A New Open Humanities: Introduction

by Jeremy L. McLaughlin

A New Open Humanities

EDITOR'S SUMMARY

The third annual Virtual Symposium on Information & Technology in the Arts & Humanities, held on April 18 and 19, 2017, centered on a theme of open science in the humanities. Presentations at the Symposium have included topics such as data visualization, historical images, interactive exhibits and linked data. The 2017 theme of open humanities was a starting point for the speakers to consider how open science has and can impact the world of humanities in various ways. Speakers at the symposium discussed analyzing writing practices on the internet using web scrapers, data management in the humanities, visual literacy skills of graduate and undergraduate students and the challenge researchers face in trying to keep up with publications in their field.

KEYWORDS

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On April 18 and 19, 2017, the ASI&T Special Interest Groups/Arts and Humanities (SIG/AH) and Visualization, Images and Sound (SIG/VIS) hosted the third annual Virtual Symposium on Information & Technology in the Arts & Humanities. The Symposium began in 2015 as a way for ASIS&T members and the larger community to examine and celebrate the impact of information and technology on disciplines in the arts and humanities. For those involved with the event, it has become an important venue for discussing the place of these disciplines within an organization like ASIS&T. In the past, we've had speakers from the National Endowment for the Humanities, the Modern Language Association and the Digital Public Library of America. Academics, students, vendors and practitioners have presented on topics ranging from interactive exhibits and linked data to digital pedagogy, images in historical newspapers and a series of data visualizations created from Bob Ross' *The Joy of Painting*.

You can find the recorded presentations on YouTube (https://www.youtube.com/channel/UCh6awNw3yZbodGT42HlCD_g) and presenter slides on figshare (https://figshare.com/authors/Symposium_on_Information_and_technolology_in_the_arts_and_humanities/740215).

The theme in 2017 was "Open Science in the Humanities" – chosen because we wanted to explore ways in which the principles of open science are alive and well in different disciplines. Not just an interesting ideal, the development of a more open culture could help pave the way for new forms of value creation and visibility for humanists and their research. Such innovation is especially important as the ongoing crises in the humanities come to a boil, and these disciplines look to redefine themselves in an increasingly STEM-focused world.

So What Is Open Science and What's It Doing in the Humanities?

Open science is a catchall phrase that refers to the development of practices and principles designed to improve knowledge creation and research dissemination. These practices revolve around norms related to research transparency, reproducibility, access (or openness) and collaboration aided by new research methodologies and information technologies. Open science principles guide the development of collaborative research programs (the science of team science), the use and sharing of data, the evaluation of results and the dissemination of and access to findings. These practices have allowed many disciplines to embrace digital technology, advance research agendas and make visible the value and impact of scientific research in profound ways.

A note on terminology. When the theme for 2017 was initially proposed, it was "The Open Humanities," but it was changed to "Open Science in the Humanities" because the latter is more in-line with how we approached the topic. While the *science* of open science can apply to any discipline or research culture, the term *open science* is primarily used to discuss research practices in STEM areas, so we had to specify the scope as being outside of the sciences. Indeed, Michelle Sidler has even suggested that the open science movement change its name to *open knowledge*, to reflect the different cultures of disciplines in the social sciences and humanities [1]. This borrowing from STEM does not imply that there is not humanities research related to transparency or reproducibility; on the contrary, by definition most digital humanities projects, such as digital archives and textual mining, analysis and visualization, are collaborative and increasingly use open forms of technology and research methods. We rarely refer to these projects as *open humanities*, though, and that specific phrase is typically used to discuss open access publishing, one component of the development of an open humanities culture.

A New Open Humanities

Symposium speakers and attendees were asked to consider what the practices and principles of open science are, how they are being adopted and adapted by humanities disciplines, and how forms of knowledge production and incentive systems affect the idea of value. By the end of the event, I began thinking of the themes and topics as being part of a new open humanities that goes beyond open access and includes the digital humanities and discussions of collaboration, transparency, reproducibility and the development of an open culture in all disciplines in the arts and humanities.

While slower historical trends toward digitization pervade the belief that most humanities disciplines can't adopt a more open research culture, the speakers at the 2017 Symposium presented over two days talks about information use, knowledge creation and research contribution in a number of fields. Speakers were invited to present projects and research that embodied open principles, used open data or technology or provided empirical studies of how researchers in the humanities interact with new methodologies or techniques.

As we moved through the speakers on both days of the agenda, the core themes of the new open humanities were re-introduced in several contexts:

- Michael L. Black, University of Massachusetts Amherst, presented the methodological challenges involved in using web scraping to study internet writing practices. Compared to case studies of computers and writing or the application programming interface (API)-driven research of social media, web scraping relies on data that is largely unstructured and that may also be incomplete. Researchers must be aware of capabilities and limitations involved in creating data from the web, additional technical challenges of extraction and analysis, and ethical and legal considerations involved in web scraping.
- While also preparing to speak virtually at the RDAP Summit that week, Miriam Posner, University of California at Los Angeles, spoke about the role of data in humanities research. While research data management is another area where humanists seem slower on the uptake, Miriam suggests that this apparent lag has to do with translating the vernacular to fit research practices in different disciplines rather than a lack of awareness about data and its growing importance in academic practices.
- Recent trends have produced significant breakthroughs in humanities research. Yet the production of high-quality open-access, teaching-

centered projects has not kept pace with these research innovations. Joseph Locke and Ben Wright, editors of the open American history textbook *The American Yawp* (www.americanyawp.com) discussed their project within the larger history of open educational resources (OER) and called for a reinvigoration of the spirit of openness and pedagogical innovation that animated the early period of digital humanities.

- Krystyna Matusiak and Anna Harper, both from the University of Denver, presented the findings of a research project that examined undergraduate and graduate students' visual literacy skills and use of images and other visual information resources in the context of academic work. The study explored the types of visual resources being used in students' academic work, the role images play in academic papers and presentations, and the ways students select, evaluate and process images. They discussed expanding visual literacy awareness and education alongside instruction in information literacy for students.
- With the ever-expanding amount of research content available online, researchers face challenges keeping up with new publications and potentially important developments in their areas of interest. David Bourget from the University of Western Ontario presented two projects developed at the Centre for Digital Philosophy (PhilPapers.org and PhilSurvey) that are helping researchers face these challenges in their field.

For me, the key takeaway from the event was this: while humanists have a different relationship with their research methods and materials and with scholarly communication, a more open culture is evident in the increasingly collaborative and digitally driven research practices of humanists across disciplines. While we've watched this develop in the digital humanities over the past decade, the continued progress of this digital culture is also leading to the more general development of an open culture in the humanities.

The essays in this special section, based on Symposium presentations, speak across the themes of the new open humanities – collaboration, transparency, openness and value – from the perspective of the arts, the humanities and information science. It is our hope that these essays will inspire discussion about knowledge creation and the important perspective of the humanities within ASIS&T.

We begin with one of the most important aspects of an open culture: open access (OA). In principle and in practice OA is a pivotal component of an open humanities. For a number of reasons, OA has been contested in several disciplines, but, as **Martin Paul Eve** explains in our first essay, OA is a feasible alternative to traditional journal and monograph publishing in the humanities. Martin is an international expert on OA in the humanities and co-founder of the Open Library of Humanities (https://www.openlibhums.org/). Throughout the essay "Open Access Publishing Models and How OA Can Work in the Humanities" he examines the challenges to OA in the humanities (for example, varied research outputs and the cost of monograph publishing) and points to growing progress in open journal and monograph publishing. This progress includes publisher-, funder- and scholar-led projects around the world that utilize new forms of technology to bring change to old traditions. He concludes with this statement and profound question: "I believe in open access for the humanities, though, because a fundamental question should move us: what good is research on the human, if our fellow humans cannot afford to read that work?"

The next two essays in this special section discuss how information and technology are being used in collaborative projects and for unique forms of knowledge creation and creative output in literature, linguistics and the performing arts.

In "Using Zombies to Teach Collaborative Scholarship and Born-Digital Publishing," **Jamie A. Thomas**, an undead-researching sociolinguist at Swarthmore College, discusses the collaborative student project *[ZOMBIES REIMAGINED]*, which combines popular culture with innovative teaching and publishing in communication, discourse and media studies. Students participate in doing research and building born-digital online exhibits around representations of the undead, examining what they reveal about society and culture. She notes that the collaborative efforts and the public-facing dimensions of such a project boost student motivation and prepare the next generation to engage with a digital, open humanities. In addition to details about project management and ethical considerations of creating and

publishing digitally, Jamie also discusses the specific open source tools that were used by students to analyze and present information visually and textually (Timeline JS, Storymap JS, Markdown, StackEdit, Prose.io).

The voice of the performing arts is an important – though seldom heard – disciplinary component of information science research. A project allowing for creative audience interaction with live music performances and the potential collaboration between artists and academia is the focus of an essay by **Kate Hayes**, a music artist and entrepreneur in the United Kingdom. In "Collaboration in the Spotlight: The Open Symphony Case" she explains her experience developing this technology and puts the project within the larger context of value, individual contribution in artistic expression and ownership in the performing arts. As a live music performance that uses audience interactive compositions and technology, Open Symphony helps break down barriers between performers and the audience. Tensions around the economics of art and commercial versus academic value may hinder collaborations between artists and academia, but with the right framework and definitions of value this could lead to additional forms of cross-disciplinary exploration.

The final essay looks more closely at systems of reward, the concept of value and transparency related to existing and new forms of evaluation and assessment in the humanities. In "Four Claims on Research Assessment and Metric Use in the Humanities" **Björn Hammarfelt**, from the University of Borås in Sweden, concludes the special section by examining the links among knowledge creation, academic value and systems of reward in academia. As researchers continue to produce knowledge, these powerful processes can be viewed as one of the most important underlying influences in the development of a new open humanities. Björn notes that systems of assessment are so familiar that it is easier to imagine aliens – or perhaps zombies? – than a world without assessment. As it relates to the use of metrics for research evaluation, several factors have made quantitative assessment a challenge in the humanities. He presents four claims relating to the continued development of formal evaluation practices that take into consideration the varied types of research outputs and new forms of technology and data related to assessment. He concludes that while there are more opportunities for using research metrics in the humanities, we must be cognizant of the potential consequences additional quantification can have on knowledge production and academic culture.

During the introduction of the 2017 Symposium, I read a quote from an article in *Science* about the importance of the development of an open culture, but I replaced the word *science* with *the humanities* to show the importance of this particular statement to all academic disciplines. Because it aptly sums up the scope of this special section, I conclude with the unedited quote here as well.

> Many individual researchers lack strong incentives to be more transparent, even though the credibility of science would benefit if everyone were more transparent. Unfortunately, there is no centralized means of aligning individual and communal incentives via universal scientific policies and procedures. Universities, granting agencies and publishers each create different incentives for researchers. With all of this complexity, nudging scientific practices toward greater openness requires complementary and coordinated efforts from all stakeholders. [2, p. 1422] ■

Resources Mentioned in the Article

[1] Sidler, M. (2014). Open science and the three cultures: Expanding open science to all domains of knowledge creation. In S. Bartling & S. Friesike (Eds.), *Opening Science: The evolving guide on how the internet is changing research, collaboration and scholarly publishing* (pp. 81-85). Heidelburg: Springer Open. Retrieved from https://link.springer.com/chapter/10.1007/978-3-319-00026-8_5/fulltext.html

[2] Nosek, B. A., Alter, G., Banks, G. C., Borsboom, D., Bowman, S. D., Breckler, S. J., … Yarkoni, T. (2015). Promoting an open research culture: Author guidelines for journals could help to promote transparency, openness, and reproducibility. *Science, 348*(6242), 1422–1425. www.ncbi.nlm.nih.gov/pmc/articles/PMC4550299/