Textual Studies: Past, Present and Future. Ed. Amy Earhart and Maura Ives. Spec. issue of *DHQ: Digital Humanities Quarterly*. 3.3. (2009). n. pg. Web. <<http://digitalhumanities.org/dhq/vol/3/3/index.html>>. Web. Refereed.
Peer Reviewed Articles
"After a hundred years/ Nobody knows the place.--": Notes Toward Spatial Visualizations of Emily Dickinson." Special Issue: Networking Dickinson. *The Emily Dickinson Journal*. 23.1 (2014): 98-105. Print. Invited. Refereed.
et al., Edited texts. "Alex Haley's Malcolm X: 'The Malcolm X I knew' and notecards from *The Autobiography of Malcolm X*." *Scholarly Editing: The Annual of the Association for Documentary Editing*. 35 (2014). <http://www.scholarlyediting.org/2014/editions/intro.haley.html>. Web. Refereed.

Bruce E. Herbert

Peer-reviewed Publications (Student authors are underlined)
Harvey, O.R., B.E. Herbert, L.-J. Kuo, and P. Louchouart. 2012. Generalized two-dimensional perturbation correlation infrared spectroscopy (2D-PCIS) reveals mechanisms for the development of surface charge and recalcitrance in plant-derived biochars. *Environ. Sci. & Technol.* 10.1021/es302971d.
Miller, C., D.N. Little, A. Bhasin, N. Gardiner, and B. Herbert. 2012. Surface energy characteristics of natural minerals and their impact of aggregate-bitumen bond strengths and asphalt mixture durability. *Transportation Research Record: Journal of the Transportation Research Board*, No. 2267. Transportation Research Board of the National Academies, Washington, D.C., 2012, pp. 45-55. DOI: 10.3141/2267-05.
Kim, H., Miller, H. R., Herbert, B., Pedersen, S., & C. Loving. 2011. Using a wiki in a scientist-teacher professional learning community: Impact on teacher perception changes. *J. Sci. Ed. & Technol.* 10.1007/s10956-011-9336-x.
Herbert, B.E. 2006. Student understanding of complex Earth systems. p. 95-104. In C.A. Manduca and D.W. Mogk (Eds.) *Special Paper 413: Earth and Mind: How Geologists Think and Learn about the Earth*. Geological Society of America. Boulder, CO.
Grants and Contracts
NSF-CLT. The CIRTL Network - Shaping, Connecting, and Supporting the Future National STEM Faculty. 2008-2012. B. Mathieu, P. B. Herbert, Co-PI among others. \$5.2 million. (Award 0717768).

Primary structural contexts (Amy):

- Systems of rewards
- Norms of publication
- Norms of authorship

Primary structural contexts (Bruce):

- Knowledge creation
- Norms of authorship
- Labor models

Applied Goal

University initiatives experience a high rate of failure (Kezar and Eckel, 2002), designed as they often are with simplistic or inaccurate change models. In developing our program, we aim to meet the imperative to design with a community's needs and practices as its focus, taking the factors and interactions that will affect the success of the program into consideration.

As Palmer and Cragin (2008) argue, "Understanding the nature of information practices and their relation to the production of scholarship is important for both theoretical and applied work in library and information science (LIS)."

Activities that serve the library-DH partnership at Texas A&M University may include:

- Digital asset management system
- Digital collaborative spaces (HubZero, Commons in a Box)
- Reading group

