
Indigenizing the Digital Humanities: Challenges, Questions, and Research Opportunities

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In 2010, 2.9 million Americans self-identified as American Indian or Alaska Native. In addition, another 2.3 million people reported as American Indian or Alaska Native in combination with one or more other races. There are 562 federally-recognized tribes in the United States with dozens of other state-recognized tribes awaiting federal recognition. Outside of the U.S. there are millions of other indigenous community members in lands far-flung. Native American Studies (on Native American Studies and its relationship to knowledge, see Fixico, 2013; Madsen, 2012; Meyers, 2016; and Warrior, 2014), an interdisciplinary field of study exploring the history, culture, politics, issues, and contemporary experience of these indigenous peoples of America, intersects with a number of issues related to access, preservation, and methodology that are problematized through the development and deployment of digital tools, methods and research. While tremendous work has been done around the preservation and access of analog materials within Native American communities (for an example of digital Native American projects, see the [Chaco Canyon Research Archive](#)), there has been much less attention paid to the ways in which digital objects (on analog to digital surrogates, see the [Protocols for Native American Archival Materials](#); on digital repatriation, see Christen, 2011; Colwell-Chanthaphonh, 2011; Colwell, 2015; and Runde, 2010), practices, and methods function within Native communities and through Native American Studies scholarship. With the exception of

the Murkutu content management system which originated with the Warumungu Aboriginal community in the Central Australian town of Tennant Creek, digital humanities researchers and developers have been largely separate from Native American Studies— for example, it is only in the last year or so that we have begun to see digital humanities represented at Native American Studies conferences (e.g. Ethnohistory, Native American and Indigenous Studies Association, etc.) or within topical sub-panels at professional gatherings like the American Studies Association, the Modern Language Association, or the American Historical Association. There are hundreds of scholars actively working at dozens of American Indian, Native American, and Indigenous studies programs in addition to scholars working in humanities departments like literature, history, anthropology, archeology, etc. While museum, library, and archival communities have digitized Native cultural objects, literature, and music, there has been just cursory use of these materials within the larger digital humanities research landscape outside of digital archives or digital anthropology/archeology contexts. This submission opens by exploring a handful of individual projects that have leveraged Native materials to highlight how Native American studies scholars might critique the use and contextualization of tribal materials. Potential projects for exploration include [Performing Archive: Edward Curtis + “the vanishing race”](#), the [Indigenous Digital Archive](#), and the [Native American Images Project](#). The digital humanities community has done little to inform itself of the unique issues associated with research and teaching by and in the Native American context. This knowledge has not been integrated for five reasons: 1) funding for Native American studies research institutionally has focused on the production of traditional scholarly products (e.g. monographs); 2) Native American studies as a discipline has remained underfunded institutionally which bars many institutions from hiring staff, faculty, and tribal members to work together to teach and research; 3) funding for cultural heritage organizations including tribal archives, libraries, and museums, has focused on preservation and access to analog materials (on intellectual property issues associated with analog to digital Native materials, see Anderson, 2005; and Brown and Nicholas, 2012) only, rather than embracing the spectrum of digital and analog materials that document Native life; 4) the diversity of academic disciplines who participate in Native Studies is broad and, as such, lends itself to fragmentation and a lack of information exchange about digital projects, tools, methods, and pedagogy; and 5) Digital

Native studies most frequently is only encountered by scholars and community members at the end of the development cycle as the project is released and they begin to encounter “actual” users. As a result, there do not exist any best practices, guidelines, or even suggestions about the process of working in digital environments with Native American communities. Archaeologists and museum professionals have made the furthest strides in attempting to address engagement with tribal communities and research (on issues of information architecture and archiving in indigenous contexts, see Powell and Aiken, 2010; Cushman, 2013; Senier, 2014; Christen, 2012; and Joffrion and Fernandez, 2015), yet that work has not widely proliferated among the interdisciplinary humanities nor the digital humanities more generally. As a result, each digital humanist (and humanist) must start from scratch and negotiate every encounter without guidance or lessons learned from those who have attempted integration of the digital with Native American Studies before.

Additionally, because these conversations have been focused mainly on individual projects or on knowledge management generally (e.g. the [Murkutu Project](#) and the [Intellectual Property Issues in Cultural Heritage Protocol](#)), the cross-pollination of an interdisciplinary community of digital researchers with tribal communities, cultural heritage organizations, and academic scholars has been significantly underdeveloped. Thus, it is not surprising that there are only a handful of funded digital projects documenting Native American life: the [American Indian Treaties Portal](#), a digital collection of the final texts of 366 of the 375 American Indian treaties recognized by the United States Department of State, and the digitized [Journals of Lewis & Clark Expedition](#) created in partnership with the Center for Digital Research at the University of Nebraska Lincoln. [Mark of the Mississippians: A Multi-Platform Digital Media Project](#) (Cahokia Mounds Museum Society) and [Meeting the Earthworks Builders](#), a flashbased video game are currently being developed by the Ohio State University.. Additionally, NEH Public Programs just funded [Indians of the Midwest](#), an educational website focused on recent scholarship on Native peoples and the Newberry Library Collection.

The barriers to digital fluency in Native American studies are varied and include such obstacles as cultural rules regarding access to sensitive materials, the advanced technical expertise that software and hardware often requires beyond basic digitization, the costs of digital infrastructure and proprietary license fees, and issues of community engagement and trust

that might limit the display of digital materials about Native peoples. It might be tempting to assume that the uptake of digital humanities method and pedagogy in the academic, cultural heritage, and tribal communities is one of lack of information or funding, but in fact the digital humanities researchers included as part of the Digital Native American and Indigenous Studies project are finding that it is also the cultural barriers to access, display, and analysis across differing types of digital materials that are challenging our ability to leverage digital tools, resources, and approaches.

Digital Humanities articulates three parallel interdisciplinary commitments to “openness”: 1) a commitment to open access publishing; 2) a commitment to open access/open source software development; and 3) a commitment to open access data. While the first two trends have received deep and lasting attention via scholarly publishing and digital commons enterprises and the open source development movement promoted by github and other code repositories, the commitment to open access data has been largely undertheorized. Using case studies of Digital Humanities projects that have been developed using Native American and Indigenous content, this submission suggests that Native and Indigenous content complicates the current technical application of open source development driven by digital aggregators and application programming interface development. By highlighting ethical issues around the use, reuse, and distributed architectures encouraged by common digital humanities technologies, this submission suggests that the rhetoric and practice of the open access data movement obscures both Native agency in determining the use of community materials as well as the role of technical determinism in proliferating the violence of colonial archives on Native communities. Questions this submission engages with include: How do we deal with born-digital research data in Native American and Indigenous contexts? How do we as scholars responsibly engage in digital research in Native communities? How do organizations and institutions navigate the cultural, legal, and ethical contexts of the communities whose objects they hold? How can free and open source software solutions be leveraged to build community engagement? Finally, what might be recommended for tribal communities who desire to launch their own digital projects but may have concerns about resources, access, infrastructure, and preservation?

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