

Community-centric factors in sustaining digital scholarship

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While the term *sustainability* has proliferated across the discourse of the digital humanities over the past two decades, the meaning and implications of the concept vary significantly across different projects, communities, and organizations. What it means to sustain digital scholarship is necessarily context-dependent (Edmond / Morselli 2020; Drucker 2021). Yet many projects face common, interrelated obstacles to remaining viable over time—whether technically, intellectually, effectively, etc.) These common challenges include resource-scarcity, vagaries of institutional support (e.g., Maron / Pickle 2014), reliance on volunteer labor (e.g., Risam 2018), impediments to shared technical infrastructure (Smithies et al. 2019; Dombrowski 2014), disconnect from broader systems of scholarly communication, and systemic instability and inequity across the humanities, cultural heritage, and higher education sectors more generally. The prevailing paradigm of institutional stewardship, in which digital humanities projects ultimately fall back on the preservation or maintenance resources and expertise of digital humanities centers, academic units, and libraries, has so far failed to adequately accommodate the diversity, complexity, and community-centeredness of digital humanities scholarship.

A widespread challenge is that many digital humanities resources resist institutional stewardship because communities wish to retain control over the resources they have created. Digital humanities scholarship, whether public-oriented or not, is often community-centered. Collaborative teams of technologists and researchers create and maintain digital resources to meet their own research needs, for example, or to fill gaps in the mainstream cultural record with new forms of evidence about underrepresented communities. These teams are surrounded by wider communities, including research communities within specific domains or disciplines, communities of practice organized around shared methods or other topics, and groups unified by shared identity, place, memory, and other shared interests. These teams and communities build shared resources—from digital editions to databases, from software to data models, from corpora to digital archives—to serve their constituents (Poole 2017; Cooper / Rieger

2018; Palmer et al. 2009). Digital humanities projects are active, generative, dynamic hubs for collaboration and communication. Such resources are sustained not by transfer from communities to preservation institutions, but through continued life and development.

The digital humanities discourse about the sustainability of digital scholarship focuses on financial, organizational, and technical factors in the longevity of digital resources. These factors are vitally important, but our collective conversation about sustainability has often elided the roles of communities themselves—as nebulous entities that transcend institutions, individuals, and teams. There are important exceptions. Prior work has considered, for example, how research on community needs factors into sustainability planning (Edmond / Morselli 2020; Smithies et al. 2019; Langmead et al. 2018; Warwick et al. 2008), community-building practices (Mahony 2017; Skinner 2018; Arthur 2014; Clement et al. 2013), and how cultural knowledge serves communities themselves (Cifor et al. 2018; Caswell et al. 2018; Stevens et al. 2010, etc.). Nevertheless, there is little empirical research on how communities of different shapes and sizes surround and support digital humanities scholarship and digital community archives. We need a foundational understanding of how research communities affect the sustainability of digital scholarship. In our definition of *community-centered sustainability*, a digital humanities resource is sustained as long as it responsively supports the endurance of the communities it serves—as a locus of memory, communication, and knowledge production—for as long as useful, and in whatever forms are useful (Fenlon / Muñoz 2020).

This paper describes the outcomes of the “Communities sustaining digital scholarship” project, a qualitative study of how communities interpret, impact, and implement the sustainability of their own projects and resources. Through case studies of four digital humanities projects, conducted from 2019 to 2021, we sought to understand how communities define *sustainability* for themselves, and how their emergent approaches to sustainability centered or relied upon various invested communities. Each of our four case studies serves a different core community by gathering and providing access to evidence in new forms, to support research, collaboration, and community-building:

- *Enslaved: Peoples of the Historical Slave Trade* (<https://enslaved.org/>) is an online, open-source linked data hub focused on the history of enslaved people.
- The *Lakeland Digital Archive* (<https://lakelandchp.com/>) is an effort to document a 130-year-old African American community adjacent to the University of Maryland through a digital community archive.
- The *Music Encoding Initiative* (<https://music-encoding.org/>) is a community-driven, open-source effort to define a system for encoding musical documents in a machine-readable structure.
- The *Open Islamicate Texts Initiative* (<http://kitab-project.org/openiti/>) is a multi-institutional effort to construct a machine-actionable corpus of premodern Islamicate texts. These cases diverge in topic, discipline, size, and geographic

distribution—and in how they relate to various communities and institutions. Through interviews with members of each project and surrounding communities, along with participant-observation and analysis of project documentation, our case studies have identified community-driven factors in sustaining digital scholarship.

We offer a framework of six factors that affect the community-centered sustainability of digital scholarship. How communities interpret, plan for, and implement each of these factors pro-

vide alternative models for community-centered sustainability of digital scholarship. The factors are:

- How communities engage wider interested and affected communities;
- How communities factor in the wellbeing of their members and of the community as a whole;
- How communities reify their values in the organization and design of their projects and outcomes;
- How communities navigate issues of ownership and control;
- How communities implement an ecosystem perspective; and
- How communities embrace disruption and change.

This paper elaborates each of these factors and delves into specific examples of how these factors arose in our different cases. In addition, we offer a preliminary set of implications of these factors for the creators of digital humanities projects and the communities that contextualize them.

The community-centered sustainability framework is intended to help communities think holistically about sustainability—and, in line with the conference theme, about their collaborative potentials in sustaining digital scholarship within and despite a context of broader instability. This framework complements the wide and growing body of digital humanities literature on technical, organizational, and financial approaches to digital sustainability and preservation, to provide a more complete and nuanced picture of how communities envision sustainability for themselves.

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