

RECOVERY SCHOLARSHIP AND THE INFRASTRUCTURE FOR DIGITAL HUMANITIES

REPORT OF THE COMMISSION ON FOSTERING AND SUSTAINING DIVERSE DIGITAL SCHOLARSHIP



American Council of Learned Societies The Commission on Fostering and Sustaining Diverse Digital Scholarship was convened by the American Council of Learned Societies (ACLS), with the support of the Mellon Foundation and the National Endowment for the Humanities. The views represented in the report are those of the members of the Commission and ACLS and do not necessarily reflect the views of either of the funding agencies.

The image on page 3 and used throughout the document is of a textile created by Marilou Schultz.

"In 1994 The Intel Corporation commissioned Marilou Schultz, a Native American weaver, to make a blanket featuring their Pentium microprocessor. She was to use the traditional techniques that she learned as a child growing up on the Navajo/Diné reservation. As part of a publicity campaign, the Silicon Valley-based company proposed—not for the first time—affinities between Native American aesthetics and advanced technologies. More specifically, Intel aligned the expertise of the skilled textile maker with the dexterity of the Indigenous female workforces hired to assemble circuit boards in a factory newly constructed on Navajo/Diné land."

<u>Caption</u> text from the National Gallery of Art exhibition: *Woven Histories: Textiles and Modern Abstraction* Used by permission from American Indian Science and Engineering Society (AISES) © 1994. photo © Museum Associates/ LACMA

© The American Council of Learned Societies 2024

The publication is available at https://www.acls.org/resources/other-stories-to-tell/

Suggested citation:

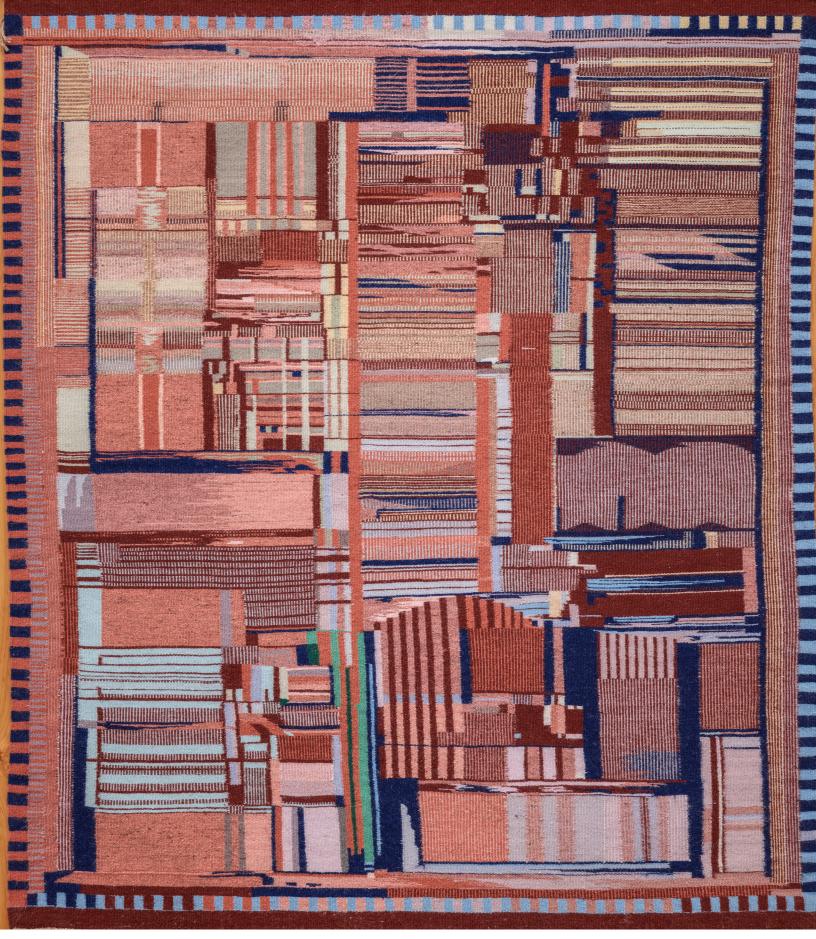
Other Stories to Tell: Recovery Scholarship and the Infrastructure for Digital Humanities. The Report of the Commission on Fostering and Sustaining Diverse Digital Scholarship. The American Council of Learned Societies, 2024.

The title of the report comes from Mark Dery, by way of Alondra Nelson's citation of his 1994 work: "Can a community whose past has been deliberately rubbed out, and whose energies have subsequently been consumed by the search for legible traces of its history, imagine possible futures? Furthermore, isn't the unreal estate of the future already owned by the technocrats, futurologists, streamliners, and set designers – white to a man – who have engineered our collective fantasies? ... But African-American voices have **other stories to tell** about culture, technology, and things to come."

[Emphasis added]

Mark Dery, "Black to the Future: Interviews with Samuel R. Delany, Greg Tate, and Tricia Rose" in Flame Wars: The Discourse of Cyberculture (edited by Mark Dery): Duke University Press: 1994.

Cited by Alondra Nelson in "Introduction, Future Texts" in Afrofuturism. Social Text 20.2 Summer 2002.



Marilou Schultz (Navajo/Diné) Replica of a Chip, 1994

Table of Contents

Foreword, from Joy Connolly	5
Preface, from Marisa Parham	7
Commissioners	9
Executive Summary	11
Introduction: The Commission in Context	17
Higher Education and Communities Outside the Gates	24
The Challenge of Institutional Change	30
Infrastructures and Ecosystems	35
Shared Values, Relationships, and Policies	36
Human Resources, Pipelines, and Labor	42
Creating Networks and Collaborations	47
Platforms and Technologies	50
Scholarly Communication and Preserving the Scholarly Record	55
Sustaining and Disseminating Community-Engaged Work	62
Using New Resources in Teaching	64
Financial Support	66
Recommendations	73
Recommendations: The Voices of Participants	81
Appendix: Commissioners and Project Team	89
Appendix: Participants in Focus Groups and Interviews	99
Footnotes	105
Resources and Suggested Reading	108
Collaboratives and Networks	109
Community-Institutional Partnerships	111
Digital Infrastructures	114
Evaluation, Pathways, and Labor	117
Funding and Institutional Support	119

Foreword

he Commission on Fostering and Sustaining Diverse Scholarship was convened by the American Council of Learned Societies (ACLS) at the behest of the Mellon Foundation and the National Endowment for the Humanities (NEH). The goal of the Commission's work is to ensure the health and enduring availability of recovery scholarship, work that is bringing to light histories and literary, artistic, and cultural traditions that have been ignored, forgotten, or pushed to the margins by established educational and cultural institutions. Much of this work extensively employs digital technology, and the digital environment for the humanities affects recovery scholarship's ability to thrive and to reach its growing audiences, now and in the future.

In 2004, ACLS, with backing from the Mellon Foundation, appointed a commission to address the needs of digital scholarship. The commission found that the humanities cyberspace lacked the kind of essential infrastructure that had been built over centuries in analog scholarship. In 2006, the commission issued *Our Cultural Commonwealth*. The report focused on institutional innovations that would allow digital scholarship to be cumulative, collaborative, and synergistic. NEH Chair Bruce Cole cited this report as the inspiration for the Endowment's Office of Digital Humanities. The work of this new Commission extends ACLS's earlier efforts to understand the possibilities and gaps for the digital humanities (DH) of today and tomorrow.

Over the past 25 years, digital scholarship has become widespread within the academy. Cameras, database software, text analysis, geospatial mapping, and other tools that support digital collection building, curation, and interpretation are commonly used in many types of institutions, from the wealthiest to those with scant resources. In some important ways, digital humanities have enjoyed great gains in equity, becoming more accessible to more and a greater variety of people. The impact is difficult to overstate. Community history gains public significance when it circulates beyond word of mouth or the passing down of artifacts in family circles. Digital translation revives the study of texts in understudied languages.

But severe inequities in how knowledge is created and distributed via digital methods persist. In historically understudied fields, key material runs a higher risk of being lost. Even as new sources and perspectives emerge, their rich diversity makes preservation, curation, and circulation difficult. A community college may struggle to keep up with the software updates it needs; an industry standard academic archive may not accommodate projects designed by people outside academia.

The Commission engaged the expertise of a wide range of communities invested in this work-digital project leaders, university leadership, scholarly publishers, public-facing scholars, and many others-in order to move beyond patchwork solutions. The problem at hand is not a straightforward matter of reforming library practices or funding better software. It is closer kin to a public health issue, where successfully enabling marginalized communities to thrive requires drawing on different types of people, resources, and habits of thinking. Equitable and sustainable efforts to preserve and circulate digital knowledge must be supported (1) at the institutional level where most digital projects originate, (2) within a trans-institutional infrastructure, and (3) with the collaborative leadership of diverse voices.

Sustaining healthy digital infrastructure is a global challenge. But the Commission found that opportunities and challenges for this work in the US were specific to the American system of higher education. While the Commission benefitted from the experiences of other countries, its observations and recommendations are largely focused on the United States. The research team that supported this work has my thanks: Katrina Fenlon and Zoe LeBlanc who, among their many contributions, developed the Resources section, and particularly Carol Mandel, who led the Commission's support efforts; Carol played the central role in drafting this report. For over two years, they worked closely with my colleague, ACLS vice president James Shulman, and with well over 100 community experts whose voices are reflected in this wide-ranging report.

Humanistic scholarship is always changing, and its place in departments, fields, and curricula is dynamic: It builds on past scholarship even as it maps out new questions. Incubating fledgling fields of scholarly inquiry has long been a way to make the most of the intellectual assets of the humanities; over the last 100 years, ACLS has convened research planning committees that have worked toward this end. Perhaps the most prominent outcome of past committee work was the development of area studies-the study of the history, culture, and societies of different world regions-beginning in the 1920s. Other fields aided by the work of these committees include African American studies, intellectual history, musicology, the history of religions, and linguistics, especially the study of Indigenous languages.

We at ACLS have been and will continue to be devoted to the work of field building. With funding from the Mellon Foundation, we are in the second year of supporting projects in the areas covered by this report; our Digital Justice program led by Senior Program Officer Keyanah Nurse has been intertwined with the Commission's work. ACLS is committed to building on this work in both programmatic and policy initiatives.

This report draws together the intellectual and administrative threads of field building in the humanities, highlighting the voices and stories that have been historically marginalized and celebrating the possibilities of digital technologies in carrying out reparative rebalancing of the enterprise.

The Commission is an extraordinary, forwardlooking group whose varied accomplishments and expertise remind us of the many complex elements of communication, organization, and vision needed to ensure the creation and dissemination of new knowledge. I heartily thank its 21 members for their time and wisdom. This report will help guide how we tell the world's stories through digital technology, now and in the future. All of us at ACLS stand ready to spread its insights and support its recommendations.

Joy Connolly, President, ACLS

Preface

igital practice has become critical to scholarly inquiry, expression, and preservation, fundamentally reshaping the way knowledge is created and shared. However, the integration of digital work into the fabric of higher education remains inconsistent. Practitioners struggle to ensure that their digital products are understood as integral to teaching and research, and that these works are preserved for future generations. Even in an era where the digital is celebrated for innovating both archival work and humanistic inquiry, higher education often lacks the necessary structures to recognize and sustain this work and its practitioners. How do we support digital work and workers, and how do we sustain that support over time?

The Commission's recommendations show that these questions demand more than simply adapting existing structures. The pursuit of inclusion and diversity in scholarship often risks seeking change without fully embracing difference as a material outcome. The recursive movement toward and then away from transformation challenges both scholars and the institutions within which they operate. On a practical level, it limits the scope of scholarly workthe questions researchers feel empowered to explore, the archives they build or consult, the methodologies they pursue, and the possible kinds of partnerships they can build with communities outside of academia. Institutionally, it strains the technical and administrative systems responsible for the essential tasks of financial, archival, and existential support for academic research, including assessment and retention.

In this way, the Commission's work has been about more than just tech and innovation. Solving for difference means identifying intellectual opportunities that are beleaguered by the tension between what institutions claim to want and the problematics of producing flexible yet intellectually robust structures of support for that labor. The creation of new knowledge frameworks shapes our ability to attract and engage wider audiences, and to produce new forms that can better account for the diversity of human experiences. It enables the reimagination of knowledge production itself. The boundaries between bureaucratic processes, digital advancements, and the human elements of academic work frequently merge. Academic assessment, for instance, is often viewed as crucial only to academic careers, but its broader significance cannot be understated. Dismissing community work as unassimilable into scholarly evaluation, for instance, undermines the very knowledge-making potential of the communities that scholars strive to engage with and support.

Indeed, this report highlights numerous challenges and struggles consistent with the realities faced by digital, experimental, and community-facing scholars today. Yet, it also celebrates the many instances where the challenges were met and the problems were solved. Sustainability is a critical frame because it encompasses the emotional, material, and social stakes of academic labor. It highlights the balance between innovation and the human cost of not investing in dynamic support structures, the push and pull of innovation and the human cost of not investing in structure as a dynamic process. Sustainability names the tension between reality and optimism as productively challenging or as a barrier to human and social health, and thus also to intellectual breadth and depth. While digital projects and initiatives often succeed due to the Herculean efforts of committed individuals, this success should serve as both an encouragement and a cautionary tale. Much as it is crucial to avoid transactional relationships where academics merely produce knowledge, we must also produce structures that resist treating communities as mere sources from which valuable resources-such as data, information, credibility, and students-are

extracted. Extraction in any form is very seldom sustainable.

To be clear, in most cases, institutions and scholars want the same things. The difference is that institutional support must by definition come in the form of policy and infrastructure that acknowledges new challenges and that commits to finding solutions. The Commission's work highlights the necessary role that policy plays in the stewardship of intellectual life, community, and production. As we look to the future, the Commission's work serves as a blueprint for sustaining the momentum we have achieved, while also rethinking new futures for the work. It is a call to action for institutions to invest in the long-term success of digital scholarship, ensuring that the creativity and dedication of today's scholars can flourish.

Marisa Parham, Professor of English and Digital Studies, University of Maryland Chair of the Commission on Fostering Sustaining Diverse Digital Scholarship

Commissioners

Edwardh Ages

Edward Ayers Tucker-Boatwright Professor of the Humanities and Executive Director of New American History, University of Richmond

Suin Brook

Lisa Brooks Winthrop H. Smith 1916 Professor of American Studies and English at Amherst College

Kim Christen Associate Vice President, Research Advancement, Washington State University

Dan Cohen Vice Provost for Information Collaboration, Dean of the Library, and Professor of History, Northeastern University

Dr. Maria E. Cotera Associate Professor of Mexican American and Latino Studies, The University of Texas at Austin

Meredith R. Evans, PhD Director of Special Collections and Museum, Atlanta, GA

aquahar

Maryemma Graham Distinguished Professor Emerita, University of Kansas, Founder, History of Black Writing

Josh Greenberg Program Director, Alfred P. Sloan Foundation

May Hong HaDuong Associate University Librarian and Director, UCLA Film & Television Archive

Charle Johnny C J Henry

President, Council on Library and Information Resources

ules Bergis

Bergis Jules ^V Archivist, Shift Collective

Marisa Parham Professor of English and Digital Studies, University of Maryland

Kenton Rambsy Associate Professor of English/Data Science and Analytics, Howard University

KUZ

K.J.Rawson Professor of English & Women's, Gender, and Sexuality Studies and Director of the Humanities Center, Northeastern University

Lond Pran

Roopika Risam Associate Professor of Digital Humanities and Social Engagement, Dartmouth College

Ent

Claire Stewart Professor and Juanita J. and Robert E. Simpson Dean of Libraries and University Librarian, University of Illinois Urbana-Champaign

Gabriela Baeza Ventura, PhD Professor of Spanish, Department of Hispanic Studies, University of Houston Deputy Director, Arte Público Press Director, Recovering the US Hispanic Literary Heritage Program Co-Director, US Latino Digital Humanities Center



Ben Vinson III President, Howard University

ashs bathson

Charles Watkinson Director, University of Michigan Press, and Association University Librarian, Publishing, University of Michigan Library

Stacie Williams Archives and Libraries

ferma Woo

Jewon Woo Professor of English, Lorain County Community College

Executive Summary

Found-breaking scholars, vibrant communities, and passionate archivists are building scholarly works that ask new questions, uncover new sources, and often employ digital technologies throughout their research and its dissemination. Their work of recovery scholarship diversifies the historical and cultural record and shifts and expands both the scholarly conversation and public knowledge. Their work is profoundly changing our understanding of the past, present, and future. Yet much of this new knowledge was produced only by overcoming obstacles and cobbling together support. And even as we celebrate successful projects, the digital results of that work face an uncertain future and may never be available to a future generation.

The Commission on Fostering and Sustaining Diverse Digital Scholarship was convened by the American Council of Learned Societies at the behest of the Mellon Foundation and the National Endowment for the Humanities to understand how to foster the work of diverse scholars and communities contributing to the fields of racial and social justice, to analyze the issues preventing their digital results from being sustained and preserved, and to map directions that will enable this work to thrive and ensure that its products will endure. The Commission's process explored a complex landscape of academic and community-based work and the multifaceted, many-layered contexts in which this work is created and shared. The Commission drew on the extensive and diverse knowledge of its 21 members along with the focus group and interview contributions of more than 120 scholars, librarians, technologists, publishers, academic administrators, funders, community archivists, and many others engaged in the work of digital humanities, recovery scholarship, and all aspects of scholarly communication from publication to access to preservation. This report includes their voices and stories. Each conversation added new ideas and understandings of challenges, barriers, and some inspiring successes in the current environment, and enabled the Commission to identify the points for action described in the recommendations.

As the Commission probed needs and issues, it became apparent that layers of supporting infrastructure that scholars have taken for granted for more than a century often did not work for a new

generation of digital recovery scholarship. Successful scholars in the field have had to work against the tide, innovating and inventing to make the work possible for themselves and others. Digital recovery scholarship faces structural impediments that have limited the support and preservation of much digital humanities scholarship in the last decade. We were able to see places where ingrained, conventional practices and organizational structures are no longer serving a knowledge environment that now relies on digital methodologies, encompasses a wide and varied universe of higher education institutions, includes community-based initiatives, and serves a student body representing North America's diverse population. While there have been notable successes, conversations revealed that achievements were only gained by surmounting systemic obstacles—obstacles that must be removed to make such success reproducible and to ensure that their results endure for future generations. Rather than serving as easily replicated models, the case studies of successful projects often highlighted where deep infrastructural change is needed. And the lack of easily applied or replicated models for enduring preservation reveals glaring gaps in our scholarly communication infrastructure for new digital material.

Thriving recovery scholarship requires new modes of engagement, collaboration, and reciprocal expectations across disciplines, across institutions, and between institutions and communities. The Commission report considers how to rethink and change the values, policies, and opportunities that can enable diverse scholars and communities to collaborate and accomplish sustainable work. Within institutions, current structures for financial and administrative support and for evaluation and rewards now need to serve new modes of humanities scholarship that are team based, community engaged, and use digital methodologies. Across the academic enterprise, healthy digital recovery scholarship requires interdisciplinary pipelines and partnerships with, for example, data science, library and information science, social sciences, and archival theory. The Commission's investigations also revealed the extent to which a core challenge in digital humanities work remains unsolved: Much digital work lacks provision for enduring access and is at risk of loss. Building on more than two decades of digital experience, the scholarly

communication community now needs to organize an integrated, coordinated effort to address gaps in publication and stewardship, and to articulate and implement expectations that are widely shared.

This report offers seven strategic objectives that the Commission believes can set a course for essential change. Its recommendations lay out a road map and initial implementation steps toward reframing and updating aspects of academic and scholarly infrastructure that are not well supporting 21st-century humanities work. Infrastructures are not changed or rebuilt overnight. The recommendations are intended as a map, both pointing directions and suggesting steps to get the journey robustly underway. The way forward will necessarily engage a wide and collaborative network of individuals, communities, societies, foundations, and all parts of the academic enterprise. It will entail initiatives and contributions within and across individual institutions, organizations, and communities, and will create new support capacities and new collaborations. It will build on longestablished infrastructures and on recent innovations. And in many significant areas, it will require deep reconsideration of assumptions and values, and a readiness to embrace change.

As the Commission considered its recommendations, taking a big picture view of collaborative and networked possibilities was a necessary perspective. The Recommendations section of the Commission's report includes actionable steps to implementation that engage partnerships and conversations across a wide spectrum of organizations, institutions, and individuals. The Resources section of the report provides guidance and useful reading both for those engaged in recovery scholarship and community archiving and for those who want to support and further their essential work. Fostering and sustaining diverse digital scholarship is a grand challenge that merits the focused attention of active coalitions of institutions and the creative financial support of a coordinated network of committed funders. The Commission report frames the work needed and proposes a road map toward essential change.

Summary of Recommendations



Build two-way streets for knowledge to travel between institutions and communities.

Institutional leaders, scholars, librarians, archivists, and communities can work together to design, promulgate, and implement new modes of mutually determined and mutually supportive interactions between academic institutions and their geographically and socially adjacent communities. For the full recommendation go here.

Reorganize institutional research support to match the changed nature of the humanities research enterprise.

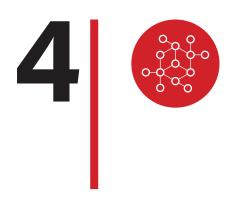
Institutional leaders—provosts, deans, budget directors, research officers, and department chairs—can recognize and create the kinds of reliable support structures for grants administration, project management, human resources management, and cyberinfrastructure (from data management and technical support to publication and preservation) that are now necessary for much humanities work. Institutions can also work together to build shared support services. For the full recommendation go here.





Reward brilliant scholarship even when it includes new modes of work and requires new approaches to evaluation.

Provosts, deans, department chairs, and disciplinary societies can adapt appointment, retention, mentoring, tenure, and promotion practices in humanities departments to value and reward high-quality scholarship manifested in new as well as conventional formats and to appreciate the demanding nature of community-engaged research and scholarship. **For the full recommendation go here.**



Grow and nourish the networks and pipelines that build a field and inspire students.

Funders, discipline societies, professional associations, and academic institutional leaders can continue to expand and multiply internships, fellowships, mentoring, and other programs that create interpersonal support networks and pipelines for undergraduates, graduate students, faculty at all levels, and community members. There are many excellent model programs, and at the same time, there is an enormous demand for more. For the full recommendation go here.

Create opportunities for pollination across domains of expertise, within and across institutions.

Institutions, funders, and professional organizations can create new structures and opportunities for interaction across fields of expertise within institutions and across institutional, organizational, and community environments, enabling established networks to collide, learn, and collaborate in new ways to produce innovative digital work in racial and social justice and to enable sustainable models. For the full recommendation go here.





Fill the gaps in the scholarly communication infrastructure for new forms of digital work.

Librarians, technologists, scholarly publishers, and peer reviewers have successfully transformed the long-standing publishing and knowledge cycle from print to digital, but it is now time for them to muster their purpose, collaboration, and innovation to adapt the infrastructure of scholarly communication to new kinds of born digital work. For the full recommendation go here.



Build the support structures that will enable diverse institutions and communities to accomplish sustainable work and preserve its content.

Funders and professional and academic leaders can collaborate to design and initiate new organizations, collaboratives, and service structures that can extend technical, administrative, and advisory capacities to all types of institutions and community initiatives. Leaders of existing collaborative organizations can reshape or expand their services to support a more diverse base. For the full recommendation go here.

Introduction: The Commission in Context

roundbreaking scholars, vibrant communities, and entrepreneurial archivists are building scholarly works that ask new questions, are informed by different sources, and employ innovative narrative structures. Their work of recovery scholarship brings to light histories and literary, artistic, and cultural traditions that have been ignored, forgotten, or pushed to the margins by established educational and cultural institutions. Their purpose is to diversify the historical and cultural record by recovering, disseminating, and elucidating previously lost or unrecorded stories, thereby shifting and expanding the scholarly conversation and public knowledge. The practitioners of recovery scholarship fill gaps in the archives through methods that range from established practices of archival research to innovative new modes of compiling or analyzing evidence, often including communitybased contribution. They actively share resources and encourage new scholarship, taking advantage of digital techniques for collaboration, dissemination, and interpretation.

The practitioners of recovery scholarship work in an environment where digital technology has rapidly changed every aspect of how evidence is compiled, cared for, examined, interpreted, synthetized, and shared as scholarly outputs. Taken together, these developments are creating new ways for the digital humanities to have an impact on the scholarly landscape and on society at large.

Marisa Parham describes why this work is transformative:

The way in which Digital Humanities has forced scholars to think about their work as an enterprise is actually important because it can be very empowering for women and people of color to begin their research from a perspective of first ownership then sharing. To think, "this is my thing and I need to make it happen. I will make it live and grow." I think this is a really powerful relationship versus only thinking I am a cog in a larger machine and hoping that someone will acknowledge me as fitting in. I think the work being done on African-American history and labor history and gueer history through interactive timelines and databases and the sheer work being done on recovering archival voices we've forgotten is incredibly important ... getting at a deeper history and

therefore being able to say more about the future because we understand more about our past. [1]

The work of the Commission on Fostering and Sustaining Diverse Digital Scholarship reflects on how recovery scholarship and its methods are challenging the frameworks that shape our institutions and how they must evolve. Altering these frameworks, like changing the physical infrastructure of mass transit systems, water pipes, and electrical grids, happens slowly and incrementally, even while the creation and use of vital new content that emerges in these frameworks is highly dynamic. What stories are being captured and legitimized in our existing humanistic infrastructure today? How are those stories that shape societal attitudes and values generated and amplified, and how will they endure? Where and how does our collective infrastructure need to be changed or reworked creatively to open up to the inclusion of other stories and to enable those stories to be shared, sustained, and preserved?

Today, Americans debate the stories taught in our colleges and universities. Many states-more than 50% thus far-have proposed state or local laws that ban certain books or outlaw "divisive topics" in the classroom. These debates, including the use of critical race theory as a synecdoche for discussions of America's racist history, originally focused on K-12 education. More recently, the metaphoric battleground has expanded to include the academic humanities in higher education. PEN America [2] is tracking the rise of what it refers to as "Educational Gag Orders ... state legislative efforts to restrict teaching about topics such as race, gender, American history, and LGBTQ+ identities in K-12 and higher education." It notes: "Of the 137 educational gag order bills introduced, 39 percent have targeted colleges and universities." As historian Joan Scott warns us, "When the state finds itself at odds with critical thinking, we know the search for truth has been shut down; when populist operators decry the elitism of the academic establishment, we know knowledge production is being directed to nefarious ends." [3] The controversy is not only about what is taught in the classroom; the stories and mythologies that we read and circulate can deeply influence how members of society approach life and death. Hate crimes, from daily confrontations to mass shootings in El Paso, Orlando, Pittsburgh, and Buffalo,

are the most vivid manifestation of how conflicting narratives about who is allowed to claim a place in American society shapes our lives.

And increasingly over the past 25 years, the circulation of the stories that shape who we have flowed through digital media. Long-standing frameworks—largely textual-for our stories have been surrounded by a swirl of other methods for capturing and conveying lifeshaping narratives. As Dr. Kishonna Gray points out, technology is used to capture and represent today's stories with far less mediation and far more access than was the case when typesetting and printing dominated. [4] This can be as true in biology and psychology as it is in history and literature; within humanistic fields, it is as true for studies of French Renaissance music composition as it is for the civil unrest around the police killing of Michael Brown in Ferguson, Missouri, in 2014. The work of scholarship in a digital age grips long-standing social and institutional practices and structures and shakes them, sometimes rapidly. The place of technology is central in the telling of "other stories,"

Even as both the content and conveyance of our essential stories are rapidly evolving, the academic infrastructure for professionally supporting and rewarding recovery scholarship—and digital scholarship in all humanities fields-stands, inadvertently and by its nature, as a bulwark to change. Field building in higher education is both an intellectual and a material activity; the long-standing structures of US colleges and universities were set in place more than a hundred years ago, and the areas of study that were granted primacy then remain in place. While Black studies or other ethnic studies were able to attain a foothold in the academy beginning in the 1960s, the unexamined depths and variation of sources and topics has continued to expand amid the country's changing demographic and amid social movements that have legitimized the study of people and cultures who were not included in the academic curriculum a century ago. From Indigenous studies to queer studies, immigration and refugee studies to disability studies, from the domains of Black, African, and African diasporic studies to Latino/a studies encompassing different peoples and cultures, humanities teachers and scholars now find or build fields across humanistic disciplines-visual or performing arts, literary or media productions,

and realms of belief or political activity. At the same time, these field-building activities and their digital methodologies are encountering a higher education system that is in a state of contraction, particularly in humanistic fields. Tenure lines and funding streams are limited. An environment of competition for diminishing resources is not one that welcomes new players and new needs.

Despite these challenges, the Commission's prevailing ethos has been one of pragmatic optimism. The report's title draws upon the guiding definition of Afrofuturism shared by Alondra Nelson as part of a group that coalesced around the optimistic hopes for technology in the 1990s. [5] "Afrofuturism," Nelson noted, "can be broadly defined as 'African American voices' with 'other stories to tell about culture, technology and things to come." As Jose Estaban writes, looking to the future is "an invitation to desire differently, desire more, desire better." [6] [7] The recommendations of this report reflect the Commission's desired future and map a way forward to arrive there.

THE WORK OF THE COMMISSION

The Commission's process explored a complex landscape of academic and community-based digital projects and spaces that work toward racial and social justice and the multifaceted, many-layered contexts in which this work is created and shared. The Commission drew on the extensive and diverse knowledge of its 21 members-who met in various configurations both online and in person-along with the focus group and interview contributions of more than 120 scholars, librarians, technologists, publishers, academic administrators, funders, community archivists, and many others engaged in the work of digital humanities, reparative scholarship, and all aspects of scholarly communication, from publication to access to preservation. Each conversation added new ideas and understandings of challenges, barriers, and some inspiring successes in the current environment. The conversations enabled the Commission to identify the points for action described in the recommendations.

Gaining the informed perspectives of so many focus group participants enabled the Commission to surface, probe, and unpack the many complex barriers to illuminating new knowledge, recovering buried histories, and creating transformative scholarship that brings to light these alternative ways of seeing. We saw that digital recovery scholarship faces structural impediments that have also limited the support and preservation of much digital humanities scholarship in the last decade. We were able to see places where ingrained, conventional practices and organizational structures are no longer serving a knowledge environment that now relies on digital methodologies, encompasses a wide and diverse universe of higher education institutions, includes community-based initiatives, and serves a student body representing the nation's diverse population. We were able to see that while there have been notable successes, those achievements required surmounting systemic obstacles that must be removed to make such success reproducible and to ensure that its results endure for future generations.

This report offers seven strategic objectives that we believe can set a course for essential and urgent change. Its recommendations lay out a road map and initial implementation steps toward reframing and updating aspects of academic and scholarly infrastructure that are not now well supporting 21stcentury humanities work. The objectives describe and propose (1) new modes of interaction between academic institutions and knowledge-creating communities; (2) redesigned academic organizational structures that recognize the new nature of team-/ project-/digital-based humanities work; (3) appointment, mentoring, and reward structures that appreciate new kinds of digital and communityengaged scholarship; (4) expanded opportunities for collaborations and pipeline development that are critical to field building, community-based research, and student success; (5) new structures and opportunities for creative collision across areas of expertise that do not currently but could profitably interact and learn from each other; (6) concerted, coordinated initiatives to fill critical gaps in the scholarly communication infrastructure for new digital forms; and (7) enhanced and new collaborations and service structures that address support needs across a wide variety of types of institutions and knowledge creators. We urge that this last set of collaborations include a network of funders that will value and support the work of recovery scholarship in the context of their goals for advancing equity and inclusion across and throughout the education environment.

The Commission's recommendations incorporate and expand initiatives underway in a variety of sectors and build on existing successful academic enterprises. At the same time, we sharpen the focus where current structures are not yet recognizing and supporting powerful and essential new work, and where new approaches can have potent and urgently needed impact. The Commission, ACLS, and collaborating organizations will use our recommendations as next steps in a continuing process of change.

The work the Commission's recommendations set out to do is vital and feasible. The plastic and pluralistic system of public and private institutions of higher education in the US have fostered inventive new methods and modes of scholarship and brought mind-opening new knowledge into being. Take, for example, the national commission assembled in 1951. Upon receiving a copy of the first volume of Thomas Jefferson's papers, President Harry Truman expressed the hope that the publication would "inspire educational institutions, learned societies, and civic-minded groups to plan the publication of other great national figures." He requested that the General Services Administration convene a National Historical Publications Commission to submit a report to him on "what can be done-and should be done-to make available to our people the public and private writings of men whose contributions to our history are now inadequately represented by published works." [8] The 1951 Commission created a map that prioritized the preparation of the papers of 66 figures; many were politicians (such as Franklin, Hamilton, Adams, and Calhoun), but the list was, in certain ways, wide-ranging, with inventors such as Edison, industrialists such as Carnegie and Firestone, and more than a sprinkling of academics (the physicists Joseph Henry and Albert Michaelson), architects (Bullfinch and Latrobe), and a sculptor (Saint-Gaudens). But, of course, the priorities of scholarship then were different than they would be today. Three of the 66 were women (Jane Addams, Susan B. Anthony, and Clara Barton). One, Booker T. Washington, was Black.

That Commission was, in many ways, effective. Various public and private forces were marshaled in support of publishing efforts such as *The Papers of Benjamin Franklin*, launched with substantial financial support from *Life* magazine (\$4 million in current dollars); the curation and publishing effort was then taken up by the American Philosophical Society and Yale. Today, 40 volumes of Franklin's writings and correspondence are available for free online. And we can see the Commission's influence playing out with wider resonance as preservation and access of primary source materials fosters future scholarship. Today, a search for "the papers of Benjamin Franklin" on JSTOR produces 63,947 results—articles and books that explicitly cite work that the 1951 Commission urged society to come together to fund, edit, and publish.

In many obvious ways, the country, higher education, and the humanities have changed in the 70 years since Truman's National Historical Publications Commission. The list of which 66 people to foreground by gathering and publishing their documents would certainly be different and longer today. But even with its narrow lens of its time, that Commission knew that the work of assembling, editing, and disseminating primary source material is far more than a scholarly endeavor. It is an act that shapes the world:

Our knowledge of these things, our knowledge of the contributions to the development of the United States that many men and women have made in numerous and widely varied fields of activity, is incomplete. It is incomplete—to specify one major reason—because much important information is hidden away in letters, diaries, reports and other papers that have never been published. [9] How the humanities are researched, studied, and taught in US colleges and universities today is the result of hundreds of years of decisions about library holdings, curriculum requirements, and disciplinary norms that have led to the inclusion and validation of the works of particular creators and particular cultures and the exclusion of others. The scholarly record and society's knowledge of and views concerning Ben Franklin have been shaped by the priorities of governmental funding agencies and private funders, the choices of university faculty members, and the priorities of college and university administrators. The scholarly record and popular opinions of tomorrow are being formed by the interests and modes of collection building and information dissemination of today's funders, scholars, and decision-makers. Our Commission's recommendations are aimed at those many individuals and organizations that are shaping that future.

The Commission has seen how new resources and digital methods can expand perspectives and change our understanding of the world.

 As a graduate student, Maryemma Graham often sat on the floor of the Schomberg Center of the New York Public Library perusing boxes of little-known books. After joining the faculty at the University of Mississippi, Oxford, and loaded with photocopies, she created the Computer Assisted Analysis of Black Literature (CAABL) in 1983. The ever-expanding



Students participating in the Black Book Interactive Project, part of History of Black Writing at the University of Kansas.

digital archive is now central to the History of Black Writing (HBW), based at the University of Kansas since 1998. HBW is a research center designed to expose students, instructors, and audiences to literature by Black authors. It works through a wide variety of public-facing events and programs, curates exhibits, produces and supports innovative scholarship, and builds partnerships with educators, libraries, institutions, and donors. Hundreds of US and international scholars have participated in HBW workshops or training.

- In 2009, professor Maria Cotera enlisted the collaboration of filmmaker Linda Merchant to preserve imperiled Chicana and Latina histories of the long civil rights era. Chicana por mi Raza Digital Memory Collective (CPMR) is a group of researchers, educators, students, archivists, and technologists who have traveled to more than a dozen states to collect hundreds of hours of oral histories with notable Chicanas, Latinas, and allies, and scanned personal archives for preservation and access. Using largely volunteer and student labor, CPMR offers a model for grassroots digital history that encourages further research into understudied aspects of the American experience. It has collected and processed some 10,000 archival items, with 3,000 more awaiting digitizing, description, and uploading.
- In 2007, members of the Warumungu community in Australia collaborated with Washington State University professors Kim Christen and Craig Dietrich to produce the Mukurtu Wumpurrarni-kari Archive. Mukurtu is a Warumungu word meaning "dilly bag," or a safe place to keep sacred materials. Warumungu elder Michael Jampin Jones chose Mukurtu as the name for the community archive to remind users that the archive, too, is a safe keeping place where Warumungu people can share stories, knowledge, and cultural materials properly using their own protocols. Growing from this community need, the Mukurtu collection management system is now an open source platform flexible enough to meet the needs of diverse communities who are managing and sharing their digital cultural heritage on their own terms.
- The Valley of the Shadow Project began with a proposal written by Edward L. Ayers in September
 1991. It was originally conceived as a traditional book, and Ayers wanted to deal with a comparative story



Joanne Salas at the police brutality march. Photo by Nancy de los Santos. Chicana Por Mi Raza Digital Memory Collective (CPMR).



Marsha P. Johnson and other Gay Liberation Front Members Walking at New York City Hall. Digital Transgender Archive.

of the Civil War by examining two places close to the border between the North and the South, including the full range of people in both places, Black and white, free and enslaved, soldier and civilian, male and female, Unionist and secessionist. Ayers wove together the small details of life in the communities during the Civil War using letters, diaries, memoirs, census records, church records, government records, battle reports, speeaches, and newspapers, Those records became a then-unprecedented online database that has since been used by many thousands of scholars, teachers, and students. The Valley Project became one of two founding projects that established the Institute for Advanced Technology in the Humanities (IATH) at the University of Virginia, a seminal research center in digital humanities.

 In 2013, K.J. Rawson began development of the Digital Transgender Archive (DTA) to increase the accessibility of transgender history by providing an online hub for digitized historical materials, born-digital materials, and information on archival holdings throughout the world. Based in Boston, Massachusetts, at Northeastern University, the DTA is an international collaboration among more than 70 colleges, universities, nonprofit organizations, public libraries, and private collections, a collaboration that forms a horizontal institution, cutting across many different types of cultural heritage institutions. The DTA is an archival project designed to address archival gaps and enable community/contributor ownership.

These groundbreaking collection building efforts and others like them—gathered, curated, and made available through digital methods—are shaping scholarship and expanding public knowledge. Their success demonstrates what is possible. But even these well-known initiatives face significant challenges to sustain their online presence—often a presence that many other scholars and teachers rely upon—and to preserve the results of their work for the future. And, as the Commission learned, many more valuable projects are struggling to accomplish their work and to make it accessible. This report takes a deep look into the barriers holding back access to a world of new knowledge and identifies where change can enable digital recovery scholarship to thrive and be sustained.

Higher Education and the Communities Outside the Gates

reative humanists have set out on their own to use digital methodologies to probe stories outside the canon of existing institutional collections. Their projects are models for democratizing knowledge through digital collection development and public dissemination. Yet digital archives and historically inclined digital projects are not only democratizing access to historical materials, they are also calling into question traditional archives as institutions and sites of power. The effects of archival power are profound and can result in the systemic erasure of marginalized communities, which archives scholar Michelle Caswell describes as "symbolic annihilation."

Institutional capacity to archive ephemeral digital history has been slow to keep pace. <u>Documenting</u> <u>the Now</u>, as described in its website,"is a tool and a community developed around supporting the ethical collection, use, and preservation of social media content." As Bergis Jules, Ed Summers, and Vernon Mitchell Jr. write, the project began in the aftermath of the police killing of Michael Brown on August 9, 2014, in Ferguson, Missouri. Social media, and Twitter in particular, where most of the information about Ferguson was shared, was a vital avenue for disseminating information about the case, the social activism it spurred, and the opposition to the protests that followed. The Twitter digital content from the Ferguson protests, for example, represented an authentic depiction of the significance of the events, the activity surrounding them, the diversity of the actors, and the nature of the protests' support and opposition. The level of participation in these movements as they play out on social media makes them rich scholarly resources deserving of collection, preservation, and study. [10]

The Digital Transgender Archive and Documenting the Now are but two examples of dozens of valuable collections being constructed and cared for outside of institutional systems. In *Decolonizing the Digital Humanities in Theory and Practice*, **Roopika Risam** notes the need for local focus in digital humanities efforts:

Emphasis on the local—a directive of postcolonial studies—demands acknowledgment that there is not a single world view or way of being within the world but rather a proliferation of worlds, traditions,



Protest in Ferguson, MO. Photo by David Carson. Documenting the Now.

and forms of knowledge. These multiplicities only constitute a global dimension insofar as the global is itself diverse and only understood through local particularities. [11]

Risam describes a range of projects that, "in their design and content, use digital cultural heritage, games, performance art, and mapping in service of decolonization for Indigenous communities, immigrant histories, and the landscape of digital humanities itself." The boundaries between the once-distinct functions of library and archival collection building, university publishing, and the relationship between the university and its community blur as long-standing social and institutional structures are torqued. Entrepreneurial scholars, along with a wide range of communities and cultural heritage groups build collections, devise policies about ethical engagement and are changing the humanities.

Often, discussions of communities in relation to digital humanities scholarship—as in the rhetoric of "community-university partnership" or "communitybased research" or even "community archives"-are implicitly referencing a well-worn dichotomy between academic or cultural institutions on the one hand and public groups that exist outside of and independently of those institutions on the other hand. Yet growth, maintenance, and impact of humanistic knowledge and culture have always been driven by communitiesgroups of people gathered around varying nuclei, such as shared dimensions of identity or memory, place, belief system, interests, objectives, methods, and more. The dichotomy between the institutionally housed efforts, with all of their varieties of support, and the work of documenting in communities that have not had an established place in the system masks a diversified and complex landscape of communities, groups, and teams-collectives defined around human relationships-that determine how cultural knowledge is socially constructed, shared, advanced, and maintained over time. At the same time, many of the projects that vividly exemplify this Commission's mandate call into question the asymmetry in power that institutional affiliation and support require. In light of the power disparities, legacies of damage, and inevitable concessions involved in partnering with institutions, holders of knowledge within and outside of the academy have created new humanities that confront

the settler and predominantly white institutions that have dominated academic and cultural spaces.

The Commission considered the growing body of work on equitable and sustainable models of community knowledge production along with community-centered approaches to the infrastructures and sustainability of digital scholarship. Community-centered approaches to infrastructure foreground the social dimensions of communities and human networks. Communitycentered approaches to sustainability view the preservation of digital artifacts and infrastructures in the context of how digital projects sustain communities and how projects endure and evolve as living, vital, community-owned and-controlled resources. All of these issues highlight the need to rethink institutional roles, practices, and values in relation to community knowledge creation. Forward-looking communities at work on historical and cultural documentation are thriving outside the university and have a limited foothold inside of it. Rebalancing and opening the relationship between higher education and communities is a cornerstone of how knowledge will continue to be created and shared.

The abundance and richness of community archiving projects illustrate the extent and variety of knowledge being created and shared outside of institutions. They also illustrate the many ways that relationships between institutions and communities creating new knowledge can be fraught with mistrust, misunderstandings, and, as further described in the Infrastructures section, divergent values. Focus group participants described wrestling with a range of challenges.

Charles Johnson, Associate Professor and Director of Public History, North Carolina Central University:

We're trying to preserve that history [of slave labor camps] from erasure as that community is gentrified but also to make it more widely known to the community at large. ... There's always a conversation around where those oral histories will ultimately live and access to them ... One of the ways that I was able to do that was through empowering the community by allowing them to or helping them to create their own informed consent and deed of gift form such that I actually go to



The Roots of Braggtown community mural project. Braggtown Community Association.

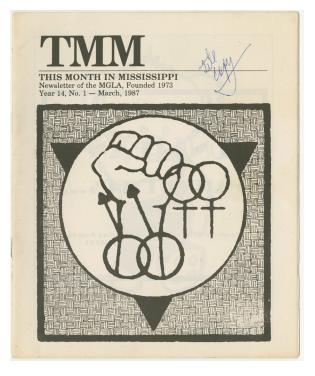
them to get permission to make use of their oral histories.

Joshua Burford, Co-Founder, Invisible Histories:

We've been collecting in Alabama since 2018. With the help of the Mellon Foundation, we expanded into three additional states. We have over 160 collections of history in Alabama, about 50 or so in Mississippi. The oldest thing in our collection is from 1912. The youngest thing in our collection is from about three weeks ago. And we just uncovered some materials from the 1880s with the help of a community-based researcher who is just this cool dude who is out looking for stuff for us all over the place.

Kayla Jackson, Head Archivist, Hallie Q. Brown Community Center, housed inside of a community center in St. Paul, Minnesota, describes the tension of working with universities:

There's a lot of condescension that comes



Cover of "This Month in Mississippi" (1970s-1980s). Invisible Histories Project.

[from] predominantly white or just well-funded institutions; they meet me and they think I'm just a person who's a really big fan of community archives and I just got into it. It's like, no, I'm classically trained in this. You don't need to tell me what provenance is. I know what that is.

Virginia Steel, Norman and Armena Powell University Librarian, UCLA:

I do see that as a big gap in universities and something that I think needs to be talked about and addressed as I think, at least in public universities, we're all talking about engagement with our communities. So, how do we incentivize that, prioritize it and recognize it when something great happens?

Even content already in institutional collections may need to be recontextualized and presented differently. In one of our focus groups, University of Michigan School of Information professor **Ricardo Punzalan** reflected on the work that goes into reparative cataloging:

I've done this consultation with the community and we said, what should we be doing? And then they ask us, "What do you have?" And then we said, well, we haven't really done an extensive inventory of all Philippine items. It's very hard to go in front of the community and ask what do you need from us? If you yourself do not know ... the extent of the materials you have. ... If you have hundreds or thousands of finding aids to fix, it's almost impossible, right? ... To implement some of the reparative description work that we do, you need to know how to work with data, and that's data curation or digital curation. And that's a whole lot of technical skills that you need to do.

Punzalan reminds us that the work of restructuring the humanities so that they will be relevant to the society and students of today and tomorrow begins with a fundamental renegotiation of the relationship between academic institutions and multifaceted communities.



Part of HQB Photograph Collection, which includes photographs of the various staff, clubs, regular program activities, and visitors associated with the Hallie Q. Brown Community Center.

Interactions between institutions and community knowledge owners and creators are complicated at every level, from values to operations. Seemingly small requirements, such as requiring Social Security numbers for low-value payments, can be obstacles.

Justin Schell, Director, Creative Spaces and Learning Technologies, University of Michigan Library:

We've gone back and forth with University finance departments around incentives for community members who participate in University programs and they're like, "oh, we're going to send them gift cards." No one wants a gift card. That's not the thing that they want, but that's the only thing we can give. Can we think a little bit differently about this? ... There are these hard and fast things that seem immovable, till they're not.

Katrina M. Powell, Professor of English, Director of Center for Refugee, Migrant, and Displacement Studies, Virginia Tech:

In the academy, we're generally moving toward open access for a variety of good reasons. However, in our work with one tribal community for a particular funding agency, in writing the proposal, there was a statement that everything would become open access. And the tribal leaders were very concerned about that. They wanted the option to keep their artifacts private if they decided to have an intranet experience for tribal members. And so in the end ... we didn't submit the grant because our partners were uncomfortable with the requirement for open access and the agency was not willing to change the requirement.

Francena Turner, CLIR Fellow/Postdoctoral Associate for Data Curation in African American History and Culture, University of Maryland at College Park:

Cities might have a fraught relationship with the university, like the Lakeland community, which is right up on the institution, where there's an oral history project and some good work coming from that ... And there's a lot of work to be done to build; it's not a restoration process. There was not a good relationship in the beginning. ... But when it comes to the project that I work on, I'm the constant because I'm a little bit of a one man show with the physical work of getting the interviews done.

Relationships between institutions and the communities in which they are situated range widely. Some, like community colleges or institutions like Rutgers-Newark, strive to be an anchor institution within their community; they understand lessons of integration, two-way streets, and mutual respect. As commissioner Jewon Woo has observed, her community college students are in and of the community; the borders between the institution and the community are porous. But in larger or private institutions, this level of integration and interaction is not typically the case. We are not able to understand how 21st-century humanities work is happening in higher education without an overall understanding of the sector. How do the humanities-and the digital humanities—fit into different types of US colleges and universities? How is work that focuses on excluded communities or issues of social justice accomplished in different environments? Since almost all of the funding for this work originates in college and university budgets, familiarity with the complex tapestry of US institutions of higher learning is core to understanding how to enable digital scholarship in racial and social iustice to thrive.

The Challenge of Institutional Change

Institutionalization is the product of the political efforts of actors to accomplish their ends ... the success of an institutionalization project and the form that the resulting institution takes depends on the relative power of the actors who support, oppose, or otherwise strive to influence it.

Paul DiMaggio [12]

ociologists Roger Friedland and Robert R. Alford define institutions "as both supra-organizational patterns of activity through which humans conduct their material life in time and space, and symbolic systems through which they categorize that activity and infuse it with meaning." [13] The place of digital scholarship associated with racial and social justice can be contextualized within an understanding of the material and symbolic developments of US colleges and universities.

Over the past 50 years, in response to changes in our society and in the interests of the student body, colleges and universities have begun to pay some heed to social movements that have pressed for civil rights and opportunities for those who have long been excluded from the social, economic, and academic privileges that US colleges and universities were founded to bestow upon the white privileged class. With these modest gains, scholars have begun to chronicle the extent to which the history of US higher education has included actions of systematic extraction. After being appointed as the first Black president of an Ivy League university, Ruth Simmons asked the university to turn its tools of analysis on itself; she "charged a Committee on Slavery and Justice with the task of shedding light on the history of Brown's ties to the transatlantic slave trade and an overview of reparations programs throughout history. Second, she called on the group to organize a series of academic events and activities that might help the University, and the United States at large, think deeply, seriously and rigorously about reckoning with its history of racial slavery." [14] Since the 2006 report of Brown's Committee on Slavery and Justice, some colleges and universities have begun to recognize that their involvement and reliance on exclusion and extraction

as not an incidental but a central reason for their now well-established place in US and world culture. [15] Some of these institutions, including Brown, have laid out steps toward both recognition and repair of these histories.

While participating in a seminar led by Shelly Lowe, then executive director of the Native American Program at Harvard, scholar/journalists Tristan Ahtone and Robert Lee created <u>Land Grab Universities</u>, a dynamic website/publication of the nonprofit *High Country News*. In their work, they describe how the Civil Warera investment in public education was not a cost-free federal gift to the states:

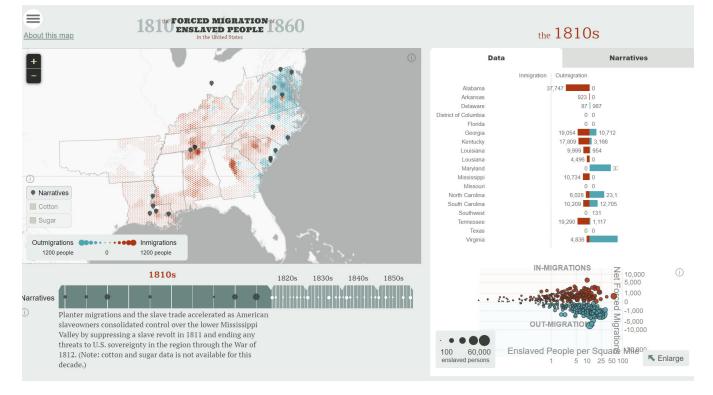
In 1862, President Abraham Lincoln signed the Morrill Act, which distributed public domain lands to raise funds for fledgling colleges across the nation. Now thriving, the institutions seldom ask who paid for their good fortune. Their students sit in halls named after the act's sponsor, Vermont Rep. Justin Morrill, and stroll past panoramic murals that embody creation stories that start with gifts of free land. Behind that myth lies a massive wealth transfer masquerading as a donation. The Morrill Act worked by turning land expropriated from tribal nations into seed money for higher education. In all, the act redistributed nearly 11 million acres—an area larger than Massachusetts and Connecticut combined. [16]

Reports of these kinds use the tools of humanistic scholarship to reveal how deeply rooted in systemic inequity the material well-being of US colleges and universities has always been. Gradual changes in the expansion of subjects of study beginning in the last quarter of the 20th century have also sought to alter the long-standing order of the disciplines of the humanities. But effecting change within and across institutions has been slow and piecemeal. Institutions are not built to change; they are built to resist change. The change-resistant fabric of institutions is woven both vertically and horizontally; just as in a tapestry, the vertical threads of the warp are the strongest; vertical organized institutions are a mechanism of changeresistant continuity. The local, vertically organized institutions employ most of the people involved in the work of higher education-faculty and staffand because of this material power, each college or university has a strong role in deciding what happens and how: campus-based constituencies determine which faculty to hire and reward, how much funding the library will have to support digital projects or build collections in which areas, or what sort of subsidy (and hence what degree of risk tolerance) to provide the university press.

The weft of the tapestry of higher education is drawn by the shared narratives and norms of the communities that reach across the vertical threads of local institutions. While what happens at one campus is undoubtedly shaped by the people, context, culture,

resources, and situations of that campus, at the same time, those individuals involved are all more or less involved in trans-institutional communities through which their norms and expectations are shaped. The horizontal communities that connect faculty, staff, and students across institutions play a significant role in shaping the symbolic values of participants in this work: Library organizations may support the building or expansion of standards and software tools; disciplines shape the peer review and reward standards for faculty. The individual vertical organizations do not set their directions in isolation. They are connected both through the markets in which they compete with each other and in the communities through which they share norms, ideas, and values. Substantive change necessarily must infiltrate both the warp and the weft.

A vertical institution is wound tightly to maintain its structure. Changes that seek to adapt the material and symbolic threads run the risk of being entirely excluded or being absorbed invisibly into the existing structure. The structures of the humanities were established in the very early 20th century and have managed to resist—with minor adjustments—changes to their fiber.



Forced Migration of Enslaved People in the United States, 1810-1860. American Panorama. An Atlas of United States History: The University of Richmond

Practitioners of digital methods have been insurgents against the established methods of 20th-century humanistic scholarship; scholars investigating topics of racial and social justice seek some share of the power and support that has mostly gone to white Eurocentric humanistic studies. Together, those who use these methods in these fields encounter the barriers of embedded agency, in disciplines, in departments, and in the reward and support structures in and across institutions.

Throughout its focus groups and interviews, the Commission heard of the many ways individuals creating or supporting digital work in racial and social justice became entangled in the powerful warp of their institutions and the difficulties they faced in seeking to change ingrained criteria for rewards.

Richard Cox, Project Director, Digital Library on American Slavery, University of North Carolina-Greensboro:

I can show website hits that are amazing and show how I'm reaching so many more people and this work is impacting lives, et cetera. But, you know, am I getting those citations?

Christopher Warren, Associate Head and Associate Professor of English and History (by courtesy), Carnegie Mellon University:

I was thinking one of the challenges that my colleagues and I have faced is around collaboration. Because so many digital projects involve multiple people, and so much of the model of evaluation in the humanities presumes a single author. It's tricky with digital scholarship to ask people to kind of untangle their very rich and productive collaborations.

Eileen A. Fradenburg Joy, Director, Punctum Books:

There's a kind of a loop ... between the ... standards a publisher wants to maintain editorially, content-wise and otherwise, and the kind of experimentation it might like to engage in along those lines, and what a tenure and promotion committee would normally expect. And some would say for good reasons, because you're fostering the work of early career researchers and



Latino Farmworker Movement. US Latino Digital Humanities Center.

they need job security. [But] you're also trying to publish work that's transformative, field-defining, field-changing, et cetera. But if we stay within that loop, then it's very difficult for something else, other than the conventional monograph, to emerge.

Jason Fikes, Director, Abilene Christian University Press:

There are fewer and fewer students for all of our schools to have. Universities must learn to market themselves more broadly. If faculty continue to hang on to ... the tenure review process when the impending student cliff is coming our way, the whole tenure process may explode or implode from underneath. Schools and scholars are going to have to start reaching new readers and their writing will need to reach well beyond the scholarly guild. Academic community members want many things from the humanities. Students may want to figure out who they are and where they come from by studying literature and history; faculty who have advanced through a system that rewards specialized solitary research want to create new knowledge in the manner that works for them; administrators may want to differentiate themselves by attracting grant money to justify the humanities in the same scorecard that they justify the sciences. In a system without a strong sense of unified goals, evolution of what counts can be particularly difficult to change: As sociologists John Meyer and Brian Rowan note, "The more ambiguous the goals of an organization, the greater the extent to which the organization will model itself after organizations that it perceives as successful." [17]

Unlike a commercial market where varying from the established success stories offers a new firm a potentially rewarding path forward, varying from the established norms in a "market" with ambiguous goals offers only risk. Horizontal institutionalization can reinforce and tighten the sector's change-resistant fabric. At the same time, inter-institutional or transinstitutional infrastructure can also play an adaptive role. A range of local institutional forces and collective sectorwide pressures creates a strong weave within institutions of higher education that can embrace or resist changes that would adapt to the innovative modes of digital scholars and the outsider content studied by scholars of racial and social justice.

Innovators in the humanities have had home runs. Take, for example, the Colored Conventions Project, a scholarly and community research project dedicated to bringing the history of nineteenth-century Black organizing to digital life, co-founded by P. Gabrielle Foreman and her graduate students, including its current co-director, Jim Casey. In recognition of her leadership, Foreman was named a MacArthur Fellow. She has been recognized and admired throughout higher education. Still, the entrepreneurs who work on the more difficult end of the paradox of embedded agency take significant risks on themselves. As a MacArthur Fellow and first chair of the new department of African and African Diaspora Studies at Columbia University, Kellie Jones remarks, "Do that [digital work, publicly engaged work, ambitiously interdisciplinary work] later-do what you need to do to get tenure first. Play by the rules, and then you can make your own

rules." When her students tell her that they want to follow her path, she warns them to be careful. "I have to tell them to know that they're not doing what they need to do to make it in the academy." The Commission believes it is time to change what is valued in the academy.

Meredith Evans:

This group [this Commission] should be pushing people to come into the now, because that's where their student body is. And here's where you can get those skill sets. And then that shifts and breaks the system. It's ultimately going to push the tenure process and all the other things that academics ultimately have to think about after they do their great work and then get devalued by the system. Whatever you want to call it, diversity, inclusion, equity, accessibility, belonging, at the end of the day our world is full of a variety of people, regardless of what the leadership looks like. Ideally, there's all walks of life in this.

As the Commission explored the many aspects of explicit and implicit norms that impact the field, a pattern emerged of support infrastructures essential to the health and sustainability of innovative work in the humanities. In these support infrastructures, both hard and soft, are the channels through which new and equitable solutions can bring about essential change, within and across institutions.

Infrastructures and Ecosystems

he production of and use of humanistic knowledge relies on a well-established ecosystem of interconnecting and interdependent support infrastructures that enable scholarship to thrive and its results to be easily shared. This ecosystem ranges from research support services at the institutional level, which varies widely among institutions, to the overall scholarly communication infrastructure of libraries and publishers. Digital technologies have stimulated welcome development in many aspects of these ecosystems, from new computational research methodologies to the affordances of digital publishing and to the power of online library access and databases. But below this surface, the environments and support systems that could and should enable essential new digital work in racial and social justice to succeed are not in place. This is not a question of lagging technology adaptation, although that too is a problem, but of the need for systemic and profound changes in shared values and priorities across multiple entwined infrastructures.

As the Commission probed needs and issues, it became apparent that layers of supporting infrastructure that scholars have taken for granted for more than a century often did not work for a new generation of recovery scholarship. Successful scholars in the field have had to work against the tide, innovating and inventing to make the work possible for themselves and others. As **Maryemma Graham**, who created the groundbreaking History of Black Writing, expressed it, "You have to create the infrastructure since the one that might exist may or may not be sufficiently inclusive. So, you literally are reinventing it, transforming it, adapting it, sometimes under fairly strenuous circumstances ... [and] people don't understand why you're doing it."

The Commission sees infrastructures as things people rely on, "inbound dependencies," as Kenton Rambsy described, that require buy-in and shared expectations. As **Marisa Parham** put it in her 2016 interview for *The Digital in the Humanities*, "At the end of the day all of this comes down to infrastructure: how do you produce sustaining structures in which inquiry and creativity flourish? This is about labor, responsibility, and intellectual property and, for now, grants are usually what make that space, but they're standing in for various kinds of infrastructure." [18] Our conversations and focus groups revealed infrastructure dependencies in many forms and at many levels. Key areas include: (1) Shared Values, Relationships, and Policies; (2) Human Resources, Pipelines, and Labor; (3) Creating Networks and Collaborations; (4) Platforms and Technologies; (5) Scholarly Communication and Preserving the Scholarly Record; (6) Sustaining and Disseminating Community-Engaged Work; (7) Using New Resources in Teaching; and (8) Financial Support.

SHARED VALUES, RELATIONSHIPS, AND POLICIES

Intrinsic in the deployment of how and where to invest resources in infrastructure, whether roads, computer networks, or educational systems, are the values of culture and society. Different societies make different resource allocations for infrastructure; consider, for example, the high value given to an efficient rail system in Japan. In considering the physical and social infrastructures that enable digital scholarly projects, at core are the cultural and intellectual ideas and their expression at the heart of humanistic work. For centuries, the humanities in the US limited their scope and perspective by their focus on dominant subjects of investigation, primarily the history and cultural output of the western European tradition, while marginalizing nonwhite, nonmale scholars and taking a limited view of European and American imperialism. In the same way that societal values have shaped the building of rail lines in different ways, those values have shaped the norms, mores, and explicit rules about collecting and preserving the evidence that supported scholarly investigation. Libraries and museums as we know them were the outgrowth of imperial and colonial collections dating back to the 16th century. What material was saved and preserved were decisions made in the context of the political institutions and social norms of society. This is exemplified by the presence of Indigenous objects in European cabinets of curiosity and the presence of looted or stolen cultural property in colonial collections worldwide, but also by the traditional collection scope of European and American research libraries.

An inclusive understanding of humanities scholarship requires an entirely new mode of engagement,

Beginnings

The Pilbara Aboriginal strike had its beginnings in discussions between a group of men working together building fences and sinking bores on Bonney Downs station Comment and 1945. Aboriginal men told a white contractor, Don McLeod, of their dissatisfaction with their lives as low or unpaid workers on the pastoral stations in the area. They spoke of their sense of powerlessness in the face of the pastoralists whose power was bolstered by the police. Since their labour was essential to this economically important industry, McLeod suggested a strike could be effective. But he insisted that the *marrngu* would need to be well organised.



According to Snowy Jittermarra (Maruntu), marmgu had been looking for a long time for a way to acquire greater control over their own lives. Discussions between a Nyiyaparli man called Kitchener and McLeod, who had already come to the attention of authorities for political activities on behalf of Aboriginal people, offered a way forward.

Ideas discussed included a scheme to obtain land of their own and set up economic enterprises so they would no longer be dependent on station employment. In 1945 *marrngu* from across the region held meetings to discuss these ideas when they converged on **Port Hedland** I^C for the annual horse races. Constable Les Fletcher of the Port Hedland police was invited to attend. This is his report of the meeting.

Explore sources in archive

The Aboriginal organisers travelled around the area spreading the word about the strike. The Department of Native Affairs was troubled by this and tried to counter it. Nyamal man, Clancy McKenna, was one of the principal organisers. Dooley Binbin, a Nyangumarta man, took up an organising role late in 1945.

Pilbara Aboriginal Strike Timeline.

especially with the communities that own and create stories previously excluded by societies in power.

Tao-Tao Chang, Associate Director for Infrastructure and Major Programmes, UK Arts and Humanities Research Council, considered the need for a new, shared perspective:

I think part of this is trying to shift the "locus" of where the "voice of authority sits." Often, in the case of a museum or any scholarly institution, the voice of knowledge is and resides with the academic or the curator ... Something AHRC is beginning to interrogate is the idea that "knowledge creation" takes many forms and can be drawn from many sources: there is the local knowledge that is inherent within communities; knowledge that is presented in a non-textual format such as a film, performance or creative output. As a funder, how do you 'recognize' these different forms of knowledge creation? How do you reach out to and engage communities who may not even see themselves as repositories or producers of knowledge? How do you codify their methodologies and taxonomies, and how can they be co-opted into the "canon" of research practice? It's a big cultural shift.

As Roopika Risam framed the challenge:

What would it mean to be able to articulate a consensus of what responsibility means in relation to cultural heritage ... ? How do we try and build a common understanding and consensus across all these different kinds of institutions that work collaboratively on cultural heritage ... [about] everything from start to finish, from accession to sustainability?"

Kim Christen has emphasized to the Commission the centrality of the infrastructure of relationships and the need to embed this in enduring institutional policy. She writes in *Archivaria*:

The foundation for archival repair and restructure is relationship infrastructure—practices embedded in

policies that enact, enliven, and engender respect and reciprocity through sovereignty. Relationship infrastructures ... provide modes of governance, operational policies, systematic workflows, and systems of engagement that are grounded in longterm commitments to Indigenous sovereignty and self-determination and that cannot be diluted by successive administrations in any given institution. [19]

Focus group participants described the significant effort required to create relationship infrastructure—an effort that, too often, current values, expectations for results, and reward systems are not set up to recognize.

Josh Honn, English and Digital Humanities Librarian, Northwestern University:

One of the things we learned from our grant project with the Native American Educational Services College, that was funded by Mellon, was building substantial time into the project for relationship building. I don't think we did anything that the academy or the library would see as "work" until six months into the project. I think that's a really, really important thing that funders are starting to understand... That's the beginning piece. Building in that relationship-building time that can look like anything from having dinner with folks, and paying for that dinner, and getting to know each other.

Ricardo L. Punzalan, Associate Professor, University of Michigan School of Information:

One thing about relational work in institutions is that it takes a lot of time, and it doesn't always end up in a publication. And if your infrastructure of promotion and prestige is that of the number of articles you publish and the number of books you write, good luck. ... We need to learn how to celebrate those kinds of small, but nevertheless impactful work. One good example in my own project, whenever we have anything that will involve inviting the community, we have to provide food. And when I say food, it's food of my community. Filipino food. There are no Filipino restaurants in Ann Arbor ... I call aunties and uncles to cook, and then they cook amazing food, but they can't provide a receipt. So what happens? I pay for it, and I struggle to be reimbursed. There's a lot of things that are required to do this kind of relational work that our infrastructures are not really supporting, just not there.

Continuing commitment to values and relationships is essential to sustaining the work and its products. As **Meredith Evans** described, in considering the roles of libraries, archives, and their parent institutions: "That has to become operational within your department, within your school, within your institution, because that is what the library is going to use to build upon moving forward ... Your help in building and maintaining those relationships even after you've left is really important for the future of the material and the history that you're trying to maintain." Focus group participants spoke often of this challenge.

Eric Hung, Executive Director, Music of Asian America Research Center:

I think the partnerships with universities are often problematic because ultimately it is with one person, and if that person leaves, everything disappears. I have been in the past that person that left and people felt very disenchanted with that. I've also experienced [this] from the other side.

Sharon Kowalsky, Associate Professor, Director of Gender Studies and Head of Department of History, Texas A&M University-Commerce:

I'm thinking about my institution, which has in its strategic plan increasing rural urban interactions. ... We have all sorts of projects that we've done in our department, oral histories of veterans from the area, oral histories of various communities, and they get done and they get funded, and then they get kind of lost. We think of institutions, but the priorities of the institutions are so dependent on individuals that it's hard to create any kind of longterm institutional priorities or commitments.

Jaquelina Alvarez, Co-Director, Oral History Lab (OHL), University of Puerto Rico at Mayagüez:

It can be a constant process of educating and reeducating administrators about what we're doing, how we're doing it, and why. Whenever there's a new dean or chancellor, we have to start from



Greater Boston Chinese Cultural Association (GBCCA) Chinese Music Ensembles take a bow after a concert at the New England Conservatory. Music of Asian America Research Center.

scratch and explain everything again. It takes a lot of energy and could be more organic.

A very significant challenge for the relationship infrastructure is that community access, ownership, and control of cultural heritage resources is at the heart of much of this work. Relationships between communities, institutions, and individual scholars reflect the challenge of learning how to share values and create policies that reflect a mutual understanding, new kinds of relationships, and distributed agency. As **Maria Cotera** writes of the Chicana por mi Raza project:

Our practices of leaving physical archives in place, of showing women how to access their materials in our collection, of encouraging them to use the collection to produce knowledge on their own, and working with them on writing projects and public exhibitions are all examples of how the CPMR Digital Memory project re-visions the archive as an active site of exchange where participants work together to co-produce knowledge. In other words, the women we interview are more than "resources" to be mined for information about the past; they are collaborators in intimate acts of memorykeeping. [20]

We learned from our conversations how passionate communities are about ownership of their heritage;

approaches to sustaining and preserving that heritage become complex questions about relationships and trust.

Stacie Williams discussing the Honey Pot project created by a group of Black archivists in Chicago [Blackivist interview]:

The ... thing we thought was really great ... was that they said everyone could keep their original files ... So saying it's not just about a repository coming in and taking the stuff ... but we're really here to help make this available in an additional way. This material is still your material ... This is your story. This is your community's story. [21]

Kayla Jackson, Head Archivist, Hallie Q. Brown Community Center:

A good positive note is I just got 1,200 slides repatriated from the University of Minnesota [to the Halle Q. Brown Community Center Archives], which is really great because decolonization is not a metaphor ... It's 1,200 points of information relating to a historically black community that I get to describe and put back into the community it came from.



We Will Chicago meeting. Chicago's Honey Pot Performance.

Kate Wittenberg, Managing Director, Portico:

One person spent 25 years collecting content about Latinos in Rhode Island and putting it in boxes in her living room. She was able to find funding to digitize the content and put it up on a website herself. She told us she could no longer afford the monthly subscription fee to keep Omeka going and didn't know where to put it next. From a preservation perspective that's ... one mistake away from being destroyed completely. ... It's very hard to reach these places. It's hard to identify who is in charge. And then once you do, the challenge is trying to build the trust so that you're not seen as someone who wants to take away their content and put it somewhere that you own, but rather to help make sure that it doesn't disappear.

The organizations that function as intermediaries between those who create and own material or stories and those who want to study that material function as enabling infrastructure. As such, they live on the borders, and they need to speak both languages. Archivists working with communities are cognizant of how long-standing asymmetric power dynamics play a central role as living infrastructure. They understand and convey the recognition that community ownership is not just about possession, but also about privacy and control, including the power to erase.

K.J. Rawson:

As someone who's trying to provide this cultural resource, it's a very complicated position to be in because it involves a lot of power and ethics and there aren't a lot of guides. ... Where you [may] have two different stakeholders with two different needs. And the researchers say, "I need this stuff." And the content provider is saying, "I can no longer provide access to this stuff... it is harming me to continue doing that." And I'm in the middle trying to mediate, but it's two different sets of values.

These reconceptualized relationships are not only attitudinal, but also deeply operational, especially in relation to the ownership of and access to source collections. In an environment where many in the scholarly communication community are pressing for open access to research resources, the essential values of community-created archives add complexities that need to be understood and accommodated. Today, many communities of practice are developing new ethical guidelines, new modes of collaboration, and new principles for care and ownership of archival and other resources. Important examples include the CARE principles adopted by the Global Indigenous Data Alliance ("collective benefit, authority to control, responsibility, and ethics in working with research data"), the Colored Conventions Project Principles,

and the Latinx Digital Humanities Manifesto. But they too often find themselves at odds with embedded institutional policies and practices. Few institutions have yet adopted post-custodial practices of supporting community collections in situ rather than acquiring them. And even where there are sharing arrangements for digitized and digital collections, institutional policies and practices regarding access to databases by anyone other than an officially designated affiliate of the institution create both intended and unintended barriers. While the CARE principles are well known to many archivists and researchers, their actual widespread application to cultural content-including not only Indigenous resources—requires a systemic and profound recasting of the infrastructures for collections and access, and the nature of relationships between communities and institutions.

Kellee E. Warren, Assistant Professor and Special Collections Librarian, University of Illinois Chicago:

Let's be honest. ... leadership wants that bang for their buck. They want the projects that bring the institution attention, the bright and shiny things. Actual care and ethics of care in what we're doing, that might be on the list, but it's not at the top of the list.

Bergis Jules:

I think it just comes from caring. What we don't see enough is a deep sense of caring for the entire thing ... [In large universities] there is an incentive to bring stuff to you, right? To where you are. And it disincentivizes caring for the whole thing.

How do you [the university] demonstrate that you care about the whole ecosystem? ... Well, one thing we could do ... instead of you hiring an archivist in your library to digitize other people's collections to bring into your library, why don't you hire an archivist and pay that person a fair salary, benefits, everything, but they actually work for the one or two community-based archives that are not at the university?

In the early years of digitizing primary source material, long-standing power dynamics generated the idea that the provision of digital surrogates to the community that created the objects or materials would heal the wounds of extraction. 21st-century humanities that recognize the social dynamics underlying the relationship between communities and archives might reverse that stewardship model, with the objects remaining in their communities rather than serving as institutional assets. There are emerging new models, sometimes stemming from unusual circumstances or disasters faced by a community or goals that can bring organizations together.

Ricia Anne Chansky, Professor of Literature and Director of the Oral History Lab (OHL), University of Puerto Rico at Mayagüez:

We've had several thousand earthquakes in the southeastern part of Puerto Rico since 2020. The global pandemic of Covid, most recently Hurricane Fiona making landfall approximately five years after Hurricane Maria.... We're looking at the collective narratives and testimonials of what people have survived, how people have survived, and the creative ways of implementing and strategizing ways to take care of themselves in their home communities is what our project is interested in. This particular stage of the project that we will be working on in the upcoming year is working to rethink archives that emerge from the community rather than from the institution. ... We're trying to re-situate ourselves as a support network that has skills, that has tools that we can leverage for community-based projects.... And then rethinking what makes the most sense for the communities we work with to archive their own work with redundancy at the university so that we're not reenacting extractive models that take things from the communities that we want to work with.

In classrooms, faculty who may have been trained to focus on research collide with students who increasingly are concerned with the world from which they come and to which they will return. Students are a powerful element in the relationship infrastructure that ties academic institutions to communities.

Josh Honn, English and Digital Humanities Librarian, Northwestern University:

I think these projects need to also emanate [from] or take into consideration student activism on

campus. For instance, as far as it goes with Native and Indigenous projects here at Northwestern, our institution wouldn't have any acknowledgement of its history without student activism. Students often have much better ties to communities around our areas, and are at the forefront of the kinds of things we should be thinking of.

Erika Witt, Coordinator of Public Service, Southern University of New Orleans:

For Southern University of New Orleans, with Katrina and having to start over, our biggest why for doing the things that we do is to make sure that we get our students and our community involved in their history. So our school is a bit unique in the sense that we've always been a commuter college, so the majority of our students are non-traditional. They're older students, they are maybe students that had felonies. There are students with children [who] work full-time ... For example, for Black History Month here, I wanted to make sure that we focused on SUNO black history so students can see themselves in it. ... We still need our history to be able to know where we're going.

HUMAN RESOURCES, PIPELINES, AND LABOR

Infrastructure is not just code ... or servers; it's people and labor as infrastructure. If you think about it as who depends on this work, who depends on this person ... there's a sense in which the ... years I've been at Sloan the common thread through virtually all of what we have funded has been a certain kind of trying to ... raise up, and in a certain sense valorize, different kinds of labor.

-Josh Greenberg

Fostering and sustaining a diverse, well-prepared, engaged, and fairly paid workforce is a requirement for all fields, in academe and throughout society. In higher education, there has been a widespread effort (now facing new obstacles in many states) to adapt infrastructures for recruiting and other policies to better enrich the diversity of the workforce and the student body that will be its future pipeline. The new generation of humanistic work faces challenges that go beyond those already well known to readers of the *Chronicle of Higher Education* because its workforce and participants are spread across so many kinds of institutions and so many kinds of communities outside of the academy. As Rodrigues and Schnepper write,

The human infrastructure around digital humanities projects is not just a set of complementary skills but is often a sedimented history of higher education's hierarchies, reward structures, and expectations. ... Reimagining the power structures inherent in our institutions will not be a matter of personal education or enlightenment: it will require rethinking how our institutions recognize labor, design incentives and rewards for the labor and conceptualize all forms of labor in service to undergraduate learning. [22]

The precarity of labor in the academy has been much more pronounced for faculty of color, and inequities are even greater across those who labor in and for the fields of racial and social justice, as this work engages many kinds of employees and volunteers: in communities, as interns, as students at all levels, as any worker who is not in a faculty line; this work relies on a collective of different kinds of participants. Compensation and career paths for these individuals are often insufficient or nonexistent. A major concern raised by the Commission and frequently echoed in focus group conversations was the under compensation and the overall underappreciation of students and community workers struggling to make a living, and the bureaucratic barriers to institutions compensating community project participants.

As **Marisa Parham** described her experience with so many community projects:

"All this money to build this, do that, but if we can't just feed people who have to come after work, we can't do this ... It's actually huge that you can't buy food. It's actually huge that you can't give people cash stipends."

Commissioners also forcefully highlighted the importance of giving credit and value to all the different workers engaged in these projects, especially as the nature of this work engages a diverse team that includes community members, IT specialists, librarians, and others beyond faculty scholars. As **Maryemma Graham** emphasized, "We need to give our students and staff more say in projects and create career paths to move them up to administrative and lead work. There is too much difference in career perspective and career path between the students and the trained academics."

Jason Rhody, Director of Academic Program Services and Professional Development, Modern Language Association:

We collaborate in the humanities with archivists, with librarians, with students, with partners and spouses. The histories are rich with collaboration, even as it is often hidden and unrecognized. ... I'm not saying that the sciences and social sciences are perfect, but clearly there are mechanisms for peer review and scholarly publishing that account for everything from running a lab to publishing in collaborative ways that don't detract from people's ability to get tenure. I think that we are in our own way, oftentimes leaning so heavily on this notion of individual brilliance that never really existed.

Key elements in the infrastructure of human resources are the succession pipelines that attract and retain individuals from underrepresented groups into research and teaching and also into related fields of cultural heritage curation and publishing. Focus groups spoke of pressing needs for diverse archivists and librarians, and the publishing community has identified diversity as a significant concern. [23] While we heard about many excellent initiatives underway in professional societies like ALA and SAA, in schools of information, and in individual cultural institutions, often initiated with grants from the IMLS Laura Bush Library Education Program, the need is great, and a gap remains. And beyond training, the rewards in the workplace will be a critical factor in attracting diverse workers.

Ida Jones, Associate Director of Special Collections and University Archivist, Morgan State University:

The idea is succession planning. So ideally I would like to see my replacement look like me. I was mentored by people that looked like me, and they had been stewarding the materials [in my collection for] 100 plus years. ... We're not seeing African Americans or the larger ethnic or racially diverse community coming into this field [of information science]. ... I would say the greatest challenge in this subfield of the HBCU [historically Black colleges and universities] world is the apprenticeship to make it a viable and attractive option that graduate school and employment could be rewarding. But it is also frustrat[ing] because it is not the most fiscally rewarding and, like you've heard from my colleagues in various institutions ... challenged with being a Swiss army knife in the midst of the forest called the university.

There are challenges in building the cohort of scholars in the field who can understand and evaluate the work. As Kenton Rambsy put it, "When we talk about infrastructure, we mean people who can relate to one another, who can evaluate one another, who can understand and translate certain ideas. ... I also think that means particularly in digital. How are we training diverse digital voices?"

We learned of a variety of successful programs to train diverse scholars in the techniques of digital methodologies and the ethics of community work. At the same time, we heard time and again of the need for more—more candidates of color, more funding for those whose institutions cannot support their training (typically any faculty member outside of an R1 institution), more training for community archivists. The various academic and academic-adjacent labor pools for conducting digital work and the community engagement that so often serves as the basis for opening up new fields of study requires a human resource infrastructure that is not keeping pace.

There are, as there have long been, vast differences in resources available for professional development and research support for scholars across different institutions. Much generative work in racial and social justice is emerging from diverse scholars in HBCUs and other underresourced colleges and universities. A summer program at Brown has highlighted the kinds of new investments that could make a difference.

Allison Levy, Director, Brown University Digital Publications:

[At] an NEH institute that Brown ran last summer we had 15 participants from under-resourced institutions where they don't have a center for digital scholarship, they don't have a Mellon grant, et cetera. And over half of the participants of the 15 teach at HBCUs, and they have excellent projects and they are outstanding scholars. But at the end



A New Vision for Islamic Pasts and Futures website (islamic-pasts-futures.org). Brown University Digital Publications.

of this three week institute, they went back to very heavy teaching loads [and] administrative duties. ... The big question for us is how do we get those authors more support?

Digital methods are accelerating efforts to catch up neglected fields to those with the decades of support afforded to long-canonical subjects. It is essential to recognize that digital work requires work—and new categories of labor. Community colleges can bring a diverse new workforce into the digital realm and create new career paths for their students, especially through partnerships with other institutions. As **Jewon Woo**, describes:

In a community college setting, to enrich the student body that will build the future of humanistic work, we need to offer quality workstudy opportunities. However, community-college students already have full-time or multiple parttime jobs while taking classes. What they need is not simply working opportunities but assurance of academic rewards through those opportunities. Student internship programs that become part of a course requirement are practical and beneficial for students and also for faculty. Most community colleges have a work-study program, experiential learning, or service learning course that requires students to have off-campus work experience as part of course assignments. These programs could create a pipeline for underrepresented students to find career potentials in the DH field and with acquired DH skillsets. In considering the lack of infrastructure for DH in community colleges, we need a teaching partnership between a community college and other institutions, such as wellestablished DH projects and DH centers at a fouryear institution. Through this kind of partnership, students would have both work experience and course credits, and faculty at a community college can fulfill their required teaching loads without adding additional work beyond the classroom.

The labor infrastructure of community, student, and contingent workers relies on devising ways for them to subsist; the labor infrastructure of digital staff requires a reconciliation of what it takes to do digital work with the expectations and priorities of the institution. The need for a sustained human resource investment is a thread that runs through the many kinds of infrastructures. For the most part, this work is viewed both by funders and by the institutions in which they reside as onetime, siloed, temporal activities, with no underlying organizational or staffing infrastructure. Even in larger, better-resourced institutions, the development of staffing to partner with and support scholars who work in digital humanities has lagged far behind the actual growth in the work and its challenges for work in racial and social justice. Even comparatively well-resourced institutions struggle to find sustainable staffing patterns to support the work.

Anne Cong-Huyen, Director of Digital Scholarship, University of Michigan:

We only have so much staff capacity so we can promise [only] so much support, and we try to get folks to talk to us in advance before they submit their grant applications. Because it's really difficult to shoehorn that support in after the fact. ... This time around we're asking [the institution] for three years of funding to pilot an expanded version of our current support service, and we're very much trying to push the institution to invest in hard funded positions and not just hire temp folks for a couple of years. We're also trying to find ways to ask for funding to support postdocs and graduate students. This could also help diversify the skills and experiences of humanities students.

Linda García Merchant, Public Humanities Data Librarian, University of Houston:

My role is to train them [faculty] how to do project management, how to do plan management, [and how to] utilize resources with their own institutions. There's a lot of ground that we need to cover in terms of funding support, in terms of awareness around cultivating the larger issue of racial and social justice. And yes, I think it's great that we're all making this conscious effort to do these things at our institutions, but the labor is not there. We really have to begin to look at the labor and the representations of labor that is not available to these projects.

Commission investigations also highlighted disjunctions in the labor infrastructure supporting the advancement of faculty. Promotion and tenure guidelines for digital scholarship emerged in the early 2000s as a creative force for changing the nature of humanities scholarship. In 2012, the Modern Language Association (MLA) released its <u>Guidelines</u> for Evaluating Work in Digital Humanities and Digital

Media, "designed to help departments and faculty members implement effective evaluation procedures for hiring, reappointment, tenure, and promotion." MLA is updating these guidelines in 2024, and in addition published its Guidelines for Evaluating Publicly Engaged Humanities Scholarship in Language and Literature Programs in 2022. The American Historical Association released similar <u>guidelines</u> in 2015 as well as Guidelines for Broadening the Definition of Historical Scholarship in 2023; the American Academy of Religion released Guidelines for Evaluating Digital Scholarship in 2018. But the operational assessment and reward structures have lagged. "Faculty members in humanities disciplines have been pioneers in many forms of digital scholarship and teaching," wrote Scott Jaschik in Inside Higher Ed in 2009, "but many have complained for years that some of their departments don't have a clue how to evaluate such work, and that some senior scholars are downright hostile to it." It was clear from the many conversations held by the Commission that the situation has not greatly changed; the existence of professional society-sanctioned guidelines have not yet overwritten pre-digital standards and reward structures. These organizations can and will play a role in changing the system from within, but the pace needs to accelerate in time for a new generation of scholars to thrive.

Scholars seeking to be rewarded for their new work in racial and social justice face another layer of challenge beyond the lagging ability to evaluate digital research. Revisiting the intellectual frameworks of fields and challenging the foundational schema of disciplines represents challenging work. PhD students of today are facing a very different set of opportunities as reductions in lines limit the opportunity for a generation of emerging scholars to enter and re-define the disciplines. There is also a disproportionate number of younger faculty engaged in recovery scholarship and newer methodologies. Commissioners and focus group members voiced concern about the unrecognized workloads these projects place on junior academics and the need to redesign the tenure path to value this work.

Ricia Anne Chansky, Professor of Literature and Director of the Oral History Lab (OHL), University of Puerto Rico at Mayagüez: Some of the things that I'm hearing from junior faculty members in the digital humanities is that they're now expected to do everything. That if they want to do a DH project, they have to do that in addition to articles, in addition to academic presentations, in addition to printed and bound books.

The nature of collaborative teams to produce the work also challenges the way scholars are evaluated and the way they must be prepared, as they must take on more roles than research and writing. Focus group participants saw this throughout their work.

Christopher Prom, Interim Associate Vice Chancellor for Research and Innovation, University of Illinois at Urbana-Champaign:

I was talking to a faculty member in African American Studies, Dr. Bobby Smith II, who is working on a book project related to an organization called The New Farmers of America, which was a group of black youth males who studied vocational agriculture and farming methods in public high schools between the 1920s and 1960s. While the organization's history runs parallel to the Future Farmers of America organization, its history has been almost completely erased, and he's trying to resurrect it through a book project, but would also like, of course, to have all kinds of digital outputs ... You really do need more than a team, you need almost a small army of people, because there's just so much to be done.

Evaluating digital projects in a manner appropriately equivalent to and equitable with traditional output, such as books and articles, has been a challenge for humanities disciplines for at least two decades. A number of ways forward were suggested in focus groups, from post-hoc review to creating more review publications dedicated to digital work to greater flexibility in departmental tenure guidelines.

Jennifer McNabb, Department Head of History, University of Northern Iowa:

I think a model of post hoc review would be extraordinarily useful. ... I think some potential pathways to *post hoc* review that are pretty robust, that are more than just finding two people who might be experts in this thing and asking them to write a one page report ... If we could have some step-by-step instructions that communicate pretty clearly the rigor of the process, that is something that is going to speak to a number of different constituencies, both internal to a department or college, and external to a campus-wide audience.

Rethinking the evaluation process for scholarly work was a frequent theme in focus groups and other conversations.

Jeffrey Cohen, Dean of Humanities and Foundation Professor of English, Arizona State University:

Doctors review the work of doctors, dancers and choreographers review the work of dancers and choreographers. Those in other fields have long been comfortable gauging the significance of contributions made in practice, interpretation, performance and public impact. The Humanities don't need to reinvent anything, but re-adjust with intentionality and care.

Mary C. Francis, Director, University of Pennsylvania Press:

It's a structure, a set of structures created by humans, and the humans can change it. We won't have people post-publication reviewing successfully if we don't create the space where those folks have the resources of time to say "yes I'm going to respond to that; I'm going to legitimize this in the public sphere in an engaged and positive way."

In essence, we have learned that the innovation that institutions want to foster currently depends on entrepreneurial faculty, staff, and students taking risks upon themselves. Whether it is paying uncles and aunts in a local Filipino community out of one's own pocket or prioritizing urgent project management work to compile an archive of oral histories rather than to write a "safe" (in terms of tenure review) traditional journal article based on existing archives, the risk falls disproportionately upon the individual committed to tell a new kind of story.

CREATING NETWORKS AND COLLABORATIONS

Collaboration and creating large networks of project contributors are hallmarks of new humanistic scholarship, from Maryemma Graham's founding of the History of Black Writing in 1983 to the more than 7,000 people who have contributed to the Colored Conventions Project to the ever-growing number of communities that use Mukurtu and the Shift Collective's convening of diverse community archiving initiatives. Creating networks that enable professional development pipeline programs, create subject-based resource sites, and engage in community archiving initiatives are typical modes of working and are evidence of the high levels of energy and mutual support within the field of recovery scholarship. The field is impressively rich in scholars and other practitioners who have come together in innovative ways to enable new work. For example, the Caribbean Digital Scholarship Collective (CDSC) has, with Mellon Foundation support, devised programs including summer schools, microgrants, conferences, and training to generate expanded cohorts of students and practitioners engaged with Caribbean studies. Archiving the Black Web (ATBW), founded by Makiba Foster and Bergis Jules, was developed to encourage the documentation of Black experience; its recent award from the Mellon Foundation is enabling continuing education and research programs to diversify and increase the number of web archiving practitioners and collections that focus on the Black experience. The mission statement of the Digital Ethnic Futures Consortium (DEFCon), a collaborative initiative founded by five scholars including commissioner Roopika Risam, illustrates the nature of the vision propelling these new collectives. As articulated on its website:

We are committed to sharing resources with and building a community of digital humanities practitioners whose work engages in ethnic studies fields. As faculty who work at institutions focused on undergraduate education, we are invested in supporting the work of graduate students, faculty, and librarians who are integrating digital humanities into their undergraduate teaching in Black, Indigenous, Latinx, and Asian American studies. Equally important is our investment in developing ethical digital humanities initiatives that work with community partners to promote justice and equity in the digital cultural record.

Knowledge Commons (formerly Humanities Commons) illustrates another mode of shared enabling infrastructure; it was developed to facilitate connecting individual scholars across institutions, enabling scholars to form groups and share their ideas and their work. With more than 53,000 users, it is an indicator of scholars' strong desire and ability to network across institutions.

Zoe Wake Hyde, Community Development Manager, Knowledge Commons:

A lot of it is really related to what digital spaces enable in terms of community development and people being able to come together because the ideas are there. To find each other and really leverage those kinds of connections and approach things as a community that isn't limited to one institution, but can be international or can be across a region, whatever it is that makes sense for the project. One example that emerged organically on the platform is the composers of color group. ... It's a really active group who are developing resources to diversify the materials available for teaching composition and bringing the histories

and the presence of composers of color into contemporary education.

Such network creation, in many arenas, has been core to the development of the field and is essential for its sustenance and growth. At the same time, the ability and encouragement to create networks across subject matter expertise has been limited. For example, much could be gained by bringing together scholars, community storytellers, artists, archivists, librarians, and technologists who can provide mutual support, shared expertise, and enriched perspectives. NHPRC conducted an extensive listening tour across many practitioners and many kinds of institutions and concluded, as R. Darrell Meadows described:

R. Darrell Meadows, Acting Deputy Executive Director, NHPRC:

In this broad ecosystem, these are highly complex

networks of folks who are unaware of each other almost completely.... What we came to in thinking about how we would transform our historical and scholarly editing professional development work was really around the idea of co-creation and of asking ourselves, how do we facilitate network connections that are not currently happening, but could prove really beneficial to everyone involved? And so we really jettisoned the old idea that to attend this professional development training you need to be doing very specific, almost prescriptive, ways of working in historical documentary editing. But instead to say we've got a complex set of communities out there who are all engaged in very similar work who don't necessarily know each other, they don't often recognize where aspects of their practice overlap.

In fact, funders are often well positioned to play a role in assisting network creation and are recognizing the value they are bringing:

Terri Taylor, Strategy Director for Innovation and Discovery, Lumina Foundation:

Part of what we're doing is trying to get a lot better in our own approach to networks, because one thing funders have that's often hidden are really rich networks. We can provide huge value in connecting people, and we try, it's just sometimes it's sort of *ad hoc*. ... It also helps us be better at trying to see what's not happening or where the gaps are and where we can fill them.

Scholarly societies have long played an essential role in creating networks within their disciplines and are critically positioned in academic culture in their ability to develop shared values, goals, training, career development, and more. As we see the demonstrated need for more kinds of cross-fertilization in network creation, scholarly societies could take a fresh look at the kinds of convenings, training, and partnership opportunities they provide, focusing not only on enabling "birds-of-a-feather" mutual support but also on learning across areas of expertise and productive collisions across types of institutional environments and engagement with other professions.

Beyond connecting individuals and fostering collaboration, there are few agencies and organizations

that provide continuing assistance to those in smaller institutions (i.e., those in institutions lacking the technical and administrative support available in R1s and better-resourced colleges), and often few opportunities for cross-disciplinary interactions and creative collisions both within and outside of one's institution. In fact, the commission often heard of failed collaborations between larger and smaller institutions because the well-resourced institutions were unable to recognize the realities of and pressures on those who work with heavier course loads or "Swiss Army knife" job responsibilities, without any budget or staffing for assistance, and without administrative support. They also could not adapt to working with smaller institutions in other than a top-down mode. Much of our current infrastructure for collaboration is built upon the research environment of R1s-i.e., partnerships of "equals," albeit frequently undermined by competition between these "equals -while scholarship in racial and social justice occurs in a much more complex and heterogeneous environment. And even when project design is well crafted and successful, there is too often innate mistrust of a large, well-resourced, predominantly white institution.

Lisa Janette, Archivist, University of Minnesota:

For the Black Metropolis Research Consortium, the successes were that its resources were shared equally. It was based out of the University of Chicago and they were the funding holder, and they provided the staff space and the HR resources, but we weren't employees of the University of Chicago. Technically we were employees of the consortium which included community archives, personal collectors who had material, and public libraries and universities and some museums as well. So some of the successes were that we were able to process and create access guides for collections within privately held collections and community-based collections. The downsides are that it was still grant funded, so when the grant ended, the support did too. The consortium still exists and they're doing some really interesting things ... But I think there's a lot of trust that can't be regained. I really believe that there is a downside to having a university partner be the primary partner and the funding holder, because that power remains within a large institution that's

primarily white and has bad histories of breaking that trust. Figuring out a way to separate the model so that the funding can be retained and maintained and the power can be held by the community rather than the institution [is the challenge].

We need to imagine and create new capacities and new kinds of collaboration. As exemplified by the emerging networks enabled with Mellon Foundation support, funders are exploring how to create purposebuilt models for different kinds of institutions:

Maria Sachiko Cecire, Program Officer in Higher Learning, Mellon Foundation:

Many of the grants I've made in this area recently have been multi-institutional or otherwise bring together and lift up existing networks of folks so that they can reach more people. ... For example, we funded a network for digital Caribbean scholarship that's supporting scholars who have been stringing together their own research funds and pockets of resources to do this work for years, and now we're helping them to institutionalize.... A lot of what we're doing with grants like those is connecting and resourcing scholars who have built these shadow networks of people with whom they felt they could work, and trying to help them establish structures and relationships so that after the grant period is over these communities can continue and sustain and grow. Part of that is putting down institutional roots, ideally within the scholars' own home institutions, but also more broadly in the field.

Terri Taylor, Strategy Director for Innovation and Discovery, Lumina Foundation:

I have found sometimes actually the network approach is not what minoritized populations want, e.g., an HBCU doesn't want to be a sub-grantee of an R1 university. They actually want their own grant. Or maybe a racially diverse project team does something and then the next step is actually for us to fund different members of that team on their own work moving forward. ... Something I've really seen is that we need to make sure that our approaches allow for both mature organizations that might be historically white [and] also being able to adjust to how often leaders, scholars of color develop their own thing or their own work. And those two prospects are sometimes different, and also requires us to think about networks differently.

There are emerging examples of R1 institutions working to develop different kinds of relationships with communities or with different kinds of institutional partners. One example is <u>Reckonings: A Local History</u> Platform for the Community-Archivist, which describes itself as an innovative program of "collaboration to empower BIPOC communities and citizens in the preservation, creation, and curation of community histories. This effort sees reckoning with the historical record and making it more accurate as important for civic life. With an emphasis on digital and physical sustainability for Boston and New England, the Reckonings team of scholars will work with partner organizations and students to correct gaps and inequalities in the existing historical record, and assist communities to recover under-represented histories and cultures."

Another recent announcement describes the creation of the <u>HBCU Digital Library Trust</u>, a partnership of the HBCU Library Alliance and Harvard Library described in its announcement "to sustain and deepen capacity for the digitization, discovery, and preservation of African American history collections held by HBCU libraries and archives." The Trust director is a Harvard position based at the Atlanta University Center Woodruff Library—perhaps an emerging model for partnership.

As we try to imagine fresh approaches to collaborative ventures, examples from focus group participants highlight the critical component of recognizing and maximizing mutual benefit.

Ida Jones, Associate Director of Special Collections and University Archivist, Morgan State University:

In Baltimore, Johns Hopkins University was able to acquire a grant from Mellon and sought to partner with Morgan. And of course, like all institutions and various urban centers, there are some historical issues of contest and rivalry. But we were able to bury the hatchet enough to come together for one particular project, which will be to publish a book of sorts, a coffee table book of things we hold, or memories we hold in our hands. Hopkins wants to tell the story of black Baltimore in particular, and the larger black state of Maryland in general, and they need a partner with which to do so. ... I think in terms of going forward, there can be these moments of confluence where we can actually come together for a finite period of time with which to build some trust.

Project successes and challenges illustrate the value and complexity of multitype institutional collaborations. Commissioner Jewon Woo describes the benefit of the Cleveland Humanities Collaborative, which partners Case Western and four local community colleges, as offering a way for community college students to deepen their study of the humanities and take courses that can transfer to a four-year program. "I have connected the Charles Chestnutt Archive to the Collaborative so that students in Cleveland and northeast Ohio learn about Black DH and Black print by joining this archival project," Woo said. "If I taught this only within my institution, I would not have enough students and institutional support. The Collaborative can allow me to have more students, resources, and an independent curriculum."

The concept of independent curriculum has become significant within the boundaries now created on curriculum content by Ohio State Law. In another multi-institutional partnership, Woo was able to partner with the Lorain Historical Society, which could receive funding for a Black history project otherwise prohibited to her public community college.

The Digital Library of the Caribbean (DLoC), a partnership of institutions collaborating to digitize a wide variety of collections, has experienced both the benefits and pitfalls of multitype institutional collaboration. The founding partners created the initial infrastructure, and each brought different capacities and perspectives to the project: the University of Florida (a flagship R1), Florida International University (an Hispanic-serving institution,) and the University of the Virgin Islands (an HBCU). The University of Florida had the ability to create a stable technical infrastructure, while other institutions were well positioned for outreach and training, as well as having the ability to pay foreign participants (often easier for private than public institutions). At the same time, the different institutions had administrative turnover and shifting commitments to the project. While the DLoC continues to be a vital enterprise—largely due to the constancy of the University of Florida infrastructure—the contributions, relationships, and funding arrangements require continual adjustment. Scholars underscored the importance of stable funding for one or more staff positions if the resource is going to continue.

Partnerships across institutions, such as between Johns Hopkins and Morgan State, are possible if they work to heal old wounds. But we need to recognize a fundamental truth as well: Colleges and universities compete. They compete for students, faculty, grants, public support, and even public affection. Collaboration is not generally in their nature or in their reward structures. This centrifugal pull within every interinstitutional partnership needs to be acknowledged and worked through, as building single-institution capacity for every aspect of digital collection building, scholarship, and sustainability is not possible.

PLATFORMS AND TECHNOLOGIES

All endeavors that depend on digital technology (which is to say, almost everything), and particularly efforts that generate any product worth sustaining, raise questions about the nature of their underlying technical infrastructure. Maintaining technology represents an ongoing process of writing, patching, and tuning; maintaining content requires derivation, transformation, and uploading and reloading. Little of the startup costs of a project that lives in technology retreats after the startup; digital efforts within institutions require ongoing staff support. All aspects of technology infrastructure necessitate either a reliance on an externally maintained (and continually updated) platform and network or the same capacity in-house. A given college or university that supports the creation of a project starts down a path that it may or may not understand with regard to the stewardship of the project over time. Sustainability of a project inevitably intertwines financial planning with technology planning.

The relatively long life of the University of Virginia's Valley of the Shadow project, conceived by

Commissioner Ed Ayers, frames the question of how innovative digital work requires an intensity of refreshing greater than the collecting and care of paper sources. After two intensive rebuilds carried out by the University of Virginia Library, the project's front end was beginning in 2021 to seem outpaced by other websites and thus by user expectations. Avers chose to take advantage of commercial software to update learners' interactions with Valley of the Shadow (and other projects) providing a new "skin" for the underlying content and metadata, which are also being preserved by the University of Virginia. "Potential audiences need to be attracted and guided to the resources to find them amid digital profusion. New American History seeks to attain the design and programming standards of commercial products for noncommercial ends." [24] At the same time, Ayers attributes the sustainability of the core content of the Valley of the Shadow to its reliance on the nonproprietary standards and formats used in its content creation. University of Virginia Libraries invested considerable resources to maintain the project over its 25-year life, most of it in personnel. This has been an exceptional investment and not one that serves as an easily replicated model way forward. When should institutions be expected make a commitment to maintain a high-use or otherwise significant project? Can we devise external solutions that provide more realistic infrastructural support for digital collection building and scholarship?

These questions are endemic in technology support. We found a particular set of underlying tensions and contradictions that add further complexity to technology choices and life cycles of digital projects associated with racial and social justice: (1) the desire to ensure that the technologies for this mode of work are readily accessible for use by any scholar or community; (2) the imperative from many scholars that the work not be homogenized or "flattened" by a requirement to use standardized software; (3) the core value that communities be empowered to control their content, including protecting it from surveillance, and to keep it, and be not expected to surrender it for deposit or sometimes even reproduction elsewhere; (4) the importance of ensuring that the work product is accessible to the communities that contribute to it; and (5) the overarching responsibility, and the institutional (and/or community) challenges associated with that

responsibility, of ensuring that the work, or at minimum the primary sources collected by the work, endure for future knowledge.

The phrase "technology infrastructure" is a shorthand for complex, interacting layers of software and hardware for data and metadata creation, content management, interfaces and interactions with content, modes of and platforms for dissemination and access, and repositories for various levels of preservation. For many projects, the core issues revolve around collecting resources in many formats and sharing them, either openly or selectively. For others, the development of code for analyzing, interrogating, and aggregating data is at the heart of the intellectual effort. All technology choices have implications for sustainability of the work activity, for continuing access to the products of that work, and, often, for long-term preservation of curated primary sources.

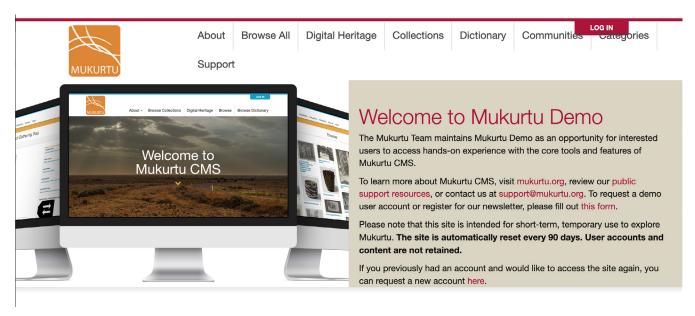
Maria Cotera expressed her concern regarding technical infrastructure as the biggest issue for communities of color that are documenting their own histories. "They're currently documenting on infrastructure that is owned by corporations, that is not secure (or even searchable within collections). We can think it's sustainable, but we can already see what is happening with Twitter and other platforms ... Those are national heritage materials. We cannot allow them to disappear into the digital hole of Instagram and Facebook." The dominance of social media platforms and "free" (i.e., the user is the product) applications presents a tempting and voluminous menu of choices for digital projects. While these products are, on the surface, attractive and easy to use, for any form of substantive content, the "digital hole of Instagram and Facebook" poses risks to privacy, security, content integrity, and preservation.

Fortunately, many projects are finding the best match for their needs among a variety of noncommercial software tools, platforms, and data management systems, such as Scalar, Manifold, Fulcrum, Omeka, PubPub, and Documenting the Now, or in more targeted commercial products like CLOWDER. While these platforms avoid many of the dangers of Big Tech, sustaining products like these and the many new, well-designed shared applications yet to come will be a continuing challenge for support of digital scholarship. One central realization that the Commission's work revealed depends on our collective understanding of the institutional structure of US higher education: The autonomy of individual institutions, and often of individual departments, that fosters creative inventiveness in the humanities makes it very difficult for faculty and staff to know when or how to shift to collective solutions for shared challenges. In other words, the impulse to devise solutions, be they intellectual explorations or technical problem-solving, is inescapably central to both academic freedom and our society's reliance on higher education. As **Marisa Parham** noted:

When we can't make a pathway for bespoke digital scholarship, in a way, we're actually running the risk of eliminating a lot of cultural heritage of the future. If we all had to flatten out and do WordPress, there's a way in which there's a real loss there. So we actually have to find a way to manage this bespoke if we're going to uphold any idea of the digital, because I'm speaking from the side of the creators and the makers and the artists and the writers.

This can be—and often is—true. And, at the same time, we need to be better at devising shared mechanisms for determining when to act collectively when an individual creative project should earn the care of a broader base of institutional support than it can get from the institution where it happened to be originally fostered. This infrastructural challenge is both technical and social; it requires shared repositories, service platforms, and distribution channels for innovative digital work. Digital bridges and tunnels require sustainable financing and networks of people who, whether employed in a home institution or a collective organization, can enable a shared capacity to steward projects that become, in essence, public goods. These infrastructures require partnerships that cross over among and between institutions, communities, and professional like-minded third-party organizations to forge workable shared solutions.

One size will not always fit all, even if collective solutions relieve less-resourced institutions from having to devise each stage of a solution. Even placing all materials into standardized, third-party repositories even if such repositories were made available— is not an acceptable solution for all groups. Kim Christen emphasizes that even admired portals and repositories, like the Digital Public Library of America, JSTOR, or HathiTrust, are not for all communities, saying, "There just has to be a very clear understanding that there are reasons why some groups would just never want to do that. Whether it's the violence that's been meted



Mukutu is a widely used platform for collecting and managing community resources, committed to maintaining an open, community-based approach to its development.

out on them ... or anything else." Murkutu, the platform developed under Christen's leadership at Washington State University as a content management and access system for Indigenous communities, demonstrates that this kind of local control can still be achieved through shared technology. Humanities Commons has aimed to be a multifunctional platform for sharing digital research objects and other work by providing access and preservation services for objects in standardized formats in its CORE repository, even as it struggles with significant issues of scalability and sustainability.

At the same time, many materials resist local repository solutions, either because of their design or scale. Moving image materials, for example, present a largescale storage problem that can be handled only by a large repository. **May Hong HaDuong** said, "The moving image archive [at UCLA] has petabytes of data and just a really intense metadata issue ... We're having to think out the scaffolding issues around data storage for moving images."

These potentially conflicting parameters may not quite meet the definition of a "wicked problem," but they do push us to new ways of thinking and continuing efforts to find creative solutions, "a constellation of things," as Dan Cohen describes it. Digital Scholar (founded as the Corporation for Digital Scholarship) is a successful model for developing and sustaining important tools like Zotero and Omeka and making them readily accessible to scholars. Ed Ayers imagined a "GitHub for these kinds of projects ... agnostic of institutional home or loyalty or responsibility." If funders created "a place that had staff that was flexible in creating and sustaining a suite of tools that are necessary for building a community-based project, and you didn't have to go through persuading a department chair, and then a dean, and then a provost, and then a vice president and then a president to do it, it strikes me that we could actually release a lot of the energies ... [of] these people doing inspiring projects." Bergis Jules's Shift Collective has just received a grant from the Filecoin Foundation for the Decentralized Web to explore decentralized, sustainable storage for community-based projects.

Even the largest institutions are struggling with finding the right balance of supporting scholars in whatever way they need to do their work while managing limited resources and considering long-term preservation. Focus group participants described their approaches and choices.

Bohyun Kim, Associate University Librarian for Library IT, University of Michigan:

We really struggle to support more than 80 IT products and to preserve content housed in many of those as much as possible [in light of] ... the limited resources and staff time and the limitation of infrastructure. ... So to give an example, we are running five large repositories. They're running on four different platforms, and they are all very, very highly customized. And one of them has been running since 1996. So there is also the high level of legacy product aspect.

Julia Damerow, Lead Scientific Software Engineer, Arizona State University:

If you are, let's say, at Princeton, and there's a whole research engineering group that can support long-term maintenance, great. Or if the project is not meant to live longer than three years, great. But in those middle cases where people want to do something new and innovative, that's awesome, but [it's a problem] if there's not a long-term plan about what to do with that, once the initial development work is done. It's easy to get money for new things, like write a grant and get some exciting new project off the ground, but what do you do with it once the money's out and the thing is built? Because within three or four years, technology's changed, you need to constantly update things to keep it running.

Focusing on sustainability of core content rather than bespoke projects is one way that institutions have been able to take responsibility for support of new work.

Jill Sexton, Associate Director for Digital & Organizational Strategy, North Carolina State University:

We have really backed away from creating a lot of bespoke solutions for digital humanities types of projects. But we do consult with faculty on these, and primarily we help them with sources. We help them come up with interesting and creative ideas for tying their idea with archival and other types of content. But we also consult with them on how to decouple the content from the presentation so that it can be preserved in the long term and presented in a way that's still coherent but maybe doesn't require the same level of effort at maintaining a bespoke custom interface.

Jimmy Ghaphery, Associate Dean for Scholarly Communications and Publishing, Virginia Commonwealth University Libraries:

One of the good decisions we made [about a major compilation Mapping the Ku Klux Klan] is that we do not consider this manifestation something that we're going to preserve, which is kind of funny since it's still there after eight years. But what we did do is make the conscious decision based on our resources to move the underlying data into the repository. And I think that was probably a wise decision upfront and has taught us as we have ongoing projects to really think about that separation.

Linda García Merchant, Public Humanities Data Librarian, University of Houston:

I really think that helping faculty and researchers understand that a foundational data structure is key because then we're not as worried about sustainability because you can migrate that to a different [repository] and think about the publishing as a transitional space.

Christopher Prom, Interim Associate Vice Chancellor for Research and Innovation, University of Illinois at Urbana-Champaign:

We actually run our own bespoke repository service here for digital content, for data, for research publications, our own institutional repository. But it is an integrated platform that allows us to do both, preservation and then publishing on top of that. In addition to that, we have the Illinois Open Publishing Network where we provide our humanities scholars and others access to Omeka, to Scalar, and to Pressbooks as three kinds of out of the box options that we provide to them. These examples, not surprisingly, represent the capacities—however limited they may seem—of betterresourced institutions. The services these institutions describe are available only to their own or selected qualified scholars. Others are seeking more generic ("flattened") approaches for a broader range of scholars and practitioners. Manifold has been a successful, readily accessible platform for students, scholars, and other creators to use to share their digital content, often in coordination with more traditional forms of publishing. Matt Gold, one of the creators of the Manifold platform, described his goal.

Matthew K. Gold, Associate Professor of English and Digital Humanities, CUNY Graduate Center:

I think that in addition to thinking about those kinds of institutions [that are not R1s] and how we can support them ... we can think about citizen archivists trying to do so on their own. A lot of people don't have the kind of support they need to pull together digital publications and collections. And so I'm thinking about ways institutions without resources can start to empower faculty and students together to create in ways that align with racial and social justice. There are model support structures, there are collective support structures, there are places where people can work together, and that's really important.

Zoe Wake Hyde, Community Development Manager, Knowledge Commons: [Humanities Commons enables] having [research objects] in a coordinated space that is also open enough for people to be customizing, to be using it in ways that make sense to them. Plus, there are things that we are aware of that we can be helping with, like different levels of permissions and access. So particularly in projects around racial and social justice, you're often dealing with either topics or actual research objects that you don't necessarily want to have fully open to everybody all the time but that you can have levels of permission there. Which is something that a platform like ours can help with the cultural or community standards for.

While there is no magic, one-size-solves-the-problem technology infrastructure, the wide and successful use of Mukurtu is an important model. The policies and agreements Christen was able to negotiate with WSU to enable sustainable, community-centered use are as important as the software itself in demonstrating how institutions and communities can create partnerships and sustainable new platforms. Beyond the work of creating a project, the question of how it will be accessed for continuing use is not just one of sustainable technology platforms, but also of how it will enter and remain in the system of scholarly communication.

SCHOLARLY COMMUNICATION AND PRESERVING THE SCHOLARLY RECORD

Ecosystems for sharing, using, and building on knowledge are intrinsic to human existence, whether employing rich oral traditions or myriad forms of material documents. The world of institutionally supported research and scholarship has developed a robust, complex global infrastructure of scholarly communication that carries a scholarly recordwhether a scientific result, an archival record, a long-form analysis, or any product of investigationthrough its evaluation, publication, dissemination, and enduring access. It is an infrastructure with many players, within and outside of the academy: publishers, libraries, standards-making bodies, societies, indexing organizations, review outlets, and more. It is difficult to comprehend how thoroughly the still-in-process transition from paper to digital has created enormous new opportunities for the dissemination of the fruits of scholarship and the need for updated infrastructure to support these new possibilities. In the age of paper, access to scholarship was always going to be severely constrained; in a digital world, access is constrained only by financial sustainability limitations and the stillincomplete components of digital infrastructure.

Digital transformation in this infrastructure has enabled a wealth of new services for finding, assessing, navigating, and using resources. The first 30 years of this transition has, understandably, seen the most dramatic advances in the digital amplification of what were widely adopted paper vehicles: articles in scholarly journals, via journal aggregation platforms like PubMed, ArXiv, and—for the humanistic fields, JSTOR and Project Muse. But digital work has engendered wholly new formats, presenting new challenges when the work itself and its product break the mold of traditional books and articles.

The concept of "the scholarly record" is no longer necessarily limited to a published book or article but may be a digital record of a scholar's research process, their presentation-often interactive-of exploration, analysis, and/or evidence. And, as in a practice that has been more familiar in traditional archaeological work or documentary editions, it can include the collection of cultural and historical evidence, newly exposed, curated, and made available digitally. In the case of much new humanistic work, this evidence is being gathered in partnership with or entirely by the communities that identify with a particular cultural story: protest movements as they play out in social media; tribal artifacts once appropriated by settler institutions; 18th-century archives hiding in plain sight evidence of enslaved families; oral histories of LGBTQ+ activists. This is evidence and knowledge that could not be more important for society today and in the future, but much of it is not served by the current infrastructure for scholarly communication. The gaps in the current system are viewed differently from the perspectives of its multiple participants: the academic scholars struggling to insert a respected place for an interactive or otherwise complex digital project into the traditional peer review and publication process; university presses and other specialized publishers working to accommodate varieties of digital expression but with limited means to do so; innovative platform providers seeking acceptance (and funding) for new paradigms; libraries focused on demand for new services rather than on expansive and difficult new parameters of collecting; libraries now functioning, to varying degrees, as open-access publishers; and a vibrant, growing realm of communities, researchers, storytellers, and project creators concerned with the challenges of getting their work done rather than with a post-production life cycle. The Commission heard all of these passionate voices in its focus groups, voices that revealed profound gaps in vital infrastructure, from planning to publishing to preservation.

PLANNING FOR SUSTAINABILITY

In a pluralistic and complex landscape of institutions and projects, many experiments in digital work will never grow beyond an idea or a pilot. Devoting thought both on the part of the scholar and the institution to intentions, expectations, and options for how and whether a project will be sustained and how its results could be preserved is better to do earlier rather than later. The Socio-Technical Sustainability Roadmap developed by the Visual Media Workshop at the University of Pittsburgh explicates the many considerations that go into planning for the future of a digital project, from expectations for its lifespan to priorities, responsibilities, staffing, technical specifications, and more. Taking a more technical approach, the Endings Project, developed at the University of Victoria with funding from Canada's Social Science and Humanities Research Council, explores the principles that make digital project code amenable to preservation. Despite the wisdom of these guidelines and a deep body of technical knowledge in digital preservation, few projects start with a sustainability road map for a realistic project life cycle or for transition to a continuing preservation environment. And even when a project's creators intend to develop a resource for the field—e.g., a digital corpus or capacity that many others will depend upon-rarely do they consider a financial plan that could securely keep a such project operational and useful in the long term.

Focus group members at institutions large enough to offer digital scholarship support described their experiences.

Rebecca Sutton Koeser, Lead Research Software Engineer, Center for Digital Humanities, Princeton University:

[When faculty] come to our new digital scholarship unit, one of the first things they're going to be asked is "what is the intended duration or lifespan of this project?" If they don't know, then we help them figure it out, because that's a really important question to figure out at the outset. ... Also we do think very carefully about the different outputs, and we are always working to generate data exports and data sets and written outputs so that ... you can toggle between different modes of analysis ... like a data set for computational approaches or ... a usable interface to explore in a different way, and one of those will last longer than the other.

Brian Croxall, Assistant Research Professor, Office of Digital Humanities, Brigham Young University:

We frequently have in our project planning documents a conversation about preservation. We ask people, how long does this need to stay up? ... and that becomes a way to talk with them about the fact that the website we're going to build for you is not going to last. But we can think about ways to get your data into the library, into our institutional repository ... [so] those things will last even if the presentation mode does not. Also, in that same project planning document we ask them about their dissemination plan for publications, conference presentations. Working with things like the MLA to get scholarly projects indexed into the MLA bibliography is another option to make [a project] more discoverable. So just trying ... to encourage scholars to realize that there's more to do than make the really cool website.

In some cases, a library or a department recognizes why these projects are, even if new, of central importance to how an institution wants to define—or in the case of an institution like Princeton, redefine—itself:

Jon Stroop, Deputy Dean of Libraries, Princeton University:

Sustainability and how we manage expectations around sustainability ... has to be a pillar of how we present any initiatives going forward. ... I'll think about a local project ... Princeton and Slavery. Many of our institutions have some kind of archive or website ... that tries to reckon with its legacy as it relates to enslavement. That website can go stale. We're putting forward something that reflects not just scholarship but our values and our institutions are shifting. That's different from other webpages or digital exhibits for which going "stale" is perhaps a lower risk. [If a website like Princeton and Slavery] goes stale we risk sending a message that says, "well, this was important, but it was a trend and, and now we've moved on to other things." If we're going to move this front and center, it has to stay there for a time that goes well past the sort of span of any of our careers.

As the well-resourced institutions struggle to assist their scholars to create a sustainable product, such support is not available across the diverse realm of those in the field. A story that is all too common is the very real threat—and actual experience—of loss of unique resources, resources that took enormous time and knowledge to create. One example with a happy ending is the *lle-en-lle* compilation of francophone authors from islands and their diaspora that was compiled over 23 years and almost lost.

Hanétha Vété-Congolo, Chair, Department of Romance Languages and Literatures, Bowdoin College

I wanted to talk about an example of one digital work that was done over 20 years. The director decided to close that site and then the question of archiving it was posed ... He thought of various options, but had to go through a friend, someone he knew among his network, and then that person became an advocate with their university's library, because there's no structure in place for that. Luckily enough, he was able to have that collegial support from that friend and the site is now perennially archived. But he would not have had that opportunity had he not had among his people someone willing to advocate for that permanent storage of the work.

The passion and vision of an individual scholar or a group of scholars drives the creation of a project. But the capacities and vision that fuel that creation are different from the capacities and vision that support institutionalization or some form of enduring structure in the same way that art collectors may not always have the most realistic ideas for how to sustain their art collections beyond their lifetime. One of the challenges in a digital realm is finding the right home for enduring access to a digital project. It might be the scholar's home institution or, as was the case with the *lle-en-Ile* project, it might be another institution or set of institutions entirely, or the creation of a new institution within a community. The nature and value of critical projects in racial and social justice can be viewed as a moral imperative for sustainability. We face a challenge worthy of attention and support.

THE ROLE OF PUBLISHING, FROM ACCESS TO EVALUATION

The different expectations regarding bespoke technology platforms vs. standardization in the creation of projects also plays out in the ability of a work or project to be published within the traditional infrastructure. Different approaches and expectations need to be considered in imagining access to work that is unlikely to be sustained in the long term. Preserving digital work though approaches of the Endings Project or securing primary resources in a library collection or other repository still leaves many scholars with the career need to publish their work within the academic sphere and with the personal and ethical need to reach potential consumers of their work in select communities and throughout society. Many participants in the system are seeking new forms of dissemination and documentation outside of traditional publishing. Not all work needs to endure in a permanent scholarly record, but it is important to recognize that the interlocking elements of the traditional publishing ecosystem serve to demonstrate results and justify colleges' and universities' investment in the work of professional scholars. Nowhere is this more apparent than in the natural and biological sciences, where enormous shares of university budgets are devoted to the capital and staff costs associated with supporting "big science." If the recognition and reward structures for digital scholarship associated with racial and social justice fail to earn a place in higher education, there is little chance that the work of faculty, staff, students, and community members will be supported and made widely available in any significant and sustainable way. This realization means fitting this work into today's publishing processes and metrics while, in parallel, building new processes and metrics.

Eileen A. Fradenburg Joy, Director, Punctum Books:

Maintenance is an issue, technical capacity is an issue, and all of that. But the big issue is how it enters into the knowledge databases. How is it discoverable? How is it cataloged? How is it mapped? Where is it deposited? Where's the metadata? Who has access?

Roopika Risam:

Jennifer Juliano and I are co-editors of *Reviews in Digital Humanities*, a journal that peer reviews digital humanities projects. ... Part of our hope ... in doing this is that there would be some record of the projects that if they cease to be maintained, or if they're sunsetted, there is some documentation that they existed and that they were there. Often we have a "reinvent the wheel" problem because people don't know that other people are out there doing the work or have done the work that they could learn from or talk to or build on.

Darcy Cullen, Assistant Director of Acquisitions, University of British Columbia Press; Founder, RavenSpace:

Since web-based and innovative digital resources, particularly community and public knowledge publications, need new kinds of discovery and distribution channels, I was looking at ... one platform, with the idea of still being able to bring people to one place to find and access these resources and move through them. I think about the National Film Board of Canada that has a site with ... all these promotional pieces, the one liners and trailers, education components and media kits. It's one place where audiences come and easily find things. I could imagine something similar and our audiences then being redirected, linked out to the digital project where those each live. Making it easier for marginalized audiences and diverse audiences who work with these types of resources to be able to find their materials in more organic ways, and by not having to go find relevant works in a piecemeal way of multiple searches. So how can we facilitate a way of discovery for these audiences?

Stacie Williams:

Maybe the standard is a small white paper when you're done, with a copy of the code in whatever your institution's institutional repository is. And then from there people can see about replicating it with whatever newer updated technologies will likely be out when the thing is done. Then you, as the researcher, aren't forced into a position of trying to maintain something.

Charles Watkinson:

DOIs are great in allowing works to be discovered, cited, and accrue prestige online. However, DOIs made available through Crossref and DataCite reinforce institutional power because they can only be assigned through member organizations. What happens if you are not "approved" by or affiliated with one of those entities? You are at a disadvantage. The DOI is now the entryway into recognition, into credit, into getting into the information supply chain so your work will get reviewed and preserved. And without access to a DOI, that entryway is blocked.

Marisa Parham:

I hit DOI like a wall we never got over. I have digital projects that are published by actual journalism presses, [and] I can still barely find myself because the DOI has never resolved itself properly and no one can figure out how to fix it.

In the digital realm, we can imagine entirely new ways of disseminating and perhaps evaluating resources. For example, Stephen Rhind-Tutt has introduced a new approach in Coherent Digital with efficient automated processes for curating and adding metadata to collect web links of digital content and for creating persistent identifiers and backup copies for consistent access.

Stephen Rhind-Tutt, President, Coherent Digital, LLC:

What excites me most about this is the opportunity to bypass so much historical neglect. We've traditionally set up systems that require a great deal of money and a great deal of learning for people to publish. And in doing so, we've shut down large swathes of voices around the world. One human in four comes from South Asia, one human in five comes from Africa, and the methodology and systems they have to communicate with us are not well formed. They put content up in many, many different forms in many different ways. Large publishers and librarians, at best link to it and at worst ignore it. So, what I'm really excited about is enabling these communities, who after all are such a huge and important part of humanity, to speak with their own voices and to

bring skills of access, preservation and curation to those voices.

And organizations like ITHAKA continue to work to provide new scholarly services in sustainable ways.

Kevin M. Guthrie, President, ITHAKA:

What I have learned over my many years working in this environment is that there is real opportunity due to the low marginal costs of operating effective platforms. If the provider can make its services inexpensive enough, and if the costs of adding content can be kept to a bare minimum, more and more of this type of content can be made available online. Even at small costs, though, to get the kind of scale required to make the kind of needed impact will still cost a lot of money, because even a tiny number multiplied by a huge number is still a large number. And that must be paid for somehow. In the interim, before a new model can be put in place, what is happening is that there is cross subsidization of this type of activity going on. And so when you start to think about what's the sustainable approach to it, how do you think about that? Do you think about it standing alone? Do you think about it in the context of being part of something else that can offer a cross subsidy? These are really important economic questions that that one has to wrestle with. And, thinking across the community, how do we share those resources or how do we share benefits?

The traditional outlet for critical scholarly ideas has been specialized and university presses. These publishers are relied upon not only for their ability to disseminate work and get it into secure library collections, but also for the evaluative stamp their editorial process puts onto a work. They are an integral part of the current academic process. Yet they are still struggling to adapt to the digital arena. The reasons that they are moving more slowly than STEM publishers to adapt are twofold: First, they have limited resources with which to experiment. Second, and perhaps even more limiting, is the reliance that universities place upon them for working within rather than expanding their long-standing boundaries. The universities that support the approximately 100 North American university presses and the libraries that support them by buying their books are heavily reliant

on the traditional products of academic research. Publishers in our focus groups struggled with these questions.

Dominique J. Moore, Acquisitions Editor, University of Illinois Press:

I think the scholarly community is in for a big shift ... There are a lot of scholars that are mixing methods and using the digital space in ways that are hard to capture with the monograph that is so vital for the tenure and promotion process. Really the true life of their project exists in this more malleable and mutable state. So the idea that scholarship is ever fixed in time, which is something that the printed product might make one believe, is being dismantled with these transgressive methodologies. Instead, the scholarship gets to exist as something that's always growing, always transforming, always changing. And the difficult part about that is many university presses, guite frankly, don't have the infrastructure in terms of staff and funds to support those types of initiatives in any sustained, ongoing way.

Lisa Quinn, Director, Wilfrid Laurier University Press:

Like how do I pay for this? I have exciting conversations with others all the time about digital projects, and then we're all left scrambling to figure out where the money is going to come from, not just to bring them to life, but to ensure that they continue to exist or remain relevant technologically or in any other way. I think that there's an underlying business model required and that is a collective problem that could be addressed.

In their opinion editorial (Feb. 2021) for *Inside Higher Ed*, **Charles Watkinson** and Melissa Pitts describe new projects from university presses working to create "a new layered infrastructure to address vexing questions about how research might be more equitably created, assessed and distributed." [25] Publishers in our focus groups described some of their new work, including how they make use of Fulcrum and Manifold.

Jon Davies, Assistant Director for Editorial, Design, and Production, UGA Press:

We've been using the platform developed by the

University of Minnesota Press. So most of the time when we have born digital material or ancillary material ... instead of feeding it off to the authors as we used to and having them set up their own website, and then somehow us linking to it, and then it going dead 10 years, four years, three years later, or never becoming live in the first place, it now often will reside on the Manifold site.

Jason Colman, Director of Michigan Publishing Services, University of Michigan Library:

We have a file formats guideline for video, audio, 3D models, and interactive maps and images ... We ask the authors to provide specific formats and then we commit to preserving those as part of the library's collections at Michigan. The press at Michigan is part of the library. Fulcrum is hosted on library servers and backed up on university infrastructure. So the library has a commitment to forward migration of content. If you have a JPEG now, but there's something else 20 years from now, we'll figure out how to make it that something else instead of a JPEG and that promise applies to Fulcrum.

Publishing partnerships with libraries enable a structure for sustaining the content of digital publication, with Michigan a prominent example, but this has been operable at only a few large institutions. Stanford University Press attempted a model that provided a scholar's digital project website with the same expectations as a printed monograph. This model excited scholars but proved unsustainable after grant funding ended.

Jasmine Mulliken, Production and Preservation Manager, Digital Projects, Stanford University Press:

We [Stanford University Press] are essentially publishing monograph equivalent digital projects, putting these projects through all of the same kinds of workflows and academic rigor as we would a traditional monograph, but they live on the web. This makes them somewhat more susceptible to decay at a much quicker rate. So we have a lot of authors that are taking chances on publishing their work in this format that doesn't guarantee its longevity in the scholarly record. ... It's not sustainable for a press alone to take on the work of digital preservation. But if there was some kind of system in place that was maybe beyond each individual press, that could be the hub for either sustaining or hosting or something like that, then the presses could do what they know how to do ... and the more difficult questions that they don't have the infrastructure for could be handled by some kind of group that connects all of the presses and developers and scholars.

Libraries are increasingly taking on publishing functions; the Library Publishing Coalition now has some 100 members. These services are typically integrated into library scholarly communication programs, often with the goal of enabling open access for faculty publications. For the most part, these operations have not sought to expand into larger publishing organizations with greater capacity, nor have they developed the capacities that Mulliken imagines. When roles (as, for example, between publishers and libraries) shift, some functions may not carry over.

Emma Molls, Publishing Librarian, University of Minnesota Libraries:

I've been a part of [the] library publishing world ... [and in] reckoning with the systems of distribution of content we really are just kind of getting to the tip of the iceberg. We break a lot of molds even when trying to get something indexed. If this thing is not a straight up book or this thing doesn't meet the traditional parameters of a journal, well then it's something else. Where are those things going? We do as much as we can in-house, e.g., to do search engine optimization, but wouldn't it be wonderful if we had another way to get things distributed?

A key role played by the university press is its review and editorial process, which helps assure the quality and value of the scholarship it makes available. (In fact, many are concerned about the extent to which academic departments rely too heavily on university press publication as a stamp of approval.) Presses are finding that digital work in recovery scholarship presents considerable challenges for peer review.

Lisa Quinn, Director, Wilfrid Laurier University Press:

The pressures come into play not just because you have a small population of folks who are

being asked to review everything in developing and rapidly expanding fields, which is exciting and overdue, but the standards to which they're being asked to review are very much a traditionally westernized set of approaches. Epistemologically speaking there's a struggle because the author is trying, often, just as an example in a work of Indigenous studies, to break open some of those boundaries. And we may have another Indigenous scholar on the other side, and they're trying to translate this through a peer review process that is coming very much through a western view of what it means to be rigorous or how one develops a work to its fullest potential.

Tara Cyphers, Assistant Director, The Ohio State University Press:

I think when it comes to newer areas, we're finding we also have to broaden our idea of the "right reader" for the project and then also educate our editorial board on that so that they're on the same page and understand why we've selected certain readers that may not fit their traditional ideas about who the reader has to be.

Mary C. Francis, Director, University of Pennsylvania Press:

We turn to our boards to accept well-designed, but maybe slightly different looking, modes of peer review or community engagement. And we really want their buy-in. Perhaps the learned societies could be a place to start that collective action where we could have dialogue about thinking through what the standard should be for a specific project that has a specific mission goal, and help them feel more at ease in endorsing their standards.

Humanistic scholarship is heavily dependent on university presses, for books especially, and also for journal publishing. And yet these presses are mostly functioning, for the 100-plus institutions that host them, as individual cost centers rather than as shared infrastructure. Pitts and **Watkinson** note in their February 2021 article that even the larger presses that are trying new digital platforms will not constitute a needed new infrastructure without a new system of funding "that recognizes university presses as missioncritical components worthy of intentional, interinstitutional commitments—rather than as auxiliary units of a few individual institutions, funded by sales and assessed only by the bottom line."

Ben Vinson:

I just wonder if we should have just a simple recommendation to university press advisory boards that we recognize that digital scholarship is part of our academic futures. We expect advisory boards to work to ensure and sustain diverse digital scholarship. And we encourage boards to work with their respective universities on identifying long term resources.

The requirement to fulfill a narrow charge for narrow financial margins ensures that individual presses need to be risk-averse both in terms of the subjects that they publish and the modes they employ. Both of these risk-averse tendencies represent challenges for digital recovery scholarship. Because of the limits of the current model, fresh systems thinking likely calls for trans-institutional models that mix long-standing models with new possibilities.

Ben Vinson:

One thing that struck me is a tactic that the American Academy of Arts and Science is using to develop funds for improving democratic citizenship. The approach is to create a fund and publicly source that fund. It may be a stretch, but I don't know if such a Commonwealth fund might be something to think about and approaching particularly the entities like Google and Microsoft because they may have an interest in cultivating, let's just say, scholarly quality content that would inhabit their digital real estate. Why not leverage that interest for a more enlightened internet?

The current system of scholarly publishing has neither the resources nor the plasticity to accommodate essential new digital work that should enter the scholarly record, i.e., made findable and available in a mode for enduring access. The scholarly community created the existing system, and it now can and must adapt it to 21st-century realities.

SUSTAINING AND DISSEMINATING COMMUNITY-ENGAGED WORK

The traditional values and rewards of academia are not typically shared by communities who are building resources to tell their stories. They are not creating publication for tenure and often not for the long-term scholarly record. This creates tension and contradictions for the scholars working with communities.

K.J. Rawson:

There can often feel like there's a competition between building in the now and the immediate future and then thinking long term. And it's almost as if there's not enough infrastructure; it's hard to do both at the same time ... Because there's just this frantic pace of the everyday. Just thinking about having a sufficient infrastructure that affords the possibilities and the privileges of being able to think about the long term planning seems like a huge step for many projects and initiatives.

Maria Cotera:

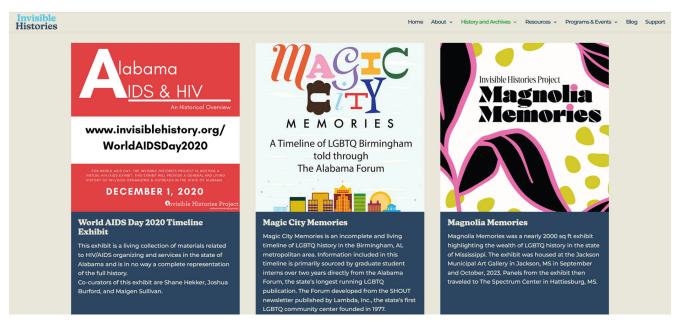
I do feel like there's a kind of disconnect between the infrastructural imaginaries of the institutions and the infrastructure imaginaries of community members... In the community there's an explosion of interest in archival matters ... and yet all these materials really sort of sit outside of the structural spaces of relationships that are constituted by libraries and funding.

Kim Christen:

With sustainability ... you're talking ... about keeping things forever, but ... some of that stuff either shouldn't be; it should have never been collected; it shouldn't be there; it's framed for the wrong people ... Sustainability is one of those things that is ... readily misunderstood and preservation becomes very political because it can slip fairly quickly into paternalism ... There are different policies for different types of collections of cultural heritage material.

K.J. Rawson:

I think about this from a trans history perspective. History can actually be quite damaging for many trans folks, and [they want] the ability to control your story and your narrative. ... I wonder what it might mean to take a more nuanced and sometimes theoretical approach to ending things intentionally, and perhaps even starting things with an eye towards endings.



Invisible Histories locates, collects, researches, and creates community-based, educational programming around LGBTQ history in the Deep South.

These tensions and potentially conflicting values require new approaches to preserving and sharing work.

Gabi Ventura:

Thinking about the roles that we currently have in taking care and making sure that whatever projects or materials or archives or whatever we're working on exists for future generations, [if the community wants them removed] maybe we still keep a record of those archives that are no longer made available. At least that there's a record that they exist is also important. That's a huge responsibility for all of us.

Marisa Parham:

We need some distinction between "projects" and archival objects. Our conversation about sustainability in all of this work often slips into being a conversation about the preservation of archival objects. Part of what I'm hearing, especially from the community perspective, is that what emerges at the moment of doing the work on the ground is actually what's important about the project. That goes to [the question] of whose interest is being served at the moment of talking about a certain kind of sustainability, and are those the interests of the people for whom a project may have first been instantiated.

Community-engaged work by its very essence needs to be of value to the community, as well as shared with others. Institutions and scholars are exploring what that means for support, publication, and sustainability.

Judy-Lynne Peters, Co-Director of Northeast Slavery Records Index, John Jay College:

When we began to work with the members of our consortium we suddenly realized that our stuff was written like scholars wrote for other scholars. And we really wanted this to be something that everybody would have access to. It's such an important thing for people that we really need to think about: How do people in our target audience need to use this? What do they need to be able to see? And how can we make this relate to them rather than have it relate on the level that we look at it? ... How do we make this accessible to all those different levels?

Josh Honn, English and Digital Humanities Librarian, Northwestern University:

The last thing that I've really struggled with, especially because we were working with an institution that was so small and so underfunded, was ... empowering (for lack of a better word) communities to own the resources that we've created together. Instead of seeing it as something that Northwestern has to own, how can we get that final deliverable, that website, that digital project, into the hands of the people who it really affects and who are going to be the stewards of that legacy and remain in [the] community?

Annette M. Kim, Associate Professor and Director of Spatial Analysis Lab (SLAB), University of Southern California:

In terms of dissemination, I'm offering the dataset to doctoral students; [they] want to use it, and they're the next generation, so I'm excited about that.... There are also people outside of academia who are accessing the project through the website or social media and they have different interests [that] they're getting out of it. And I'm also trying to accommodate it for public school teachers at the high school level. So I'm trying to have layers of depth for the different audiences.

Jaquelina Alvarez, Co-Director, Oral History Lab (OHL), University of Puerto Rico at Mayagüez:

One of the things that we are doing with this grant is acquiring technology to be able to provide to the communities because we understand that lack of resources at the community level is a significant barrier to share the information. We are very concerned about access, and we want to give access to all these digital resources. However, we understand that if our communities cannot access [them] digitally, we need to provide an alternative method. We've been discussing how to do that with the communities. In terms of dissemination, we have the website, and we are working on a repository of their histories, but also we are creating exhibits. And those exhibits will be more targeted to the different audiences.

Megan Senseney, Head of Research Engagement, University of Arizona Libraries:

The groups and individuals we're working with expect to continue building and growing their archives, so we don't expect them to stay static. There's sustainment to consider in terms of growth and change. There's also preservation, which is capturing something at a point in time. We want to capture through web archiving how they're representing their digital archive and the end of the project, if they choose to, *and* we hope to continue building these relationships so that the archive itself is a living thing that grows. We will take great consideration as to how we continue to activate the digital archive to make it accessible to the broadest possible audience.

Darcy Cullen, Assistant Director of Acquisitions, University of British Columbia Press; Founder, RavenSpace:

We're based in Vancouver on Musqueam First Nation unceded territory, and we launched a new publishing model and a platform for the publication of community-driven publications [called RavenSpace]. Indigenous peoples are working with scholars, and they are involved in the actual design of the scholarship and the research questions. And so as publishers we found that we needed a solution to produce publications that would be more accessible, relevant, and generally resonating with those very communities and with Indigenous peoples, ensuring that the knowledge and outputs from that research went back into community and supported community goals as a priority ... We're really thinking ... about how we return the fruits of community-led research back into communities.

Bringing these new community-based resources into an ecosystem of enduring access, and doing so in accordance with <u>CARE</u> and <u>FAIR</u> principles, brings a significant new challenge to the academic, cultural heritage, and publishing communities. Unless that challenge is met, we will be left with a gaping hole in our knowledge infrastructure.

USING NEW RESOURCES IN TEACHING

We have learned through the work of the Commission that capacity building, pedagogical development, public knowledge, and diversifying the digital landscape are deeply intertwined issues. For example, Kenton Rambsy has noted that sustainability in digital humanities starts with the student. Training the next generation of diverse DH scholars, which Ramsby does in his work as a faculty mentor for the Mellon Mays Undergraduate Fellowship Summer Institute at Howard University, should be an intentional element of any effort to sustain a field. That training has inspired his students, as reflected in the comments of Howard senior Nyla Jones: "Digital tools can help bring to light the litany of issues impacting marginalized communities, forcing people to look at these issues numerically, in addition to anecdotally, providing undeniable proof of the need for social action and restorative justice." Jewon Woo has highlighted the profoundly fluid boundaries between the institution and the community when discussing her students; the community is quite literally in the classroom at community colleges. Training them in digital methods is not simply a pedagogical exercise, it is an empowering process of giving undergraduates the technological skill to tell their stories in novel ways. Her student Nevaeh Pasela said, "Beyond the historical and humanistic aspect of the project [to transcribe and code Charles W. Chesnutt's correspondence], I find myself invested in the workings of the programs which we use to transcribe letters. I have been provided with new knowledge ... which would be useful in careers around archival research. [And]... I have found myself making new connections I never would have before without the internship opportunity." Such efforts bolster campuses' intellectual vibrancy and extend beyond the walls of the academy. Given the continued uneven institutional landscape within the academy, efforts to train the next generation of DH and social justice scholars and to bolster publicly engaged work through DH pedagogy still require intentional support.

Future iterations of the ACLS Digital Justice Grant program will retool its eligibility requirements to more explicitly welcome projects that operate at the intersections of DH capacity building, pedagogy, and public knowledge. One such example of work at this interplay is the Recruiting and Training the Next Generation of <u>Slave Societies Digital Archive</u> (SSDA) Scholars at Vanderbilt University, which earned an ACLS Digital Justice Development Grant in 2023. Led by professor Jane Landers and associate professor Daniel Jenkins, the project trains students at Fisk University, Tennessee State University, and Middle Tennessee State University in machine learning to enhance access to records within the Slave Societies Digital Archive, the oldest and most extensive serial records for African and Indigenous people and their descendants in the Atlantic World. Projects like this one highlight the fluidity between capacity building (expressed here as pedagogy and skills training) and publicly engaged scholarship.

Students who have the benefit of working with active scholars are engaged in the full range of new humanistic work, learning about digital and analytical methods and exploring extraordinary cultural and historical stories. At the same time, the products of this work, from primary sources to research findings, are not yet reaching as wide an audience as they could beyond those already familiar with particular initiatives. This was Ed Ayers' motivation in creating New American History online resources, which has successfully attracted an enormous audience. "New American History translates the tools of, say, redlining, the other maps of American Panorama, into teaching resources that people can use. We build these things, but we've not built out the pedagogical bridge to some of our imagined audiences."

Commissioners imagined creating trans-institutional communities of practice and shared platforms that would translate scholars' and communities' work into resources for teaching. Focus groups considered ways to share teaching materials, including peer reviews, sessions at discipline conferences, and targeted publishing initiatives such as <u>Lived Places Publishing</u>.

Barbara Kline Pope, Executive Director, Johns Hopkins University Press:

It's our responsibility, as publishers, to help authors reach their readers. Many authors don't have the time or even the expertise to think about the best way to disseminate their scholarship. We make it our obligation to ensure that the audiences are as targeted or broad as the work demands. And we have to get ourselves out of thinking about only books and journals as the vehicles for that dissemination. For example, we're partnering with the National Science Teaching Association to write and distribute curriculum based on a series of books that we think high school students would be interested in and inspired by. And so, it's best to start with the audience and then go from there.

Andrea Eastman-Mullins, Founder/CEO, West End Learning:

I've seen so much on the ground working directly with faculty where they have created really intriguing and innovative content that has no plan beyond the grant or no plan beyond the one semester that they took to create it. And I see a lot of money going into OER [open educational resources] and a lot of money going into creating these things. But it tends to prioritize the privileged so the faculty who are at larger institutions are able to get release time to create learning content. And as a result we don't have voices in teaching content coming more from community colleges or HBCUs. I see that as a divide plus making sure there's a path for the content to be found and used and sustained.

Matthew K. Gold, Associate Professor of English and Digital Humanities, CUNY Graduate Center:

[I'm] thinking about the whole movement within OER that really starts to involve students as creators. What's so cool about it to me is that you have a model where instead of having students in a class, whether it's a graduate or an undergraduate class, working on individual seminar papers or term papers that get read only by the professor, instead you may have an entire class working together on a collective publishing project that everyone is contributing to. And then, at the end of the semester, it becomes an OER in its own right that can be read and experienced by others. We've had a kind of explosion of content [on Manifold]. For example, a student in our master's program working on digital humanities created a podcast archive interviewing queer and trans prisoners

of color and put that up on Manifold. To me, it's just an example of how a single student working on a project can create something that really is engaging and that then becomes a resource in its own right for others to see.

Andrea Eastman-Mullins, Founder/CEO, West End Learning:

Thinking about the teaching and learning side, it's historically been hard to be recognized for teaching and learning period, let alone publication in it. But I think as higher ed is transitioning, things that the highest levels of universities care about are also changing. So student retention, graduation rates, student success and the entire brand of the institution itself-how is it going to compete with how the world is changing? If you're a faculty member and you're able to articulate the number of views on your OER or the number of students you have retained in your department because you explained something better through your YouTube video, that starts to get at what matters the most right now at universities. I'm not sure how that translates into something the scholarly community can create, but it's a conversation that is changing as we speak. And so some of it, I'm optimistic, will naturally change because the objective of the university is going to have to change.

Scholars engaged in uncovering and creating new knowledge in racial and social justice are energetic and generous in sharing their work with their students, but they typically lack the time and expertise to translate the results of their work into broad-based curriculum content or K-12 teaching resources. Commissioners and others noted several successful partnerships with schools of education to create teaching resources. One successful model of moving the results of new scholarship into curricular materials is the <u>Virtual Martin</u> <u>Luther King, Jr. Project</u>.

Victoria J. Gallagher, Professor of Communication, North Carolina State University:

We did a pilot with area high school teachers who took it up and used it. And we based our application on that pilot. And in fact, we have done a really good job of getting it into the eighth through 12th grade curriculum. We do hope to provide curricular materials for younger grades, and plan to work toward that with interested partners in the College of Education at our institution.

Ultimately, widespread use in teaching of the resources created by new recovery scholarship will require better dissemination and access to these vital digital resources. A mind-opening new knowledge base is being created, and in too many ways, we lack the capacity to deliver it to the world.

FINANCIAL SUPPORT

Thinking back to the original invitation to form this Commission, if there was one topic that we would inevitably take up, it would be this: How has, is, and might digital scholarship related to racial and social justice be financially supported? Given what we have seen about the needs and possibilities for scholarly cocreation with communities, the place of this work within the institutional contexts of colleges and universities, and the opportunities that might require time, focus, and resources between the boundaries of particular organizations, how might funders consider prioritizing their limited resources? How might institutions consider internal priorities to enable this work to thrive?

A wealth of innovative, energetic, and substantive humanistic initiatives in recovery scholarship has recently been fueled by public and private foundations that recognize the vital importance of the field. But the apparent vibrancy and success of this activity is masking a serious lack of stable, sustained financial infrastructure, a situation that is endangering the longer-term health of the field. This kind of humanities work is relatively new, and there is little built-in operational support in institutions to match and continue grant funding, and only in larger institutions is there support for the grant process itself. And the reality is that a digital enterprise is costly: costly to create content, to manage it, to make use of it, and to preserve it as part of a scholarly record where norms were designed around print publications. While there is not enough funding to support all the digital scholarship that enterprising scholars and communities can envision, the deeply essential work that is now being done—and the more that needs to be done—in recovery scholarship will require reprioritization in

institutions and new models for collective action and external support.

Commissioners and focus group participants spoke often of the barriers created by a continual short-term cycle of project-specific support. Unrealistic grant cycles, process overhead, cost-sharing requirements, and restrictions on paying community participants are examples of factors that too often create a procrustean bed into which many institutions and initiatives are unable to fit. While grant-supported research has always, often necessarily, had strict funding rules, these are rules that have been designed to work typically for science disciplines (i.e., where large-scale grant support has long been a standard mode of operation) and in large institutions with an established research-support apparatus. In contrast, much of humanistic research now cuts across institutions of all types and sizes and engages communities with no support structure for grants management. When projects are of modest size, the ratio of labor in creating a grants infrastructure relative to the investment in actual project work can be out of scale.

Marisa Parham:

That's always the bind of some of these digital projects, as you spend as much time asking for money ... [as you] spend doing the thing. ... So if you're imagining business hours, Monday through Friday are spent trying to get the money for doing the work, [and the work] for which you've gotten the money starts after those times [i.e., after business hours].

Monika Rhue, Project Manager, UCLA:

Some of the basic challenges that we faced early on at smaller institutions [are because] we typically wear many hats. So you may be the director, you may be the octopus, but you're also the one wanting to push having your collections accessible, working with your community, and partnership with your community. Typically you are the one writing those grants. At larger institutions, they can work with their development officers or grant officers to write a proposal. But that's not the case at these smaller institutions.

Work with community-based groups adds different

perspectives and considerations for funding; it is not just the same business-as-usual as funding R1 institutions.

Cecilia Conrad, Director of Levers for Change, the MacArthur Foundation:

In our 100&Change competitions, we saw the same structure over and over again: the work was being done in the community—the community leaders knew how to get change done, they knew the people, they understood what could really make a difference. But the universities knew how to write a grant application. They knew the right things to say and the right way to report—it was all buttoned up. But there's something wrong with that balance.

Marisa Parham:

Funding agencies [are moving] to include more kinds of communities in these sort of large scale grants. But the level of staff you need to even produce that grant is unattainable for most people. You have to have capital to even get the capital.

R. Darrell Meadows, Acting Deputy Executive Director, NHPRC:

What we're seeing in all of our grant programs is an effort to support work that centers the voices of Black, Indigenous and people of color, not just collections but also practitioners of color and Indigenous practitioners. ... and thinking carefully about how we can support institutions that are not well resourced and often not well positioned to succeed in our grant making area. So we have to look at our policies and processes of how we're vetting applications, what kinds of hurdles that are really proving to be barriers to people in applying.

Lisa Janette, Archivist, University of Minnesota:

I really believe that there is a downside to having a university partner be the primary partner and the funding holder, because that power remains within a large institution that's primarily white ... Figuring out a way to separate that model so that the funding can be retained and maintained and the power can be held by the community rather than the institution [is the challenge]. And I think that's where grant funding becomes problematic because for a lot of grants you have to have a certain number of employees or be a certain size or be able to prove that you can manage the money well. ... It makes it difficult for smaller institutions to be able to make the case that they can do it when they really can.

Government funding agencies in the UK (Arts and Humanities Research Council), Canada (Social Sciences and Humanities Research Council) and elsewhere described how they are reconsidering guidelines for community-based cultural heritage groups, with Canada especially responding to mandates to support Indigenous community-based initiatives.

Matthew Lucas, Executive Director, Corporate Strategy and Performance, Social Sciences and Humanities Research Council of Canada:

So we have two types of eligibility at Canada's three federal granting agencies. One is the eligibility of researchers or organizations to apply to specific funding opportunities, which we refer to as applicant eligibility. This varies a little by opportunity. The other is the eligibility of organizations to manage our funds, what we refer to as institutional eligibility. All of our awards flow through organizations, usually post-secondary institutions, whether they are awards for institutions or individual researchers, and these organizations must meet certain criteria and agree to certain conditions to be eligible to manage this funding. While we are looking at both types of eligibility to ensure we haven't created unnecessary barriers to participation in our programs, we have paid particular attention to institutional eligibility as we realize that the processes and requirements we've put in place with respect to relatively large postsecondary institutions don't necessarily work when you're working with not-for-profit organizations.

Using organizations and institutions closer to the ground as regranting agencies can be one way for funders to give larger grants that are then better shaped for smaller applicants. The Mellon grants to the Council on Library and Information Resources (CLIR) for Digitizing Hidden Collections: Amplifying Unheard Voices, is one successful example. Roopika Risam described a program in which Mellon provided funds to Salem State to in turn provide grants to smaller institutions to develop curriculum. (Before receiving this grant, Salem State first had to prove its own capacity to manage a grant program.) At first, the community colleges did not have the capacity even to apply for new curriculum development.

Roopika Risam:

So we ended up pushing back for the second year after we got no applicants the first year and said ... let everybody tell us what they need for capacity building, for professional development, for infrastructure, and let us try and fund that and give them a mentor. And it worked really well. We have for this year more applicants than we can fund. ... I think one of the things we have to keep in mind is that people on the ground know, or we can help them learn, what questions to ask, so they can articulate what they need rather than have it be something that comes from external bodies.

There is also typically a lack of financial infrastructure to sustain the work after the grant period has ended. Commissioners considered how grant funding is aimed at innovation and exciting short-term project work, but then leaves projects, especially in communities and smaller institutions, without resources for its less glamorous continuation. Dan Cohen characterized the problem as the need to Meet Operational Needs Each Year, i.e., MONEY. Ben Vinson noted that R1 institutions understand core capacity support in the sciences but have not thought of the humanities in terms of defining a research core; they need to translate that to the humanities and implement a necessary infrastructure. Vinson said, "If we speak of a humanities core in that way, that becomes understood as an investment resource ... something that benefits multitudes of scholars at an institution."

Even larger institutions have not built in a support pattern for research that includes community collaboration. Ultimately, most of the funding for digital work in the 21st-century humanities will come from institutional funding. To gain institutional funding, scholars and their staff colleagues who seek support in undertaking this work need to demonstrate how their work aligns with the goals of their institution and remind the institution of its stated goals:

Kim Christen:

I partnered with our College of Engineering as well as our College of Medicine and Education. And we reminded everyone of the university strategic plan, where we commit to our land grant. They remember that we were a land grant and asked what's the land grant mission of the future if we're going to look at the history and leave that behind? And it is in there that says that we have community-engaged research in our strategic plan. Our Office of Research is just trying to understand what that is. And so they're coming to those of us who are doing it. And that is where we can be connectors. We are like, "Hey, we know how to do that. Y'all don't know how to do that. You have to go that last mile." And they do understand the concept of lab to market. They don't understand what that means when they're outside of the context of translational science applications and that we can show them what it means to be community engaged.

Megan Senseney, Head of Research Engagement, University of Arizona Libraries, describes how digital humanities work carried out as part of the Border Lab aligns with institutional priorities:

The inclusion of a Border Lab as a pillar initiative in the University of Arizona's strategic plan represents a commitment from the University to prioritize and fund efforts that reflect our borderlands region. The topic is really interdisciplinary, and these commitments at the institutional level are fundamental for supporting the work we do within the context of social justice and the humanities. The University Libraries has for a very long time set their efforts and priorities by anchoring into the University's priorities. In the early teens, the University was more explicitly indicating a focus on border studies, even if quite broadly, which helped Special Collections cement efforts around borderlands community archiving.

Makiba J. Foster, Librarian of the College, The

College of Wooster, describes how she sees her the alignment between her work as the college librarian and her work on the Archiving The Black Web project:

In the aftermath of George Floyd and Breonna Taylor, you've got universities and all these other institutions giving lip service to their stance on issues of social justice coming out supposedly against anti-blackness. And so, if we think about how sometimes to challenge the systems that are in place, that also means that we have to maybe let go of some of the structures that are in place that we've just accepted for no reason other than saying this is the way to do something. That was one of the reasons why I accepted the position here, where I am in a more senior administrative role reporting directly to the provost who reports directly to the president. In this leadership role, I am using my work with Archiving the Black Web to test systems that are in place, checking for currency and equity.

Ben Vinson:

I think we could advocate for intentionally calling out our objectives in the strategic planning processes of institutions and also of units within an institution. Not only at the institutional level, but there may be opportunities for schools that are also elaborating strategic plans to be very intentional about putting this language in those documents so that there's actually activity generated that bakes this work into the institutional planning process.

Roopika Risam:

At Salem State, we have leveraged these particularities of institutional life and student experience to design a digital humanities program that suits their needs and have tapped into our institutional strategic plan priority for student success to gain departmental and administrative support for the program. In spite of what we do not have, we do have students who know what they want and need, and designing digital humanities initiatives to meet these requests underscores the role of social justice in our work.... Because they tend to lack forms of cultural capital that are rewarded in job searches, they have difficulty imagining career options or translating marketable skills from humanities majors into employment. There would not be a need for digital humanities at the university if not for its value to our students.

Jennifer McNabb, Department Head of History, University of Northern Iowa:

Unless you're one of the bullet points in the strategic plan, unless you are data that can be shown as advancing on that strategic objective, you're not going to get much play. You might get a story or you might not. ... And as far as money is concerned, you're not always going to get them to put their money where their mouth is if they don't see the value of your project, which I think is a really tough reality.

Extending support to community participation can also be integrated into institutional infrastructure and strategies. **Claire Stewart** used the model of state extension programs as an example. "When I got to Nebraska, I found they already had a grant to the public library to bring in maker spaces," Stewart said. "So I think there might be existing things in universities that are potentially designed to help with this kind of thing but probably aren't focused on it yet."

Fitting in with institutional strategy is crucial to attracting the institution's support. And at the same time, the search for outside support requires internal institutional infrastructure. Obtaining grant funding requires supporting infrastructure to undertake a project, infrastructure that is often lacking for the humanities, even at better-resourced institutions.

Katrina M. Powell, Professor of English, Director of Center for Refugee, Migrant and Displacement Studies, Virginia Tech:

For instance, at a place like Virginia Tech, there are lots of people doing community based research and doing technology research in the College of Engineering or in the College of Natural Resources. And so the kinds of infrastructure that are in place for those colleges, like grant proposal writers, project managers, we don't have that same infrastructure in the College of Liberal Arts and Human Sciences. Anytime I propose and then luckily get a grant, I'm managing it in a way that my colleagues who are in other disciplines are not managing theirs because they have staffing to support that work. Our Office of Sponsored Programs seems bureaucratic to us because we have less experience working within their system—which is set up for engineering and the sciences. If you're a project manager in the College of Engineering, you know how to manage all those systems and you're working with organizations used to signing complex contracts. ... What takes someone who has the job of grant project manager five minutes to do, may take me all day to figure out. And so that has taken my time away from producing various kinds of scholarship or digital projects or community-based resources as we figure out how to both be trained in the system as it exists and to clearly communicate the ways the system might adjust to our needs.

As funders shape guidelines, they need to consider longer-term sustainability as well as immediate project support, but that doesn't relieve institutions of the importance of infrastructure. As **Josh Greenberg** noted after considering ideas articulated by focus group members, "What I read through in a lot of these recommendations is where should funding come from for these different pieces of work. I am increasingly of the mind that particularly grant dollars or private philanthropic dollars are best optimized at the level of project work and then overhead on those dollars ... But the sort of infrastructure and the maintenance is increasingly the purview of the institutions because they are the ones who have the durable view."

While funders may not play the role of ongoing support infrastructure, they can help to build it. There are investments that funders can make in building sustainable infrastructure in different kinds of institutions and organizations. Interinstitutional and extra institutional solutions can create powerful and cost-effective approaches to shared services, shared technology, shared expertise, and shared platforms. Intermediary organizations such as JSTOR and HathiTrust were supported by foundations to, in turn, become self-sustaining. Grant makers and grant seekers alike realize project-level funding can be more effective when projects are contextualized in a larger systemic strategy.

Maria Sachiko Cecire, Program Officer in Higher Learning, Mellon Foundation:

We're taking a lot of factors into account in how we're thinking about sustainability. In the past, we

were primarily working with some of the wealthiest colleges and universities in the country. I think you can and should lean on them pretty hard to eventually take over many of the budget lines that they establish through a grant-funded project. But the situation may be different at other types of institutions with fewer financial resources at their disposal. We are always thinking about questions like: what are we expecting of this project? Might it be a sunset project with a clear conclusion date? Or if we think it's a project that we know will need to go on much longer, what alternative sources of support are available and how prepared are we to have longer-term funding horizons for it?

Carly Strasser, Program Manager for Open Science, Chan Zuckerberg Initiative:

Sustainability for infrastructure is really hard. It's even harder if funders have rules on what they are or are not willing to fund. Funders shouldn't have hard lines that we're unwilling to cross. Instead we should be engaging in conversations with infrastructure providers on how we can make these projects last for the long term.

Brett Bobley, Chief Information Officer, NEH:

There are people in the funding community that think we should only judge a project based on its scholarly merit. ... But at the end of the day, if ... they're going to be out of business in a year or so, that is money down the drain. It requires funders to have to put on a different mindset about how you fund something for the long term.

Sustainability also requires taking a hard look at the nature of partnerships and how to build support for smaller institutions in reliably enduring ways.

Monika Rhue, Project Manager, UCLA:

We do this work because we know it's a necessity. We write the grants, we apply for the grants, we receive the grants, we implement the activities of the grants, but then it's like the partnership is gone. How can we continue partnerships with those organizations beyond the grant to help with sustainability? ... There's got to be some way of working with these agencies to understand that ... we may have put a sustainability model in the grant proposal because, you know, that's what the funding required. And some of that sustainability is realistic, but it also depends on where that institution is at that time as far as their own budget ... So a systematic way is how can an agency support sustainability across our funding. Thinking about a broader way that we can share expertise, digital infrastructures and things like that. Thinking holistically about where we are ... think[ing] with us about how we can come up with the best model when it comes to sustainability and don't always make the ownership of sustainability on the person who applied for the grant.

Virginia Steel, Norman and Armena Powell University Librarian, UCLA:

The Modern Endangered Archives Program's preservation grants are given to teams that selfidentify. We have teams working now in over 50 countries around the world. At the end of the day, what we do at UCLA Library is receive copies of the digital files, and our commitment is to make them openly available at no cost and then to preserve them over time and to make sure that a copy remains in the community where the materials are located. So, we're not taking possession of anything; instead, we're providing resources for communities to do work they define as important, and then we receive, publish, and preserve a copy of the digital files. One thing we've noticed—because the program has been going for a few years now-is sometimes it's been a really helpful catalyst to getting more digitization to happen and to continue after the project is concluded locally because the equipment stays; whatever the teams purchase, they get to keep; we've got videos online that provide some training; and we've got materials about how to assign metadata. The idea is to create a knowledge base in all the locations where grants are given and we're not actually running the projects ourselves.

In public institutions, stable funding in this field faces new, serious threats, as legislators in many states are working to defund and ban programs associated with critical race theory and other aspects of social justice. Funders can also play a role in helping institutions make the case for their priorities or to get work done through feasible partnerships.

Kevin C. Winstead, Postdoctoral Fellow, Georgia Tech University:

Institutions are only going to respond to two things, legislators and money, and the legislators are already making it clear what that's going to look like. It is the responsibility clearly of grant funders to make certain things like personnel decisions within your infrastructure, around advisory boards all the way down to who they hire as graduate students, explicitly clear as a way of combating some of the things that are happening. A school like Florida on its own is going to respond to the governor because that's the relationship they have. They need somebody else to tell them to do something different, and for an R1 that means money.

Jewon Woo:

In an effort to react to a bill in the legislature that will remove funding for any program that has diversity, equity, and inclusion as a goal, our college has tried to remove any such language from our curriculum. But then of course we can't fulfill our written mandate from the state department of education which requires preparation in this work as part of our preparation for the workforce. Why should an outside funder work inside this [state] system? Perhaps our community partners—the historical society, the community group—can get the foundation funding and then maybe re-grant some of it to us, rather than the other way around?

Along with values and policies, financial support can be viewed as the infrastructure layer that supports all the others. In the context of enabling critical 21st-century humanities, that layer needs to be viewed as a deep, wide, long-range ecosystem of support, not as quickfix infusions. Commissioners and funders considered how collaborative efforts and networks of funders could have an impact. Commissioner **Charles Henry** has proposed how long term and collaborative funding could enable collaborative planning, a platform of integrated and related elements, as we see in scientific undertakings: The platform ... would be an amalgam of existing platforms, a coherent mosaic of projects, publications, ideas, curricula, and software that is coherently architected and builds upon existing efforts while allowing for new innovations. A value of this platform would be the imagined centrality of what is actually a widely distributed ecology, so that thousands of projects can be easily accessed and used interoperably. Mentally substitut[e] "the humanities" for "science" and there would be a legitimate argument for reconceiving the humanities, or some aspect of the humanities, as a large scale, collaborative, interdependent research project that would benefit enormously if designed and supported like the Hadron collider but with a considerably smaller investment.

As the Commission considered its recommendations, taking a big picture view of collaborative and networked possibilities was a necessary perspective. The recovery work of 21st-century humanities has become essential to the social and intellectual health of our nation. Fostering and sustaining diverse digital scholarship is a grand challenge that merits the focused attention of active coalitions of institutions and the creative financial support of a coordinated network of committed funders.

he Commission's work has cast light on two intertwined and urgent challenges for expanding knowledge of cultures and society: the extraordinary barriers that confront the work of essential recovery scholarship and a critical lack of digital infrastructure in humanistic fields. Examining that intersection has revealed the need for some essential systemic changes in our established structures for supporting humanistic research and study. The Commission learned of brilliant projects and best practices, and we saw how these cases had surmounted—*but not solved*—the problems that are preventing diverse digital scholarship from reaching the audience that needs it, either now or in the future. Without systemic change, much important new work has little expectation for sustained development or for long-term survival.

Infrastructures are not changed or rebuilt overnight. The recommendations that follow are intended as a map, both pointing directions and suggesting steps to get the journey robustly underway. The way forward will necessarily engage a wide and collaborative net of individuals, communities, societies, foundations, and all parts of the academic enterprise. It will entail initiatives and contributions within and across individual institutions, organizations, and communities, and will create new support capacities and new collaborations. It will build on long-established infrastructures and on recent innovations. And in many significant areas, it will require deep reconsideration of assumptions and values, and a readiness to embrace change.

The rich discoveries and voices of recovery scholarship are profoundly changing our understanding of the world. This work must thrive and endure; without it, we are wearing blinders. In fact, we face a future in which a significant segment of valuable digital scholarship across humanistic disciplines will be gone. We confront a challenge that is critical to the health of higher education, to understanding and preserving cultural heritage, and to the universe of knowledge that fuels our society. There are few quick fixes, but there is a clear and urgent path forward.



Recommendation 1: Build two-way streets for knowledge to travel between institutions and communities.

Institutional leaders, scholars, librarians, archivists and communities can work together to design, promulgate, and implement new modes of mutually determined and mutually supportive interactions between academic institutions and their geographically and socially adjacent communities.

Cultural communities have never been passive subjects awaiting "discovery" but were typically ignored or left out of institutional efforts. Communities are doing much of the work of actively excavating, documenting, narrating, and owning their stories on their own terms and through their own networks. They are filling long-ignored gaps in societal knowledge. The recent report of the Association of Public and Land Grant Universities highlighting the imperative for publicly engaged and publicly impactful research explains the essential mission of serving public interest and lays out an excellent road map for institutions to embark on mission-directed change. The Commission's work has shown the need to take the concept of public engagement a step further by calling for bidirectional engagement (two-way streets) between institutions of higher education and the communities outside the gates. While faculty and institutional staff bring knowledge and expertise, knowledge and expertise lives elsewhere as well. Academic institutions need to partner with and facilitate the work of scholars who collaborate with communities, and to take a further step and play a role in ensuring enduring access to community-controlled resources in ethical, caring, and non-extractive ways. We need collections jointly built and cared for by communities and institutions of higher education that will be a source of enduring knowledge.

Steps toward implementation:

- Promulgate, and where needed create, guidelines and toolkits that can assist institutions—in research offices, libraries, academic departments, research centers—in reaching out to and working with communities in ways that engender reciprocity and mutual respect. These tools include models for engagement policies, compensation mechanisms and reporting, and draft agreements concerning obligations and responsibilities.
- Implement a series of convenings at which school and discipline deans, university librarians and other senior curators, and active community archivists confront the difficult issues of "non-ownership collecting" and scholar-community partnerships, and work to identify new approaches, seeking wide understanding of issues and developing win/win models.
- Instigate panels and workshops at scholarly societies and higher education organizations—including administrators, librarians, archivists, scholars and community practitioners—to engage wide discussion and joint problem-solving around universitycommunity collection building strategies, policies, and tools. Illustrate these conversations with success stories and recommendations by organizations such as the Society of American Archivists, (SAA), the Association of Tribal Archives, Libraries, and Museums (ATALM), and the Shift Collective and ensure active participation by community groups.
- Design and issue private and government funding calls targeted to incentivize institutional-community partnerships that are community based and jointly designed.



Recommendation 2: Reorganize institutional research support infrastructures to match the changed nature of the humanities research enterprise.

Institutional leaders—provosts, deans, budget directors, research officers, and department chairs—can recognize and create the kinds of reliable support structures for grants administration, project management, human resources management, and cyberinfrastructure (from data management and technical support to publication and preservation) that are now necessary for much humanities work. Institutions can also work together to build shared support services.

Humanists engaged in digital and community-engaged work need expanded space and increased support for: managing projects with budgetary, administrative, and personnel demands; managing, preserving and enabling access to research data and other digital resources; seeking and administering grant funds; collaborating across departments and disciplines; and, in the case of community-engaged work, collaborating with and employing individuals who are not necessarily official members of the university community. A redesigned infrastructure needs to be accomplished at the institutional level and, especially for smaller institutions, can be advanced by multi-institutional research centers or trans-institutional networks. We recommend actions to incentivize and assist institutions to take this path.

Steps toward implementation:

 Develop a program that would convene a series of meetings designed to change humanities processes that currently create barriers to the team structure of digital scholarship. The aim is to bring together deans, department chairs, active scholars, senior librarians, CIOs, and senior research officers to consider protocols for new collective forms of humanities research and to design and implement restructured budgets and support programs at model institutions. Their program implementation would in turn engage senior budget, administrative, and human resources officers. A cohort of institutions could further create a more formal coalition to demonstrate their commitment to change (e.g., akin to the University Innovation Alliance). This program would be grant supported and include start up awards to incentivize participation and institutional change.

- Develop a report that can inform restructuring efforts by documenting where the structures of scientific teams/labs provide relevant models and where they do not.
- Design and implement targeted funding calls that would strengthen the cross-institutional administrative infrastructures that exist in established research centers (e.g., Black Literature, The Center for Black Digital Research/Colored Conventions, etc.) with an eye to sustainable models for multi-institutional support.



Recommendation 3: Reward brilliant scholarship even when it includes new modes of work and requires new approaches to evaluation.

Provosts, deans, department chairs, and disciplinary societies can adapt appointment, retention, mentoring, tenure and promotion practices in humanities departments to value and reward high quality scholarship manifested in new as well as conventional formats and to appreciate the demanding nature of community-engaged research and scholarship.

Scholarly societies, including the Modern Language Association and the American Historical Association, have begun laying groundwork by developing guidelines for assessing work in digital humanities and community-engaged scholarship and they provide professional development and mentoring for scholars in these areas. The Association of University Presses has updated its peer review best practices to include guidance on evaluating digital and multi-modal works. This work now needs to be taken further and adopted and adopted widely at institutional levels. More needs to be done to expand the work of mentors, fellowships, and cohorts of peer reviewers, all of which are necessary for the kind of strong support network of human resources that can enable scholarly achievement. It is also urgent to extend this work to disciplines that have not yet developed new guidelines. Institutions should be incentivized to recognize the critical need to make the changes described in the updated guidelines.

- Disciplines can strengthen their support networks for peer review of digital and other non-conventional products of research through the work of scholarly societies and other discipline networks. They can promulgate models of *post-hoc* review (important for alternative modes of "publishing") and develop networks and clearing houses of peer reviewersincluding community-peer reviewers whose expertise expands that of the academy- who can appreciate and assess digital and community-engaged work. They can encourage publishers to adopt and adapt these new forms of review. Workshops can train outside reviewers to work alongside scholars to assess both method and content of scholarly endeavors. One aim of these networks would be to recognize and relieve the burden on the relatively small number of senior scholars who are available to participate in review processes in a field that is still emerging.
- Design and seek funding for awards and fellowships that will help scholars pursue their digital work in recovery scholarship and to gain recognition for it. For example, build on the model of the Whiting Public Engagement Fellowships. Aim awards not only at R1 institutions, recognizing work conducted at

smaller and regional institutions and making awards available to communities. Documentation of these awards should be associated with individual profiles using identifiers such as ORCIDs and incorporated into scholarly portfolios and appropriately tracked in faculty productivity platforms.

 Professional development, and in some cases training, for campus-wide tenure/promotion/faculty advancement committees should become a topic in meetings among like institutions, as provosts and chief academic officers gather in associations like the Association of American Universities (AAU), Association of Public and Land Grant Universities (APLU), or the Council of Independent Colleges (CIC). Just as senior administrators have begun to gather to look at open review processes, they should consider the importance of promoting and rewarding innovative and community-engaged work. Academic societies can also play a role in training members who serve on such committees to communicate changing norms to colleagues in different divisions.



Recommendation 4: Grow and nourish the networks and pipelines that build the field and inspire students.

Funders, discipline societies, professional associations, and academic institutional leaders can continue to expand and multiply internships, fellowships, mentoring, and other programs that create interpersonal support networks and pipelines for undergraduates, graduate students and faculty at all levels, and community members. There are many excellent model programs, and at the same time there is an enormous demand for more.

Throughout its conversations and outreach, the Commission heard how essential interpersonal connections and support have been to successful careers and projects, and how beneficial project work had been to undergraduate students-not only academically but in gaining job opportunities. At the same time, participants consistently emphasized the need for expanded, purposeful programs of interpersonal support. Even as successful scholars described their own good fortune in connecting to mentors and partners, they emphasized how many others were struggling and lacked opportunities to connect and gain continuing advice. And while there are in place excellent programs sponsored by ATLAM, AUPresses, SAA, ALA, and schools of information (many initiated with the help of valuable funding from the Institute for Museum and Library Services), feedback from all sectors urged the creation of more internships, scholarships, and pipeline programs to attract students of color and potential community practitioners to digital archival work in racial and social justice. They urged that internships, scholarships, and mentorships for undergraduate students and community "apprentices" become a normal activity within institutions of all sizes, thus reaching the widest possible number of individuals.

- Disciplinary societies and professional organizations can incentivize and stimulate academic institutions to create internship and apprenticeship pipeline programs for undergraduates and community members. For example, professional and discipline organizations can design and promulgate programs, and can seek financial support for regranting to and giving recognition to institutional initiatives.
- Discipline societies can partner with libraries, archives, and their professional organizations to seek funds (e.g., from IMLS) for recruitment from underrepresented communities to publicly engaged projects that utilize library and archival training.
- Recognizing the value to students of communityengaged digital practices, foundations supporting undergraduate education can incentivize curriculum development that includes active student participation in community-based digital humanities projects.
 Funding through regranting organizations could reach a diverse group of institutions, including community colleges.
- Disciplinary societies and ACLS can design and

sponsor mentoring programs and networks.

 Institutions can create paid internships for work in all aspects of digital humanities and communityengaged archiving as a learning experience for diverse students and a workforce for a wide range of projects.



Recommendation 5: Create opportunities for pollination across domains of expertise, within and across institutions.

Chief academic officers and other institutional leaders, funders, and professional organizations can create new structures and opportunities for interaction across fields of expertise within institutions and across institutional, organizational, and community environments, enabling established networks to collide, learn, and collaborate in new ways to produce innovative digital work in racial and social justice and to enable sustainable models.

Energetic and innovative scholars are typically collaborative and well connected to others in their domain. But for their work to thrive, be sustained, and reach wide exposure, it needs cross fertilization with expertise from other disciplinary scholars and practitioners, including technologists, data scientists, publishers and librarians, along with scientists and social scientists experienced in creating research data sets and maintaining digital projects. A number of important and stellar success stories shared with the Commission have benefitted from chance cross-sector, cross-institutional encounters, and these successes illustrate what can be gained from enabling these connections. Too many worthy projects lacking such encounters are short-lived and do not find a sustaining home. And experts in other fields are not gaining the benefit of new perspectives revealed by new recovery scholarship.

- Through grant funding and collaborative initiatives, increase support for backbone organizations, such as the Association of Computers and the Humanities and Reviews in Digital Humanities, and institutional/cross community research centers, such as the Center for Black Digital Research/Colored Conventions Project and the US Latino Digital Humanities Center, to incentivize and enable their capacity for transinstitutional infrastructure.
- Strengthen the emerging field-building infrastructure provided by scholarly associations in recovery fields (such as Native American and Indigenous Studies Association, Society for Disability Studies, African American Intellectual History Society). These organizations offer support to critical new fields and lack the benefit of long-established structures and financial support. In particular, they can be supported in their core operations and for workshops spreading digital scholarship skills.
- Create a venue where scholars across recovery disciplines interact with technologists, data scientists, research data curators, librarians, publishers, and community archivists to explore challenges and opportunities in sustaining digital scholarship.
 <u>HASTAC</u> (Humanities, Arts, Science, and Technology Alliance and Collaboratory) is a model of a venue aiming for creative synergy and shared learning. A model that illustrates the how such a gathering over time solves problems, builds fields, and stimulates new approaches is the Coalition of Networked Information. Travel support and fellowships for attendance to a well-designed venue could bring the benefits to scholars from more kinds of institutions than typically attend existing conferences.
- Funding calls to create events and to establish crossexpertise networks could incentivize efforts to shape new and strengthened collaborative opportunities.



Recommendation 6: Fill the gaps in the scholarly communication infrastructure for new forms of digital work.

Librarians, technologists, scholarly publishers, and peer reviewers have successfully transformed the long-standing publishing and knowledge cycle from print to digital, but it is now time for them to muster their purpose, collaboration, and innovation to adapt the infrastructure of scholarly communication to new kinds of born digital work.

The digital humanities community has tackled some of its many access and publishing challenges, from guidelines for sustainable website creation, to emerging repositories, and important new platforms for digital publishing. But gaps are everywhere across the infrastructure, and—likely because there is no profitable commercial incentive-there is no overarching effort to fill those gaps. While not every project website need enter the permanent scholarly record, too much valuable content goes unrecognized and little used, with faint likelihood of access to it even five or ten years into the future. Connecting established scholarly publication to its supporting evidence base of research data has recently become a recognized challenge, one that is now receiving well-supported and well-coordinated innovation and implementation. It is time to stimulate a similar set of activities to bring the products of digital humanities scholarship to its audience and to ensure that the eye-opening primary resources surfaced by recovery scholars and by community-driven initiatives are widely available and permanently stewarded and preserved.

Steps to implementation:

• Extending work in research data curation, initiate a coordinated effort to fill technical and process gaps in the access, publishing and preservation infrastructure for the primary resources created in the course of digital humanities projects and the applications that are

created to access and make use of these collections. This work might be accomplished through a coalition of lead institutions and organizations, working together with funding agencies, such as IMLS, NEH and NSF, to articulate and prioritize needs and instigate solutions. There are no simple answers, but, as demonstrated by the creation of digital infrastructure for standard publications, much can be accomplished through energized, coordinated initiatives.

- As institutions consider their support structures for humanities research (Recommendation 2) support to meet new infrastructure requirements (such as PID assignment and repository deposit) should be built in, along with training for scholars to determine their realistic expectations for sustainability of their projects and how to implement those expectations through digital infrastructure.
- Guidelines and charters that set out goals and understanding of project aims and anticipated life cycles should be shared and provided as templates. These help to foster the use of standards and good practices in project creation and help to set expectations about a project's duration among all involved parties, including active discussion about sunsetting and the ending of projects or their preservation.
- The publishing process, with its elements of quality review, dissemination, and connection to indexing and libraries, needs support for efforts to accommodate new forms and links to primary source content. Innovative centers (such as Brown's Center for Digital Scholarship) enable experimentation by presses without the presses having to take on all the risk. Platforms such as SCALAR, Manifold, and Fulcrum now represent sector wide investments and continue to need support as they become better established. Grant funding has moved innovation forward at selected presses; a broader initiative (a "Commonwealth Fund") to expand this work and encourage more partnerships and participation could enable scholarly book and journal publishers to tackle challenges-including in the review processes-to disseminating new digital work in racial and social justice.
- Digital work in recovery scholarship shares the access and preservation problems inherent in "gray literature,"

which now is typically embodied in websites. Innovative harvesting and collection approaches, such as those provided by <u>Coherent Digital</u>, are necessary in a new generation of lighter touch and lower investment preservation and access.

 Libraries can collaborate to collect important digital work in recovery scholarship, modeling their efforts on shared area studies collecting and other digital archiving initiatives. Work that does not enter library collections in some manner faces a dubious preservation future.



Recommendation Seven: Build the support structures that will enable diverse institutions and communities to accomplish sustainable work and preserve its content.

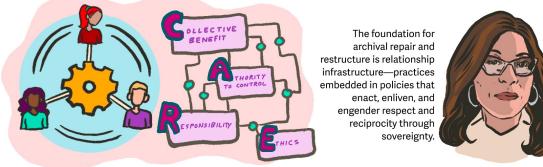
Funders and professional and academic leaders can collaborate to design and initiate new organizations, collaboratives, and service structures that can extend technical, administrative, and advisory capacities to all types of institutions and community initiatives. Leaders of existing collaborative organizations can reshape or expand their services to support a more diverse base.

Exciting findings and new resources are emerging across a wide range of institutions and communities; the diverse range of sources and interest in the humanities can often be more compelling outside of the bestresourced institutions, enabling digital scholarship with different perspectives in different contexts. But beyond R1s and other well-resourced, predominantly white institutions—and not infrequently within them—scholars and archivists struggle to cobble together the means to achieve their goals. The Commission saw pressing needs for: administrative support to obtain grant funds and manage projects; sustainable and robust technology platforms, especially for repositories and web management; "help line" advice not only for technology

- Use targeted funding calls to stimulate and incentivize institutions, consortia, associations, and other groups to plan and create new service organizations, or reshape and expand existing organizations, for scholars and archivists creating digital projects in reparative fields.
- Convene leaders of existing programs that connect smaller as well as larger institutions (e.g., I-CHASS, Lyrasis, ITHAKA) to explore potential ways to expand, replicate, and innovate the kinds of support they offer. Successful campus based hubs that have demonstrated particular capacities to support recovery scholarship (such as I-CHASS and I-Open) should be supported in providing office hours and help lines for less well-funded institutions.
- Convene leaders of regional institutional consortia to explore new service models they might offer in support of digital research, publishing, and preservation. These should include grant-writing support for scholars and staff who are endeavoring to craft strong proposals without the development offices more often found at R1 universities. Shared capacities could enable access to platforms, tools, and dissemination outlets for scholars across many types of organizations.
- Create a focused network of funders that seeks to advance equity and inclusion across all academic disciplines and that recognizes how the work of recovery scholarship in the humanities has lessons for equity across the academic spectrum. Growing interest can be seen among funders in related but different movements that span the biological sciences, physical science, health, social sciences, and humanities, such as "community -engaged scholarship," "experiential learning," "publicly accessible scholarship," and "open access/open knowledge." The Pew Transforming Evidence Funders Network and the MacArthur-led Press Forward are examples of how a pluralistic group of funders can address pressing, complex, big-picture issues by finding leverage points in common.

Recommendations: The Voices of Participants

Knowledge has to travel on a TWO-WAY STREET between institutions and communities



KIM CHRISTEN



The women we interview are more than 'resources' to be mined for information about the past; they are collaborators in intimate acts of memory-keeping.



MARIA COTERA



How can we get that final deliverable, that website, that digital project, into the hands of the people who it really affects and who are going to be the stewards of that legacy and remain in community?



JOSH HONN

The humanities have changed; academic institutions need to change too.

My role is to train faculty how to do project management, how to do plan management, utilize

to begin to look at the labor and the representations of labor that is not available to

these projects.



Linda García Merchant





Dan Cohen characterized the problem as the need to Meet Operational Needs Each Year, i.e., MONEY.



Dan Cohen



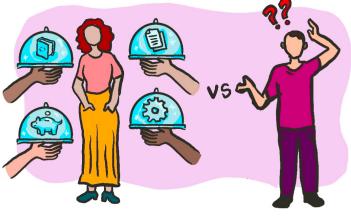
If we speak of a humanities core in the way we do for science that becomes understood as an investment resource... something that benefits multitudes of scholars at an institution.

Ben Vinson III



What takes someone who has the job of grant project manager five minutes to do, may take me all day to figure out. And so that has taken my time away from producing various kinds of scholarship or digital projects or community-based resources.

Katrina Powell



Reward the work: recognize that brilliant scholarship includes new modes of work and new ways to evaluate it.



So many digital projects involve multiple people, and so much of the model of evaluation in the humanities presumes a single author. It's tricky with digital scholarship to ask people to untangle their very rich and productive collaborations.

Christopher Warren





Some of the things that I'm hearing from junior faculty members in the digital humanities is that they're now expected to do everything. That if they want to do a DH project, they have to do that in addition to articles, in addition to academic presentations, in addition to printed and bound books.



Ricia Chansky



Jeffrey Cohen

Doctors review the work of doctors, dancers and choreographers review the work of dancers and choreographers. Those in other fields have long been comfortable gauging the significance of contributions made in practice, interpretation, performance and public impact. The Humanities don't need to reinvent anything, but re-adjust with intentionality and care.

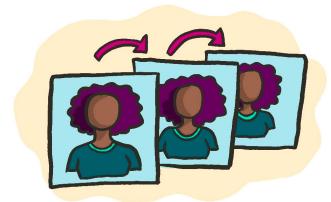


Grow the networks and pipelines that build a field and inspire students.



Maryemma Graham

We need to give our students and staff more say in projects and create career paths to move them up to administrative and lead work.



The idea is succession planning. So ideally I would like to see my replacement look like me. I was mentored by people that looked like me, and they had been stewarding the materials in my collection 100 plus years... I would say the greatest challenge in this subfield of the HBCU world is the apprenticeship to make it a viable and attractive option that graduate school and employment could be rewarding.



Ida Jones



Zoe Wake Hyde

A lot of it is really related to what digital spaces enable in terms community development and people being able to come together because the ideas are there. One example that emerged organically on the platform is the composers of color group... bringing the histories and the presence of composers of color into contemporary education.

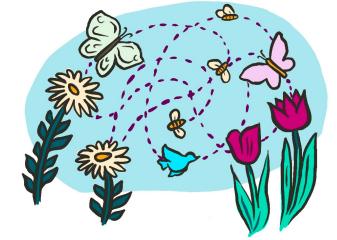


Sustainability depends on cross fertilization; create the opportunities to make it happen.



Terri Taylor

Part of what we're doing is trying to get a lot better in our own approach to networks, because one thing funders have that's often hidden are really rich networks. We can provide huge value in connecting people.



In this broad ecosystem, these are highly complex networks of folks who are unaware of each other almost completely. How do we facilitate network connections that are not currently happening, but could prove really beneficial to everyone involved?



R. Darrell Meadows



Kenton Rambsy

In my Digital Humanities and African American literature course, #TheJayZClass, my institution had a program to facilitate cross-disciplinary work, and the crosspollination with library science and computer technology has been illuminating. The fusion of their data management and analytical skills with our literary inquiries elevates our analysis, highlighting the evolving relationship between literature, music, and digital technology.



Fill the critical digital gaps in our system of scholarly communication.



Roopika Risam

Part of our hope...in doing this is that there would be some record of the projects that if they cease to be maintained, or if they're sunsetted, there is some documentation that they existed and that they were there.





The DOI is now the entryway into recognition, into credit, into getting into the information supply chain so your work will get reviewed and preserved.



Charles Watkinson



Stephen Rhind-Tutt

We've traditionally set up systems that require a great deal of money and a great deal of learning for people to publish. And in doing so, we've shut down large swathes of voices around the world. What I'm really excited about is enabling these communities... to speak with their own voices and to bring skills of access, preservation and curation to those voices.



Build the supports that enable diverse institutions and communities to play in the field.



Sustainability for infrastructure is really hard. It's even harder if funders have rules on what they are or are not willing to fund. Funders shouldn't have hard lines that we're unwilling to cross. Instead we should be engaging in conversations with infrastructure providers on how we can make these projects last for the long term...



Carly Strasser



Monika Rhue

Some of the basic challenges that we faced early on at smaller institutions are because we typically wear many hats. So you may be the director, you may be the octopus, but you're also the one wanting to push having your collections accessible. At larger institutions, they can work with their development officers or grant officers to write a proposal. But that's not the case at these smaller institutions.





Funding agencies are moving to include more kinds of communities in these sort of large scale grants. But the level of staff you need to even produce that grant is unattainable for most people. You have to have capital to even get the capital.



Marisa Parham

Appendix: Commissioners and Project Team

Commissioners

Edward L. Ayers, Tucker-Boatwright Professor of the Humanities and Executive Director of New American History, University of Richmond Edward Ayers is the author of eight books, has won the Bancroft and Lincoln Prizes for his scholarship, been named National Professor of the Year, received the National Humanities Medal from President Obama at the White House, served as president of the Organization of American Historians, and was the founding board chair of the American Civil War Museum. He is president *emeritus* at the University of Richmond, where he serves as executive director of New American History and Bunk, dedicated to making the nation's history more visible and useful for a broad range of audiences. His latest book is American Visions: The United States, 1800-1860 (W.W. Norton, 2023)

Lisa Brooks, Winthrop H. Smith 1916 Professor of American Studies and English at Amherst College Lisa Brooks is the Winthrop H. Smith 1916 Professor of American Studies and English at Amherst College, where she enjoys working with undergraduate students on digital humanities projects. She is the author of The Common Pot: The Recovery of Native Space in the Northeast (University of Minnesota Press, 2008) and Our Beloved Kin: A New History of King Philip's War (Yale University Press, 2018), which received several awards, including the Bancroft Prize for American History and Diplomacy and the New England Society Book Award for Historical Nonfiction. Brooks collaborated with multiple students and the irL humanities lab to create the digital companion to Our Beloved Kin, which invites engagement through multiple digital pathways and features innovative maps, place-based images and archival documents. She has also collaborated on community-engaged and digital projects, including the Digital Archives of Native American Petitions in Massachusetts and Mapping Native Intellectual Networks of the Northeast. She has been honored to pursue archival research, place-based writing and digital projects as a Whiting Public Engagement Fellow, a Guggenheim

Fellow, an ACLS Fellow and, most recently, as the Mellon Distinguished Scholar in Residence at the American Antiquarian Society.

Kim Christen, Associate Vice President, Research Advancement, Washington State University Kim Christen is the Associate Vice President for Research Advancement and Partnerships at Washington State University. She is a Professor in the Department of Digital Technology and Culture, and she was the director of the Center for Digital Scholarship and Curation at WSU for the last eight years and she continues to support the center as a Faculty Research Associate. Her research and scholarship explore the intersections data management, software systems, and information ethics specifically addressing issues of access, use and reuse of cultural heritage and traditional knowledge in global network. Her work has been published widely in international journals. Dr. Christen is the founder of Mukurtu CMS an opensource software platform designed with Indigenous communities globally to meet their unique information, curatorial, and data needs. She is a co-Director of Local Contexts, a global initiative to provide digital tools and legal frameworks for stewarding digital cultural heritage and the management of intellectual property by Indigenous communities. Dr. Christen collaborates broadly emphasizing communityengaged research including working closely with Native American nations across Washington state and nationally as well as with Indigenous communities globally to build digital tools and networks as catalysts for social change.

Dan Cohen, Vice Provost for Information Collaboration, Dean of the Library, and Professor of History, Northeastern University

Dan Cohen is the Vice Provost for Information Collaboration, Dean of the Library, and Professor of History at <u>Northeastern University</u>. His work has focused on the impact of digital media and technology on all aspects of knowledge and learning, from the nature of libraries and their evolving resources, to twenty-first century research techniques and software tools, to the changing landscape of communication and publication. He has directed major initiatives that have helped to shape that future. Prior to his tenure at Northeastern, he was the founding Executive Director of the <u>Digital Public Library of America</u>, which brought together the riches of America's libraries, archives, and museums, and made them freely available to the world.

Before DPLA, Dan was a Professor of History in the Department of History and Art History at George Mason University and the Director of the Roy Rosenzweig Center for History and New Media. There he oversaw projects ranging from the September 11 Digital Archive to the popular Zotero research tool.

Maria E. Cotera, Associate Professor of Mexican American and Latino Studies, University of Texas— Austin.

Maria Eugenia Cotera is an associate professor in the Mexican American and Latino Studies Department at the University of Texas-Austin. She holds a PhD from Stanford University's Program in Modern Thought, and an MA in English from the University of Texas. Her first book, Native Speakers: Ella Deloria, Zora Neale Hurston, Jovita González, and the Poetics of Culture, (University of Texas Press, 2008) received the Gloria Anzaldúa book prize for 2009 from the National Women's Studies Association (NWSA). Her edited volume (with Dionne Espinoza and Maylei Blackwell), Chicana Movidas: New Narratives of Feminism and Activism in the Movement Era (University of Texas Press, 2018) has been adopted in courses across the country. Professor Cotera is the co-founder and project director of the Chicana por mi Raza Digital Memory Collective, an online interactive archive of oral histories and material culture documenting Chicana Feminist praxis over the Long Civil Rights period. She has curated several public history exhibits, including Las Rebeldes: Stories of Strength and Struggle in southeast Michigan (2013) and Chicana Fotos: Nancy De Los Santos (2017) and currently serves as an advisor/consultant numerous large-scale digital public humanities projects focusing on the Latinx experience.

Meredith R. Evans, PhD, Director of Special Collections and Museum, Atlanta, GA

Meredith Evans is a manager of cultural heritage since the fall of 2015 has been the appointed director of the Jimmy Carter Presidential Library and Museum, administered by the National Archives and Records Administration (NARA). She is the first African American woman to direct a Presidential Library. As director she focuses on civic engagement, the role of the presidency and public policy, and making accessible the records of President Carter, his Cabinet, the White House administration and Mrs. Rosalyn Carter. Evans has expertise in selection, acquisition and preservation of print, audio, visual and digital collections, management, library-wide staff development, fundraising, and community engagement. She is the 74th President and a Fellow of the Society of American Archivists and holds an additional Presidential appointment as a member of the National Historical Publications and Records Commission (NHPRC). She has worked in academia for over 20 years and written on the role and value of museums, libraries and archives. Evans earned a master of library science from Clark Atlanta University and master's degree in public history at North Carolina State University and a doctorate from the University of North Carolina at Chapel Hill.

Maryemma Graham, Distinguished Professor Emerita, University of Kansas, Founder, History of Black Writing

Maryemma Graham, University Distinguished Professor Emerita at the University of Kansas, is best known as the founding director of the History of Black Writing (1983-2021). Her leading initiatives to promote research, teaching, and public engagement with Black literary studies, and successful track record with funding from the NEH, the Ford, and Mellon Foundations have made HBW a major center for literary recovery, archival preservation, and the early use of interactive technologies. Part of an expanded network of digital scholars and practitioners who are creating new knowledge networks that engage multiple audiences, Graham is also a widely known author/editor of 12 books that have helped to redefine the field, especially The Cambridge History of African American Literature with Jerry W. Ward, Jr. The House

Where My Soul Lives: The Life of Margaret Walker, the first complete biography of the twentieth-century poet, novelist, and institution builder was published in 2022.

Josh Greenberg, Program Director, Alfred P. Sloan Foundation

Josh Greenberg is a Program Director at the Alfred P. Sloan Foundation, where he is responsible for overseeing the Technology and New York City programs. He established the Technology program after joining the Foundation in 2010, and has since developed a portfolio of grants seeking to advance data science, data curation, citizen science, scholarly communication, collaboration platforms, and open source software. He received his BA in History of Science, Medicine and Technology from Johns Hopkins University, and an MA and PhD degrees from Cornell University's Department of Science & Technology Studies. Before working at the Sloan Foundation, he was the New York Public Library's first Director of Digital Strategy and Scholarship, where he founded and led the Digital Experience Group and the NYPL Labs team. Prior to that, he was Associate Director for Research Projects at George Mason University's Center for History and New Media. He currently serves on the National Academies' Board on Research Data and Information and the ACLS Commission on Fostering and Sustaining Diverse Digital Scholarship, and he is a Board Advisor for Code for Science and Society; previous board service includes the American Geophysical Union, the Center for Open Science, and the Metropolitan Library Council.

May Hong HaDuong, Associate University Librarian and Director, UCLA Film & Television Archive

May Hong HaDuong joined the UCLA Film & Television Archive as its fourth director in 2021. Previously, she oversaw access to the collection of the Academy Film Archive for 13 years. Her connection to UCLA began as a graduate of the UCLA Moving Image Archive Studies program and then as the project manager for the Outfest UCLA Legacy Project for LGBTQ Moving Image Preservation, a collaboration between the UCLA Film & Television Archive and Outfest to collect and preserve queer moving images. HaDuong currently serves on the National Film Preservation Board, the Board of Directors of the ONE Institute, UCLA Chancellor's Council on the Arts, and UCLA's Community Engagement Advisors Network.

Charles J. Henry, President, Council on Library and Information Resources

Charles Henry is the President of the Council on Library and Information Resources (CLIR). Before coming to CLIR, he was the Vice Provost and University Librarian at Rice University. He served as publisher of Rice University Press, the nation's first all-digital university press; and was a member of the American Council of Learned Societies (ACLS) Commission on Cyberinfrastructure in the Humanities and Social Sciences. He is currently on the Board of Trustees of Tan Tao University in Vietnam and serves as co-PI of the Digital Library of the Middle East. Henry has written dozens of publications and has received numerous grants and awards, including from The Andrew W. Mellon Foundation, the Samuel H. Kress Foundation, the National Endowment for the Humanities, the National Science Foundation, and the J. Paul Getty Trust. He received a Fulbright senior scholar grant for library sciences in New Zealand and more recently in China, and a Fulbright award for the study of medieval literature in Vienna, Austria. He holds a PhD in comparative literature from Columbia University and is an elected fellow of the American Academy of Arts and Sciences.

Bergis Jules, Archivist, Shift Collective

Bergis Jules is an archivist and a founding member of Shift Collective, a non-profit consulting and design group that helps organizations better engage, collaborate with, and reflect their local communities. As an advocate for community-based archives, he is interested in developing solutions that can grow the capacity and achieve long term sustainability in these types of cultural memory organizations, and especially those that focus on documenting the lives of marginalized people in our society. He is also passionate about incorporating ethics and care into how we collect and preserve digital content from the web and social media about people that are most vulnerable to harm in those spaces. Bergis is a co-founder and project director for **Documenting** the Now, which seeks to develop digital tools and best practices that support the ethical collection, preservation, and use of web and social media content, and a co-founder of Archiving the Black Web, an initiative aimed at growing web archiving skills of Black archivists and memory workers, and increasing the quantity, quality, and accessibility of web archive collections that can support the study and further documentation of the Black experience. He received a master's degree in library and information science with a Specialization in Archives and Records Management and a master's degree in African American and African Diaspora Studies from Indiana University. Bergis uses he/him pronouns.

Marisa Parham, Professor of English and Digital Studies, University of Maryland

Marisa Parham is Professor of English and Digital Studies at the University of Maryland, where she is PI and director of the African American Digital and Experimental Humanities initiative (AADHUM) and is associate director for the Maryland Institute for Technology in the Humanities (MITH). Parham also serves as a Leader-in-Residence for the Breaking the M.O.L.D. Initiative, which develops "a diverse set of leaders... shaped by arts and humanities' scholarly values and distinct skills." Parham holds a PhD in English and Comparative Literature from Columbia University and is the author of several books and edited volumes. She is also the writer, designer, and programmer for numerous digital essays, crowdsourced arts experiments, and physical computing projects. Recent examples of this work include Material Conditions 01, co-curated with Cassandra Hradil and Andrew W. Smith for the 2022 Wrong Biennale and the digital-interactive scholarly essay .break .dance, which is also anthologized in the Electronic Literature Collection (ELC4) and was a 2021 honorable mention for the N. Katherine Hayles award from the Electronic Literature Organization. Prior to arriving at UMD Parham was Professor of English and Faculty Diversity and Inclusion Officer at Amherst College, and a former director of Five College Digital Humanities.

Kenton Rambsy, Associate Professor of English/ Data Science and Analytics, Howard University

Kenton Rambsy is an Associate Professor of African American literature at Howard University, with a dual appointment in The Center for Applied Data Science and Analytics (CADSA) as a data storytelling specialist. He earned his PhD in English from the University of Kansas in May 2015 and graduated Magna Cum Laude, Phi Beta Kappa from Morehouse College in 2010. Rambsy's research focuses on 20th and 21st century African American short fiction, Hip Hop, and book history. His 2022 book, The Geographies of African American Short Stories, explores the nuanced literary art of African American short fiction, examining how writers depict characters navigating diverse social and physical environments. His ongoing Digital Humanities projects leverage datasets to highlight significant trends and thematic shifts in black literature and music. Dr. Rambsy is also the author of #TheJayZMixtape (2018) and Lost in the City: An Exploration of Edward P. Jones's Short *Fiction* (2019), which connect directly to his research interests by illuminating recurring themes in black creative works. A 2018 recipient of the Woodrow Wilson Career Enhancement Fellowship, in 2021, he co-founded The Literary Data Gallery, an online platform funded by the Mellon Foundation that showcases data-driven visualizations of Black creative works and artists.

K.J. Rawson, Professor of English & Women's, Gender, and Sexuality Studies and Director of the Humanities Center, Northeastern University

K.J. Rawson is Professor of English and Women's, Gender, and Sexuality Studies at Northeastern University where he also serves as Director of the Humanities Center. He is the founder and director of the Digital Transgender Archive, an awardwinning online repository of trans-related historical materials, and he is the chair of the editorial board of the Homosaurus, an international LGBTQ linked data vocabulary. His work is at the intersections of the Digital Humanities and Rhetoric, LGBTQ+, and Feminist Studies. Focusing on archives as key sites of cultural power, Rawson studies the rhetorical work of queer and transgender archival collections in both brick-and-mortar and digital spaces. He has co-edited special issues of *Peitho* and *TSQ* and he co-edited *Rhetorica in Motion: Feminist Rhetorical Methods and Methodologies* (University of Pittsburgh Press, 2010). Rawson's scholarship has appeared in *Archivaria*, *Enculturation, Peitho*, Present *Tense, QED, RSQ, TSQ*, and several edited collections.

Roopika Risam, Associate Professor of Digital Humanities and Social Engagement, Dartmouth College

Roopika Risam is Chair of Film and Media Studies and Associate Professor of Digital Humanities and Social Engagement at Dartmouth College. Her research focuses on data histories, ethics, and practices at intersections of postcolonial and African diaspora studies, digital humanities, and critical university studies. Risam's work in digital humanities has been supported by over \$4.3 million in grants from funders including the National Endowment for the Humanities and the Mellon Foundation. She is the author of New Digital Worlds: Postcolonial Digital Humanities in Theory, Praxis, and Pedagogy (2019), and has edited multiple volumes, including Intersectionality in Digital Humanities (2019) and The Digital Black Atlantic (2021) in the Debates in the Digital Humanities series at University of Minnesota Press. Risam is co-founding editor-in-chief of Reviews in Digital Humanities, a journal that peer reviews digital humanities scholarship. She is also director of the Digital Ethnic Futures Consortium, which supports initiatives in digital humanities and ethnic studies at under resourced higher education institutions. From 2022-2024, Risam served as president of the Association of Computers and the Humanities. She recently received the 2023 Diversity, Equity, and Inclusion Award from the International Association for Research in Service Learning and Community Engagement.

Claire Stewart, Professor and Juanita J. and Robert E. Simpson Dean of Libraries and University Librarian, University of Illinois Urbana-Champaign

Claire Stewart is Professor and Juanita J. and Robert E. Simpson Dean of Libraries and University Librarian at the University of Illinois Urbana-Champaign. Before joining Illinois, Stewart served as Professor and Dean of Libraries at the University of Nebraska-Lincoln (UNL), Associate University Librarian for Research and Learning at the University of Minnesota Twin Cities, and held several positions at Northwestern University over a 21-year period, including director of the Center for Scholarly Communication and Digital Curation and head of Digital Collections. Stewart's scholarly interests include information policy and curation structures. She has published and presented on copyright, open access, open-source software development, digital humanities, data management, curation and preservation. She has been an active leader through committees of the Big Ten Academic Alliance, Association of Research Libraries, and American Council of Learned Societies, and currently serves as Past Chair of the Board of Governors for the HathiTrust digital library partnership. Stewart holds a Bachelor of Arts in English literature with a minor in humanistic studies from St. Mary's College and a Master of Library and Information Science from Dominican University.

Gabriela Baeza Ventura, Professor of Spanish, Department of Hispanic Studies, University of Houston; Deputy Director, Arte Público Press; Director, Recovering the US Hispanic Literary Heritage Program; Co-Director, US Latino Digital Humanities Center

Gabriela Baeza Ventura is professor of Spanish with a specialization on US Latinx literature in the Department of Hispanic Studies at the University of Houston. She is deputy director at Arte Público Press, the premier US Latino publishing house, director of the Recovering the US Hispanic Literary Heritage Program, and co-director of the US Latino Digital Humanities Center. Her research covers various aspects of US Latino literature and digital humanities including women, immigration, recovered literature, and YA and children's literary production. Her publications include the monograph: La imagen de la mujer en las crónicas del "México de afuera;" two anthologies: Con otra Mirada. Cuentos hispanos de los Estados Unidos and US Latino Literature Today: Anthology of Contemporary Latino Literature; an edition of the collected works of Chicana-renowned poet, Angela de Hoyos. She also co-edited and introduced three collections of essays on Central American literature, Recovering

the US Hispanic Literature, and US Latino Journals and Newspapers. Baeza Ventura is a member of the following committees on scholarly digital editions: Next-Generation Historical and Scholarly Digital Editions, National Historical Publications and Records Commission and the National Endowment for the Humanities and the Mellon-ACLS Commission on Fostering and Sustaining Diverse Digital Scholarship.

Ben Vinson III, President, Howard University

Ben Vinson III is the 18th president of Howard University and a tenured professor of history in the University's College of Arts and Sciences. As president, he is tasked with inspiring, innovating, and strategically leading the Howard community which include undergraduate and graduate students, faculty, and staff. Vinson was most recently provost and executive vice president at Case Western Reserve University. He is an accomplished historian of Latin America, and the recipient of the 2019 Howard F. Cline Book Prize in Mexican History for his book, "Before Mestizaje: The Frontiers of Race and Caste in Colonial Mexico." Prior to his appointments at Howard and CWRU, Vinson also served on the faculties of Barnard College and Penn State before joining Johns Hopkins as a professor of history and founding director of its Center for Africana Studies. At Johns Hopkins, he served as a vice dean for centers, interdisciplinary studies and graduate education before becoming dean of George Washington University's Columbian College of Arts and Sciences. Vinson earned a bachelor's degree from Dartmouth College and a doctorate from Columbia University.

Charles Watkinson, Director, University of Michigan Press, and Associate University Librarian, Publishing, University of Michigan Library

Charles Watkinson oversees the Publishing division of the University of Michigan Library. This includes being director of the University of Michigan Press, which publishes around 100 books a year; oversight of a publishing services unit that hosts the works of other publishers on its Fulcrum open-source platform; and oversight of the Deep Blue repository and research data services unit. With a background in archaeology and anthropology, Charles has a strong commitment to digital preservation and is interested in issues of ownership, access, and credit. His publishing career includes positions in commercial and society publishing, as well as within university presses and libraries. He has recently served as president of the Association of University Presses and has also been on the Board of the Society for Scholarly Publishing. He was an initiator of the Library Publishing Coalition and is on the Boards of the OAPEN Foundation and Open Access Book Data Trust, which both advance open access book publishing.

Stacie Williams, Archives and Libraries

Stacie Williams is trained in myriad aspects of archives management and librarianship, including metadata creation, public services, collection development, digitization, repository management, digital infrastructure, and strategic planning. She has experience working in academic, public, research, corporate/special, government, and communitybased libraries and archives. Additionally, she is an award-winning reporter and copy editor, thorough researcher, and effective interviewer, with experience writing and editing investigative stories, hard news, features, Q&As , reviews, and briefs. Her work has been published in the Chicago Review of Books, Medium's "Human Parts" series, Belt magazine, Gordon Square Review, Midnight Breakfast, VICE, Racked, New York magazine, The Nation, LitHub, The Rumpus, The Toast, Fourculture, and Catapult. Her bibliomemoir, Bizarro Worlds, is part of the **AFTERWORDS** series published by Fiction Advocate in 2018. Williams graduated from the University of Wisconsin-Madison in 2001 with a Bachelor of Arts degree in Journalism (JBA). She also holds a Master of Science degree in Library Science and a concentration in Archives Management from Simmons College's Graduate School of Library and Information Sciences.

Jewon Woo, Professor of English, Lorain County Community College

Jewon Woo is a professor of English at Lorain County Community College, Ohio. She teaches African American, American, and Women's literatures, as well as Black Digital Humanities. Her research includes topics such as Black Print Culture, Black periodicals, performance, 19th-century American culture and literature, community-based pedagogy, pedagogy for under-represented students, and digital humanities. Recently, she published a digital humanities project titled *Ohio's Black Newspapers in the 19th Century*, with support from the ACLS, NEH, and Mellon Foundation. She currently serves as a JT Mellon Satellite Partner at the Center for Black Digital Research at Penn State University, contributing her expertise in reading old Black newspapers to the Colored Conventions Project. Woo holds a PhD in English and Studies in Africa and African Diaspora from the University of Minnesota.

Project Leaders

Carol A. Mandel is Dean Emerita of New York University Libraries. She has served on the boards of many groups concerned with access and preservation, including the Association of Research Libraries, the Digital Library Federation, the Digital Preservation Network, HathiTrust, Ithaka Harbors, and the Library of Congress National Digital Information Infrastructure and Preservation Program; she currently serves as Vice Chair of the Board of the Council on Library and Information Resources (CLIR). Her writing and related work focuses on issues and strategies for sustaining the many new forms of valuable content that are digital only, and that are eluding traditional approaches to collection and stewardship. James Shulman serves as vice president and chief operating officer of ACLS. His latest book is *The Synthetic University; How Higher Education Can Benefit from Shared Solutions and Save Itself* (Princeton University Press, 2023). From its founding in 2001 to 2016 he was president of Artstor. At the Mellon Foundation in the 1990s, he collaborated with William G. Bowen and Derek Bok on *The Shape of the River: Long-term Consequences of Considering Race in College and University Admissions.* He also wrote (with William G. Bowen), *The Game of Life: College Sports and Educational Values.*

Project Team

Dr. Katrina Fenion is an assistant professor at the University of Maryland College of Information. She is a faculty affiliate of the University of Maryland Center for Archival Futures and the Maryland Institute for Technology in the Humanities. Her research focuses on the sustainability and preservation of digital scholarship and broader infrastructures for cultural, scholarly, and scientific knowledge, ranging from digital community archives to data repositories. Her work aims to support research communities and knowledge organizations creating long-lived, impactful digital collections, which in turn support the advancement of knowledge and the endurance of communities. She earned her master's and PhD in Library and Information Sciences at the University of Illinois at Urbana-Champaign.

Zoe LeBlanc is an assistant professor in the School of Information Sciences at the University of Illinois Urbana-Champaign, specializing in digital humanities and the histories of information. She is co-authoring Data Work in the Humanities with Meredith Martin and developing Informing the Third World, a digital project on anti-colonial information infrastructures. Zoe is actively engaged in several collaborative initiatives, including serving as a founding member of the Cultural Analytics Teaching and Research Initiative, the Principal Investigator for the Coding DH Project, a Trustee and Technical Lead for The Programming Historian, and a founding member of the SSHRC-funded Non-Aligned News Agency Research Project. Previously, she was a Postdoctoral Associate and Weld Fellow at Princeton University's Center for Digital Humanities and a digital humanities developer at the Scholars' Lab at the University of Virginia. She earned her PhD in History from Vanderbilt University in 2019.

Keyanah Nurse is the senior program officer for Intentional Design for an Equitable Academy (IDEA) Programs, where she leads the Digital Justice Grants Program and co-leads the Intention Foundry. Before joining the ACLS staff in September 2021, she served as an ACLS Emerging Voices Postdoctoral Fellow at the University of Illinois Urbana-Champaign. There, she contributed to a variety of doctoral career diversity initiatives, as well as received training in digital humanities for her research on the history of the global Black press. As a historian of the African Diaspora with a specialization in modern Latin America, her research interests include liberalism, state formation, race, gender and sexuality, and black intellectual traditions. She received her PhD in history from NYU in May 2020 and her BA in Hispanic studies from Columbia University in 2014. In addition to her scholarly work, Keyanah has written extensively on race, gender, sexuality, and contemporary pop culture for public audiences, contributing to the academic blog Black Perspectives as well as serving as senior editor for Honeysuckle Magazine, an independent NYC-based arts and culture publication. She also serves as a research consultant for the podcast Multiamory, which explores non-normative relationship orientations from an intersectional perspective.

Appendix: Participants in Focus Groups and Interviews

Elizabeth Murice Alexander

Assistant Clinical Professor, African American Digital & Experimental Humanities, MITH-University of Maryland, College Park

Jaquelina E. Alvarez

Co-director of Oral History Lab (OHL), University of Puerto Rico at Mayagüez

Alexandra Apavaloae

Senior Policy Analyst, Social Sciences and Humanities Research Council (SSHRC)

Jennifer Ashley

Associate Professor in the Global Affairs Program, George Mason University

Chad Attenborough

Editorial Assistant, University of California Press

Erin Barsan

Senior Program Officer, Office of Library Services, Institute for Museum and Library Services

Allison C. Belan

Director for Strategic Innovation and Services, Duke University Press

F. Warren "Ned" Benton

Professor in the Department of Public Management, John Jay College of Criminal Justice

Dorothy Berry

Digital Curator for the Smithsonian National Museum of African American History and Culture

Daina Ramey Berry

Professor and Michael Douglas Dean of Humanities and Fine Arts, University of California, Santa Barbara

Suzanne Board

Deputy Director, Policy and International, Social Sciences and Humanities Research Council of Canada

Brett Bobley

Chief Information Officer and Director of the Office of Digital Humanities, National Endowment for the Humanities

Lisa Brady Department Chair of History, Boise State University

Joshua Burford Co-Founder, Invisible Histories

Joel Burges

Associate Professor of English and Visual & Cultural Studies, University of Rochester

Matt Burton

Associate Teaching Professor, School of Computing and Information, University of Pittsburgh

RaeLynn Butler

Secretary of Culture and Humanities, The Muscogee (Creek) Nation

Kathleen Canning Dean of the School of Humanities, Rice University

Tamar Carroll Department Chair of History, Rochester Institute of Technology

Maria Sachiko Cecire Program Officer in Higher Learning, Mellon Foundation

Sarah C. Chambers Department Chair of History, University of Minnesota

Tao-Tao Chang

Associate Director for Infrastructure and Major Programmes, Arts and Humanities Research Council, UK Research and Innovation (UKRI)

Ricia Anne Chansky

Professor of Literature and Director of Oral History Lab (OHL), University of Puerto Rico at Mayagüez

Jeffrey Cohen Dean of Humanities, Arizona State University

Sara Cohen Editorial Director, University of Michigan Press

Jason Colman

Director of Michigan Publishing Services, University of Michigan Library

Anne Cong-Huyen

Director of Digital Scholarship, Columbia University Libraries

Julia Cook

Senior Production Editor, Boydell & Brewer, University of Rochester Press

Simon Cordery

Department Chair of History, Iowa State University

Richard Cox

Project Director, Digital Library on American Slavery

Brian Croxall

Associate Research Professor, Office of Digital Humanities, Brigham Young University **Darcy Cullen** Assistant Director, Acquisitions, UBC Press and Founder, RavenSpace

Tara Cyphers Assistant Director, Ohio State University Press

Julia Damerow Lead Scientific Software Engineer, Arizona State University

Karen Mary Davalos Professor of Chicano and Latino Studies, University of Minnesota Twin Cities

Jon Davies Assistant Director for Editorial, Design, and Production, University of Georgia Press

Stephen Davis Associate Professor of History, University of Kentucky

Anna Delgado Faculty Librarian, St. Phillip's College (attended on behalf of Sam Gordano)

Midge Dellinger Oral Historian, Muscogee (Creek) Nation

Martina Dodd Curator of Collections & Exhibitions, Banneker-Douglass Museum

Andrea Eastman-Mullins Vice President, Product Management, Clarivate

Brian T. Edwards Dean and Professor of English, School of Liberal Arts, Tulane University

Jon Elwell Senior Vice President of Books, EBSCO

Jason Fikes Director, Abilene Christian University Press

Kathleen Fitzpatrick Interim Associate Dean for Research and Graduate Studies and Professor of English, Michigan State University

P. Gabrielle Foreman

Paterno Family Professor of American Literature and Professor of African American Studies and History, Penn State University

Makiba J. Foster Librarian of the College, The College of Wooster Mary C. Francis Director, University of Pennsylvania Press

Victoria J. Gallagher Professor of Communication, North Carolina State University

Linda García Merchant PhD, Public Humanities Data Librarian, University of Houston

Jimmy Ghaphery Associate Dean for Scholarly Communications and Publishing, Virginia Commonwealth University Libraries

Matthew K. Gold Associate Professor of English and Digital Humanities, CUNY Graduate Center

Wayne Graham Chief Information Officer and Director of Informatics, Cultural Networks, and Knowledge Systems, CLIR

Harriett Green Vice Dean, University of Arizona Libraries

Matt Greenfield Managing Partner, ReThink Education

Kevin M. Guthrie President, ITHAKA

Romi Gutierrez Director, University Press of Florida

Carol Engelhardt Herringer Professor of History, Georgia Southern University

Josh Honn Humanities and Prison Education Librarian, Northwestern University

Portia Hopkins CLIR/DLF Postdoctoral Research Associate in Data Curation for African American Studies, Rice University

Patricia Hswe Program Director for Public Knowledge, Mellon Foundation

Eric Hung Executive Director of the Music of Asian America Research Center

Kayla Jackson Head Archivist, Hallie Q. Brown Community Center

Lisa Janette

Head of Archival Processing, Archives and Special Collections, University of Minnesota Libraries

Suraiya Anita Jetha Acquisitions Assistant, MIT Press

Charles Johnson Associate Professor and Chair of the Department of History, North Carolina Central University

Annie Johnson

Associate University Librarian for Publishing, Preservation, Research and Digital Access, University of Delaware

Sylvester A. Johnson Professor of Black Studies, Northwestern University

Ida Jones

Associate Director of Special Collections and University Archivist, Morgan State University

Eileen A. Fradenburg Joy

Director, Punctum Books

Robert Kagan Director, Consulting, Nonprofit Finance Fund

Stefan Karcher

Programme Officer Humanities and Social Sciences, Deutsche Forschungsgemeinschaft (DFG) - German Research Foundation

Annette M. Kim

Associate Professor and Director of SLAB, University of Southern California

Bohyun Kim

Associate University Librarian for Library IT, University of Michigan

Barbara Kline Pope

Executive Director, Johns Hopkins University Press

Rebecca Sutton Koeser

Lead Research Software Engineer, Center for Digital Humanities, Princeton University

Sharon Kowalsky

Professor and Head of Department of History, Director of Gender Studies, Texas A&M University-Commerce

Sonja Lanehart Professor of Linguistics, University of Arizona

Chauncy Lennon Vice President of Learning and Work, Lumina Foundation

Allison Levy Director, Brown University Digital Publications

Shane Lin Senior Developer, University of Virginia

Matthew Lincoln Manager of Engineering, JSTOR Labs

Sherr Lo Senior Director, Consulting, Nonprofit Finance Fund

Elizabeth Lorang Dean, University Libraries, University of Nebraska-Lincoln

Matthew Lucas

Executive Director of Corporate Strategy and Performance, Social Sciences and Humanities Research Council (SSHRC)

Brandon Lunsford

Director of Library Services, James B. Duke Memorial Library, Johnson C. Smith University

Eric Lyon

Professor of Practice, Music Composition and Creative Technologies, Virginia Tech

Susan McClellan

Electronic Resources Librarian, St. Phillip's College (attended on behalf of Sam Gordano)

Jennifer McNabb

Department Head of History, University of Northern Iowa

R. Darrell Meadows

PhD, Deputy Executive Director, National Historical Publications and Records Commission (NHPRC)

Nicté Fuller Medina

Visiting Assistant Professor, Swarthmore College

DeLisa Minor Harris Director of Library Services, Fisk University

David Millman

Associate Dean for Technology and Chief Information Officer, NYU Libraries

Nicole F. Mitchell Director, University of Washington Press **Emma Molls** Director of Open Research & Publishing, University of Minnesota Libraries

Morgan M. Montgomery Assistant Library Director, Claflin University

Dominique J. Moore Acquisitions Editor, University of Illinois Press

Jeremy Morse Platform Manager, Fulcrum

Jasmine Mulliken Production and Preservation Manager, Digital Projects, Stanford University Press

James Neal Senior Program Officer, Office of Library Services, Institute for Museum and Library Services

Robert Nelson Director of the Digital Scholarship Lab, University of Richmond

Charlotte Nunes Dean of Libraries, Lafayette College

Judy-Lynne Peters, PhD Co-director, Northeast Slavery Records Index, CUNY

Katrina M. Powell Professor of English and Director of Center for Refugee, Migrant, and Displacement Studies, Virginia Tech

Christopher Prom Associate Dean for Digital Strategies, Library,

University of Illinois at Urbana-Champaign

Ricardo L. Punzalan Associate Professor, University of Michigan School of Information

Lisa Quinn Executive Director, McGill-Queen's University Press

Stephen Rhind-Tutt President, Coherent Digital, LLC.

Jason Rhody Senior Director of Engagement Strategy, Modern Language Association

Monika Rhue EdD, Project Manager, University of California, Los Angeles

Dana Schaffer Deputy Director, American Historical Association Justin Schell

Director of Digital Scholarship and Creative Spaces, University of Michigan Library

Megan Senseney Head of Research Engagement, University of Arizona Libraries

Jill Sexton Associate Director for Digital & Organizational Strategy, North Carolina State University Libraries

Emily Sherwood University Librarian, Rochester Institute of Technology

Rafael Sidi Senior Vice President, Wolters Kluwer

Holly Smith College Archivist, Spelman College

Synatra Smith Project Manager, Black Heritage Trail, New Jersey Historical Commission

Zachary Sng Senior Associate Dean of the Faculty, Brown University

Hadassah St. Hubert Historian and Independent Scholar

Virginia Steel Norman and Armena Powell University Librarian, University of California, Los Angeles

Alexandra Minna Stern Dean of Humanities, University of California, Los Angeles

Carly Strasser Program Manager for Open Science, Chan Zuckerberg Initiative

Jon Stroop Deputy Dean of Libraries, Princeton University Library

Maigen Sullivan Co-Founder and Co-Executive Director, Invisible Histories

Terri Taylor Strategy Director for Innovation and Discovery, Lumina Foundation

Tyechia Thompson Assistant Professor in the Department of English, Virginia Tech

Francena Turner, PhD

CLIR Fellow/Postdoctoral Associate for Data Curation in African American History and Culture, MITH-University of Maryland, College Park

Caitlin Tyler-Richards

Acquisitions Editor, University of Washington Press

John Unsworth

University Librarian and Dean of Libraries, University of Virginia

Hanétha Vété-Congolo

Henry Wadsworth Longfellow Professor of Romance Languages and Literatures, Bowdoin College

Joelle Vitiello

Professor and Chair of French and Francophone Studies, Macalester College

Zoe Wake Hyde

Community Development Manager, Knowledge Commons

Kellee E. Warren

Associate Professor and Special Collections Librarian, University of Illinois Chicago

Christopher Warren

Associate Head and Professor of English and History (by courtesy), Carnegie Mellon University

Myra Washington

Assistant Vice President for Faculty Support, University of Utah

Janell Watson

Professor and Chair of the Department of Modern and Classical Languages and Literatures, Virginia Tech

Kevin Winstead

Assistant Professor of Critical Media and AI Studies, University of Florida

Adrian Wisnicki

Associate Professor of English and Digital Humanities Program Coordinator, University of Nebraska-Lincoln

Erika Witt

Director and Chief Curator of Southern University at New Orleans Museum of Art

Kate Wittenberg

Managing Director, Portico

Maurice York

Director of Library Initiatives, Big Ten Academic Alliance



Tittlen and a

1

[1] Interview in the series The Digital in the Humanities Los Angeles Review of Books, May 19, 2016.

[2] https://pen.org/report/educational-gag-orders/

[3] Joan Scott, *Knowledge, Power, and Academic Freedom*, New York, Columbia University Press, 2019, p.104

[4] Kishonna L. Gray. *Intersectional Tech: Black Users in Digital Gaming.* Louisiana State University Press, 2020, p. 2. *Project MUSE* <u>muse.jhu.edu/book/77262</u>. In the introduction, Kishonna Grey reminds us that the textbook and the daily newsprint are no longer hegemonic channels in the age of video games and fast-moving self-publishing platforms of social media: "Engaging intersectionality across the mediated platforms reveals significant moment[s] of critiquing narratives. The aftermath of Mike Brown's death in 2014, for instance, reveals the power of this innovative engagement: the once-invisible could now actively engage, participate, and produce content in hypervisible ways."

[5] Alondra Nelson, "Introduction: Future Texts" in Afrofuturism, a special issue of *Social Text*, Number 71 2002, p. 9. "The term was chosen as the best umbrella for the concerns of 'the list'— as it has come to be known by its members—'sci-fi imagery, futurist themes, and technological innovation in the African diaspora.' The Afrofuturism listserv began as a project of the arts collective apogee with the goal of initiating dialogue that would culminate in a symposium called AfroFuturism Forum."

[6] Jose Estaban Munoz, *Cruising Utopia: The Then and There of Queer Futurity*, New York, NYU Press, 2009, p. 189. "Queer utopianism suggests the convergence of past, present, and future...despite the crushing force of the dynasty of the here and now."

[7] In Spiral to the Stars: Mvskoke Tools of Futurity, (University of Arizona Press, 2019), p. 4, geographer Laura Harjo wrote about how "Mvskoke communities have sustained the spaces to dream, imagine, speculate, and activate the wishes of our ancestors, contemporary kin, and future relatives—all in a present temporality, which is Indigenous futurity." [8] https://www.trumanlibrary.gov/library/publicpapers/136/address-occasion-publication-first-volumejefferson-papers

[9] https://scholarworks.iu.edu/journals/index.php/ imh/article/view/8093/9900

[10] <u>https://www.docnow.io/docs/docnow-</u> whitepaper-2018.pdf

[11] Roopika Risam, "Decolonizing the Digital Humanities in Theory and Practice," in Routledge Companion to Media Studies and Digital Humanities, Routledge, 2018, p. 82.

[12] Paul DiMaggio, (1988), "Interest and agency in institutional theory." In L. Zucker (Ed), *Institutional patterns and organizations: Culture and environment* (3-21). Ballinger Publishing, Cambridge, MA, 1988, p. 13.

[13] Roger Friedland and Robert Alford "Bringing Society Back In: Symbols, Practices, and Institutional Contradictions" In New Institutionalism and Organizational Analysis, Edited by Walter W. Powell and Paul J. DiMaggio. University of Chicago Press, 1991, p. 243.

[14] <u>https://slaveryandjustice.brown.edu/report/2006-report/building-report</u>

[15] In 2016, Georgetown University acknowledged that, in 1838, to relieve the university's mounting debt, 272 enslaved Black men, women, and children were sold to Louisiana, where they labored under dreadful conditions on cotton and sugar plantations. Many were sold again. The report of Georgetown's Working Group on Slavery, Memory, and Reconciliation is available at https://www.georgetown.edu/slavery/history/#slaverymory-and-reconciliation-at-gu

[16] <u>https://www.hcn.org/issues/52-4/indigenous-affairs-education-land-grab-universities/</u>

[17] Paul J. DiMaggio and Walter W. Powell "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. in The New Institutionalism in Organizational Analysis. p. 107.

[18] Op cit.

[19] Kim Christen, Josiah Blackeagle Pinkham, Cordelia Hooee, and Amelia Wilson. "Always Coming Home: Territories of Relation and Reparative Archives." Archivaria 94 (Fall/Winter 2022): 24-62. <u>https://archivaria.ca/index.php/archivaria/article/view/13863</u>, p. 17.

[20] "Fleshing the Archive: Reflections on Chicana Memory Practice," *Oral History Journal: Special Issue on Power and the Archive*, 49/2, Autumn 2021.

[21] <u>https://www.historians.org/the-blackivists</u>, PDF of Blackivists transcript.

[22] Elizabeth Rodrigues and Rachel Schnepper, "After Autonomy; Digital Humanities Practices in Small Liberal Arts College and Higher Education as Collaboration," in *People, Practice, Power: Digital Humanities Outside the Center.* p. 171.

[23] <u>https://blog.leeandlow.</u> com/2024/02/28/2023diversitybaselinesurvey/

[24] Edward L. Ayers, "Predicting the Past." *The Southern Quarterly*, vol. 58 no. 1,-1 Fall 2020/Winter 2021, p. 147-153. *Project MUSE* <u>muse.jhu.edu/</u> <u>article/868190</u>, p. 152.

[25] <u>https://www.insidehighered.com/</u> views/2021/02/22/institutions-and-funders-mustrecognize-contributions-university-presses-humanities

Resources and Suggested Readings

e offer a set of resources, which include exemplary readings, guidance, tools, and other materials, in relation to major themes that cut across all recommendations. These resources are not meant to be comprehensive. Rather, they aim to provide useful entry points to much broader, deeper literature on each theme. Below, you will find examples of relevant projects, guidelines, best practices, instructional materials, frameworks, planning tools, and more in the spirit of pragmatic guidance for action among specific sets of stakeholders. In addition, exemplary context readings offer theoretical contributions and conceptual approaches to understanding the issues at stake. The themes are as follows:

- · Collaboratives and networks
- Community-institutional partnerships
- Digital infrastructures
- Evaluation, pathways, promotion, and labor
- Funding and institutional support

All of these resources are also available in our public Zotero library at <u>https://www.zotero.org/groups/5591629/</u> resources for acls commission on fostering and sustaining diverse digital scholarship.

Collaboratives and Networks

This section highlights key examples of long-running digital scholarship collectives and organizations that support knowledge- and resource-sharing, mentorship, and the development of collectively owned infrastructures. It also provides information on networks that foster community-centered projects and practitioners. The resources listed here are intended to guide and inspire those looking to create or sustain collaborative efforts in digital scholarship, emphasizing interdisciplinary and cross-sector partnerships.

- Long-running digital scholarship collectives and organizations
- · Knowledge-sharing and mentorship networks for community-centered projects and practitioners
- Context: Scholarship on cross-institutional and -community networks for sustaining initiatives
- Community engagement and development
- Examples, guidance, and tools for fostering inclusion and equitable partnerships

Long-running digital scholarship collectives and organizations

- The Humanities, Arts, Science and Technology Alliance and Collaboratory (HASTAC), https://hastac.
 https://hastac.hcommons.org/, one of the longest-running interdisciplinary community spaces and conferences.
- Code4Lib, <u>https://code4lib.org/</u>, a collective of library technologists working on digital libraries and digital information technologies.
- The multi-institutional Praxis Program, <u>http://praxis-network.org/</u>, and the CUNY Futures Initiative, <u>https://</u><u>futuresinitiative.org/</u>, both of which provide support for **graduate students** undertaking diverse digital scholarship.
- The Association for Computers and the Humanities <u>https://ach.org/</u> for **faculty, staff, and students** that runs both workshops and an annual conference with a focus on promoting sustainability and social justice in American digital humanities communities.

Knowledge-sharing and mentorship networks for community-centered projects and practitioners

• For **communities** engaged in community archiving and for other digital scholarship **practitioners and creators**, we highlight the following:

- The Community Archives Collaborative, <u>https://communityarchivescollab.org/</u>, a growing network of organizations supporting skill sharing and shared resources for **community-based archives**.
- The Diaspora Solidarities Lab, <u>https://www.dslprojects.org/</u>, a Mellon-funded consortium that supports solidarity work toward transformative justice and community accountability **for students**, **faculty**, **and community-partners in Black and ethnic studies**.
- The African American Digital and Experimental Humanities Initiative (AADHum), https://aadhum.umd.edu/, supporting digital and experimental research at the intersection with Black studies, and offering innovative programs to help faculty, graduate students, and independent creators build their skills and their communities of practice.
- The US Latino Digital Humanities Center, https://artepublicopress.com/digital-humanities/, which provides both physical space and communal virtual space to share knowledge and projects related to Latino digital humanities for communities both within and beyond the academy. The related Recovery Program is a community archiving program offering grants-in-aid and other resources, based at the University of Houston's Arte Público Press. https://artepublicopress.com/recovery-program/.
- The Digital Ethnic Futures Consortium, <u>https://digitalethnicfutures.org/</u>, which is developing a network of **social-justice-engaged researchers and practitioners** at the intersection of digital humanities and ethnic studies fields and which focuses on reciprocal and redistributive community relationships and the development of pathway and student mentorship opportunities.
- For Native and Indigenous DH communities, we suggest Local Contexts <u>https://localcontexts.</u> org/, which aims to "enhance and legitimize locally based decision-making and Indigenous governance frameworks for determining ownership, access, and culturally appropriate conditions for sharing historical, contemporary, and future collections of cultural heritage and Indigenous data."

Context: Scholarship on cross-institutional and -community networks for sustaining initiatives

- For faculty and administrators looking to support training networks for digital scholarship, we suggest two collected volumes that provide a wide range of perspectives and insights into how to support collectives and training across a range of institutions:
 - Guiliano, Jennifer, and Laura Estill, ed. *Digital Humanities Workshops: Lessons Learned*. London: Routledge, 2023. <u>https://doi.org/10.4324/9781003301097</u>.
 - McGrail, Anne B., Angel David Nieves, and Siobhan Senier. *People, Practice, Power: Digital Humanities Outside the Center*. Debates in the Digital Humanities Ser. Minneapolis: University of Minnesota Press, 2022. <u>https://dhdebates.gc.cuny.edu/projects/people-practice-power</u>.
- For reflections on sustaining and supporting digital scholarship networks across centers and academic institutions, we highlight:
 - Maron, Nancy. "The Digital Humanities Are Alive and Well and Blooming: Now What?" Educause Review, August 2015. <u>https://er.educause.edu/articles/2015/8/the-digital-humanities-are-alive-and-well-and-blooming-now-what</u>.
 - Spiro, Lisa, Geneva Henry, Toniesha Taylor, and Amanda French. "Establishing a 'Resilient Network' for Digital Humanities." *Abstracts of the Alliance of Digital Humanities Organizations Digital Humanities* 2017. https://dh2017.adho.org/abstracts/360/360.pdf.
 - Coll, Fiona, Serenity Sutherland, and Candis Haak. "Finding Our Way to a Digital Humanities Community at SUNY Oswego." *IDEAH* 1, no. 1 (May 31, 2020). <u>https://doi.org/10.21428/</u><u>f1f23564.6bbe5e96</u>.

• For digital scholarship practitioners and creators, administrators, and funders, we suggest this exploration of how we might ensure a more equitable global system of digital scholarship through "participatory design that foregrounds public engagement, shared interest, and long-term relationships with stakeholders to create networks from which equal opportunities and new forms of connections can emerge" from Pawlicka-Deger, Urszula. "Infrastructuring Digital Humanities: On Relational Infrastructure and Global Reconfiguration of the Field." *Digital Scholarship in the Humanities* 37, no. 2 (2022): 534–550. https://doi.org/10.1093/llc/fqab086. For further background, see Risam, Roopika. *New Digital Worlds: Postcolonial Digital Humanities in Theory, Praxis, and Pedagogy*. Northwestern University Press, 2019. https://doi.org/10.2307/j.ctv7tq4hg.

Community engagement and development

- For **nonprofit, community-based initiatives**, the Educopia Institute offers a wealth of resources and research. As a starting point, we highlight this guide, part of their Community Cultivation Resource Library, which "provides scaffolding and tools that help support and sustain collaborative groups, communities, and organizations," for **community cultural** and **GLAM initiatives**: Skinner, Katherine. *Community Cultivation—A Field Guide*. Educopia Institute, 2018. <u>https://educopia.org/cultivation/</u>.
- Guide to **establishing governance** and **developing community** toward sustaining open-source software programs in cultural and scientific heritage: Arp, Laurie Gemmill, and Megan Forbes. "It Takes a Village: Open Source Software Sustainability." 2018. <u>https://itav.lyrasis.org/</u>.
- Reflection on **building cross-institutional networks in libraries**: Schonfeld, Roger C. "Restructuring Library Collaboration: Strategy, Membership, Governance." *Ithaka S+R*, 2019. <u>https://doi.org/10.18665/sr.311147</u>.

Community-Institutional Partnerships

This section presents models of partnership, best practices, and guidance for communities and institutions, including academic and research institutions, libraries, archives, and museums. It focuses on fostering equitable partnerships in digital scholarship by providing exemplary values statements, structures, and ethical guidelines. The resources listed here aim to support and inspire those involved in community-institutional collaborations, emphasizing the importance of inclusivity and social justice in these partnerships.

- Project values statement and structures
- Guidance for community partnerships with libraries, archives, and museums
- Examples of community/university partnerships
- Guidance on ethical academic research with communities
- Context: Scholarly reflections on equitable community-academic partnerships
- · Context: Articulations of core values of digital scholarship
- Context: Integrating social and racial justice into digital scholarship
- Examples, guidance, and tools for fostering inclusion and equitable partnerships

Project values statements and structures

- For examples of values statements and best practices guiding digital projects and centers as well as practitioners and creators focused on community-centered work, we highlight:
 - Colored Conventions Project Principles, <u>https://coloredconventions.org/about/principles/</u>.
 - US Latino Digital Humanities Best Practices, <u>https://artepublicopress.com/digital-humanities/</u> from US Latino Digital Humanities Center and Recovering the US Hispanic Literary Heritage. Codirectors: Commissioner Gabriela Baeza Ventura and Carolina Villarroel.
 - Co-Creation Goals and Structure guiding Northwestern University's Reckonings Project, https://

reckoningsproject.org/.

• Princeton Center for Digital Humanities Project Charters, <u>https://cdh.princeton.edu/research/</u> project-management/charters/.

Guidance for community partnerships with libraries, archives, and museums

- For libraries, archives, and museums developing external partnerships, we suggest this guide to developing memoranda of understanding (MOUs), which offers guidance and templates for crafting MOUs; see Mirza, Rafia, Brett Currier, and Peace Ossom Williamson. *Memorandum of Understanding Workbook*, Version 1.0. 2016. https://doi.org/10.32855/utalibraries.2016.01.
- For Native and Indigenous communities in partnership with libraries, archives, and museums, we suggest the following resources:
 - Smith, Landis, Cynthia Chavez Lamar, and Brian Vallo, facilitators. *Guidelines for Collaboration*. Santa Fe, NM: School for Advanced Research, 2019. <u>https://guidelinesforcollaboration.info/</u>. The authors write, "The Guidelines are intended as a resource for museums and communities planning and carrying out collaborative work. These documents do not present a set of rules; instead, they offer principles and considerations for building successful collaborations ... There are two separate and complementary sets of guidelines; one for communities and the other for museums."
 - In addition, we highlight this work on protocols of return grounded in the concept of rematriation; see Gray, Robin R.R. "Rematriation: Ts'msyen Law, Rights of Relationality, and Protocols of Return." Native American and Indigenous Studies 9, no. 1 (2022): 1-27. https://doi.org/10.1353/nai.2022.0010, and Callison, Camille, Loriene Roy, and Gretchen Alice LeCheminant, eds. Indigenous Notions of Ownership and Libraries, Archives and Museums. IFLA Publications Series 166. De Gruyter Saur, 2016. https://repository.ifla.org/handle/123456789/1077.
 - We also suggest Nayyer, Kim Paula. "Issues and Intersections of Indigenous Knowledge Protection and Copyright for Digital Humanities." In Access and Control in Digital Humanities, edited by Shane Hawkins. Routledge, 2021, available at <u>https://ecommons.cornell.edu/server/api/core/bitstreams/ c1270255-42e8-4a87-b9b5-d2c02bfc669e/content</u> for insights into the complexities of protecting Indigenous knowledge within the framework of copyright and digital humanities.
 - For additional exemplary protocols, we suggest *The Protocols for Native American Archival materials*, which "build upon numerous professional ethical codes as well as international declarations recognizing Indigenous rights and the ground-breaking '*Aboriginal and Torres Strait Islander Protocols for Libraries, Archives, and Information Services*." <u>https://www2.nau.edu/libnap-p/</u>, as well as the American Philosophical Society's *Protocols for the Treatment of Indigenous Materials*, <u>https://www.amphilsoc.org/sites/default/files/2017-11/attachments/APS%20Protocols.pdf</u>.
- For libraries, archives, and museums engaged in reparative description efforts, we highlight Frick, Rachel, and Merrilee Proffitt. *Reimagine Descriptive Workflows: A Community-Informed Agenda for Reparative and Inclusive Descriptive Practice*. 2022. <u>https://digitalcommons.unl.edu/scholcom/223</u>, which offers a framework of guidance including "actions and exercises that can help frame local priorities and areas for change and also provides examples to inspire local work. Inclusive and reparative description work is highly dependent on local context, and therefore a specific course of action must be created that is unique to each institution's readiness and position relative to communities."
- For libraries, archives, and museums and community-centered conservation initiatives in partnership with communities, we suggest Foundation for Advancement in Conservation. *Held in Trust: Transforming Cultural Heritage Conservation for a More Resilient Future.* 2023, which "articulates a vision of a vibrant and resilient future for conservation [physical and digital] grounded in social justice, equity, and environmental action."

Accessible at this link: <u>https://www.culturalheritage.org/about-us/foundation/programs/held-in-trust/held-in-trust-report</u>.

Examples of community/university partnerships

- Humanities for All, <u>https://humanitiesforall.org/</u>, an initiative of the National Humanities Alliance Foundation, showcases more than 2,000 examples of public humanities projects at US higher education institutions. For example, it includes guidance and examples of how university presses have partnered to serve diverse local communities in publicly engaged humanities work: <u>https://humanitiesforall.org/blog/university-presses-as-partners-for-public-engagement</u>.
- Community-centered sustainability toolkit, including a database of exemplary community-institutional partnerships: Fenlon, Katrina, Jessica Grimmer, Alia Reza, Amanda Sorensen, Travis Wagner, and Nikki Wise (2024). Community-centered sustainability toolkit. <u>https://go.umd.edu/sustaincommunities</u>.

Guidance on ethical academic research with communities

- For examples of **guides to ethical community-based research**, for **academic researchers** and **communities** of different types, we highlight the following resources.
 - For academic and research institutions and scholars in partnership with Native and Indigenous communities, we highlight *Reciprocal Research: A Guidebook to Centering Community in Partnerships with Indigenous Nations* by the Native American Institute at Michigan State University. https://inclusion.msu.edu/_assets/documents/resources/Guidebook-to-Centering-Community-in-Partnerships-with-Indigenous-Nations.pdf.
 - For guidance on employing critical refusal, "a method whereby researchers and research participants together decide not to make particular information available for use within the academy," particularly in activism and research that poses risk of harm to communities, see Zahara, Alex.
 "Ethnographic Refusal: A How to Guide." *Discard Studies*, August 8, 2016. <u>https://discardstudies.com/2016/08/08/ethnographic-refusal-a-how-to-guide/</u>.
 - For a set of principles based on concepts of refusal and resistance to harmful or oppressive data practices, see Cifor, Marika, Patricia Garcia, TL Cowan, Jasmine Rault, Tonia Sutherland, Anita Say Chan, Jennifer Rode, Anna Lauren Hoffmann, Niloufar Salehi, and Lisa Nakamura (2019). *Feminist Data Manifest-No.* <u>https://www.manifestno.com/</u>. This same resource also provides an extensive, curated guide to relevant resources and guidance for different communities, the *Manifest-No Playlist*, <u>https://www.manifestno.com/playlist</u>.
 - For principles for conducting **ethical research within online communities**, from the Association of Internet Researchers, see Franzke, Aline Shakti, Anja Bechmann, Michael Zimmer, Charles M. Ess, and The Association of Internet Researchers. "Internet Research: Ethical Guidelines 3.0," 2020. https://aoir.org/ethics/.
 - For academic publishers, this working paper reflects on the challenges associated with publishing publicly engaged humanities scholarship: Burton, Kath, Catherine Cocks, Darcy Cullen, Daniel Fisher, Barry M. Goldenberg, Janneken Smucker, Friederike Sundaram, Dave Tell, Anne Valks, and Rebecca Wingo. (2021). "Public Humanities and Publication: A Working Paper." http://dx.doi.org/10.17613/gpvb-x279.

Context: Scholarly reflections on equitable community-academic partnerships

• For **libraries**, **archives**, **and museums** as collecting institutions, a reflection on **decolonial processes** generally, see Christen, Kim, and Jane Anderson. "Toward Slow Archives." *Archival Science* 19, no. 2 (2019):

87–116. <u>https://doi.org/10.1007/s10502-019-09307-x</u>. The authors write, "Our emphasis is on one mode of decolonizing processes that insist on a different temporal framework: the slow archives. Slowing down creates a necessary space for emphasizing how knowledge is produced, circulated, and exchanged through a series of relationships."

- For how we can create more inclusive and collaborative relationships between historically marginalized communities and academia, we suggest:
 - Fiormonte, Domenico, and Gimena Del Rio Riande. "The Peripheries and Epistemic Margins of Digital Humanities." In *The Bloomsbury Handbook to the Digital Humanities*, edited by James O'Sullivan, 19–28. London: Bloomsbury Academic, 2022. <u>https://www.bloomsbury.com/us/bloomsbury-handbook-to-the-digital-humanities-9781350232129/</u>.
 - Earhart, Amy E. "Can We Trust the University?: Digital Humanities Collaborations with Historically Exploited Cultural Communities." In *Bodies of Information*, edited by Elizabeth Losh and Jacqueline Wernimont, 369–90. Intersectional Feminism and the Digital Humanities. University of Minnesota Press, 2018. <u>https://doi.org/10.5749/j.ctv9hj9r9.23</u>.

Context: Articulations of core values of digital scholarship

- For articulating and defining core values in digital scholarship, challenging traditional academic boundaries, and promoting equitable, socially engaged scholarship, we suggest:
 - Spiro, Lisa. "'This Is Why We Fight': Defining the Values of the Digital Humanities." In *Debates in the Digital Humanities*, edited by Matthew K. Gold. University of Minnesota Press, 2012. <u>http://www.jstor.org/stable/10.5749/j.ctttv8hq.6</u>.
 - Posner, Miriam. "What's Next: The Radical, Unrealized Potential of Digital Humanities." In *Debates* in the Digital Humanities 2016, edited by Matthew K. Gold and Lauren F. Klein, 32–41. University of Minnesota Press, 2016. <u>https://doi.org/10.5749/j.ctt1cn6thb.6</u>.

Context: Integrating social and racial justice into digital scholarship

- For reflections on how social and racial justice can be integrated into digital scholarship, we suggest:
 - Risam, Roopika. "Beyond the Margins: Intersectionality and the Digital Humanities." *Digital Humanities Quarterly* 9, no. 2 (2015). <u>https://www.digitalhumanities.org/dhq/vol/9/2/000208/000208.html</u>.
 - Gallon, Kim. "Making a Case for the Black Digital Humanities." In *Debates in the Digital Humanities* 2016, edited by Matthew K. Gold and Lauren F. Klein, 42–49. University of Minnesota Press, 2016. <u>https://doi.org/10.5749/j.ctt1cn6thb.7</u>.
 - Noble, Safiya Umoja. "Toward a Critical Black Digital Humanities." In *Debates in the Digital Humanities*, edited by Matthew K. Gold and Lauren F. Klein, 27–35. University of Minnesota Press, 2019. <u>https://doi.org/10.5749/j.ctvg251hk.5</u>.

Digital Infrastructures

This section explores the reimagining of technical infrastructures that support digital scholarship and provides technical considerations for sustaining long-lived digital projects. It is intended for digital scholarship practitioners and creators, communities, and institutions, offering guidance on decentralized and academy-owned infrastructures, sustaining digital project outcomes, and technical sustainability in libraries, archives, museums, and digital humanities centers.

- Decentralized and academy-owned infrastructures
- Sustaining digital project outcomes for creators and communities
- Technical sustainability for digital scholarship in libraries, archives, museums, and centers
- Examples, guidance, and tools for fostering inclusion and equitable partnerships

Decentralized and academy-owned infrastructures

- For digital scholarship **practitioners and creators**, **communities**, and **institutions**, we suggest the Knowledge Commons as a prime example of an **academy-owned**, **open access**, **nonprofit infrastructure for collaborative scholarship**, <u>https://hcommons.org/</u>. "The Commons was founded as and will remain an academy-owned and governed project, designed to serve the needs of scholars, writers, researchers, and students as they engage in teaching and research projects that benefit the larger community."
- As context for the value of Knowledge Commons, we also suggest the following reflection on the persistent need for truly equitable infrastructures for digital scholarship, even in the era of open access: Fitzpatrick, Kathleen. "Open Infrastructures and the Future of Knowledge Production, Part 1." January 5, 2024. <u>https://team. hcommons.org/2024/01/05/open-infrastructures-and-the-future-of-knowledge-production-part-1/</u>.
- For libraries, archives, museums, and academic institutions, as well as funders and administrators, we highlight this report on "values-driven, community-supported approaches to distributed digital preservation" from Meyerson, Jessica, Jackson Huang, Ryan Menefee, Courtney Mumma, Lydia Tang, Alicia Wise, Nathan Tallman, and Sibyl Schaefer. *Sustainable Community-Owned Partnerships in Digital Preservation: DPSC Planning Project Final Report*. Zenodo, May 13, 2024. https://doi.org/10.5281/zenodo.11186599.
- For digital scholarship **practitioners and creators, administrators** and **funders**, we highlight the following reflection on **alternative models of digital infrastructure**, including developing "highly specific distributed web services" as an alternative to large-scale infrastructures or standardization for supporting and sustaining heterogeneous digital scholarship: Zundert, Joris van. "If You Build It, Will We Come? Large Scale Digital Infrastructures as a Dead End for Digital Humanities." *Historical Social Research/Historische Sozialforschung* 37, no. 3 (141) (2012): 165–86. https://www.jstor.org/stable/41636603.
- For practitioners and community partnerships, we highlight the Mukurtu Content Management System, <u>https://mukurtu.org/</u>, as an exemplary project of building digital infrastructures that can further social and reparative justice. For more on the project, see Christen, Kimberly, Alex Merrill, and Michael Wynne. "A Community of Relations: Mukurtu Hubs and Spokes." D-Lib Magazine 23, no. 5/6 (May 2017). <u>https://doi.org/10.1045/may2017-christen</u>, where the authors write:

"Built directly from community needs and input, the TK [Traditional Knowledge] Labels are a prime example of a feature designed around specific cultural and historical needs. Because Indigenous communities do not legally own much of their patrimony, traditional or Creative Commons' licenses do not apply. Over two iterations of Mukurtu development, we created TK Labels to provide context to public domain and third-party owned works circulating to the general public."

- For digital scholarship **practitioners and creators**, as well as **digital humanities centers**, **libraries**, **archives**, **and museums**, and **academic institutions** responsible for **maintenance of digital projects**, we highlight this *Digital Humanities Quarterly* special issue on minimal computing as an approach to more sustainable infrastructure development, including counterpoints: Risam, R., & Gil, A. "Introduction: The Questions of Minimal Computing." *Digital Humanities Quarterly*, 016, no. 2 (2022). <u>https://www.digitalhumanities.org/dhq/vol/16/2/000646/000646.html</u>, and suggest the following examples of this approach:
 - The Programming Historian, https://programminghistorian.org/.
 - CollectionBuilder, https://collectionbuilder.github.io/,
 - Wax, https://minicomp.github.io/wax/.

 We also highlight again in this context this guide, which includes aspects of governance, community engagement, technology, and resources, toward sustaining open source software programs in cultural and scientific heritage: Arp, Laurie Gemmill, and Megan Forbes. "It Takes a Village: Open Source Software Sustainability." 2018. <u>https://itav.lyrasis.org/</u>.

Sustaining digital project outcomes for creators and communities

- For digital scholarship **practitioners and creators**, we highlight the Sustainable Heritage Network, a community/institutional collaborative focused on the stewardship of Indigenous cultures, which offers comprehensive workshops, online tutorials, and web resources dedicated to the life cycle of digital stewardship of value to communities of all kinds: <u>https://sustainableheritagenetwork.org/</u>.
- For digital scholarship **practitioners and creators**, we highlight the Socio-Technical Sustainability Roadmap, "a module-based workshop intended to help you and your team approach the seemingly daunting task of sustaining your digital humanities project over time": Visual Media Workshop at the University of Pittsburgh. *The Socio-Technical Sustainability Roadmap*. Accessed March 19, 2024. <u>http://sustainingdh.net</u>.
- For **communities** of **practitioners and creators** as well as **libraries**, **archives**, **and museums**, we highlight this Community-Centered Sustainability Toolkit, which includes a framework of factors for community-centered approaches to sustaining digital scholarship, a database of exemplary community-institutional partnerships, and other resources: Fenlon, Katrina, Jessica Grimmer, Alia Reza, Amanda Sorensen, Travis Wagner, and Nikki Wise (2024). Community-centered sustainability toolkit. <u>https://go.umd.edu/sustaincommunities</u>.
- We also suggest the following reflection on how digital scholarship "sustainability planning ... needs to consider data and technology but also community, communications and process knowledge simultaneously" from Edmond, Jennifer, and Francesca Morselli. "Sustainability of Digital Humanities Projects as a Publication and Documentation Challenge." *Journal of Documentation* 76, no. 5 (2020): 1019–1031. <u>https://doi.org/10.1108/JD-12-2019-0232</u>.
- For organizations, communities, and individuals across sectors engaged in preserving digital content, we highlight the Digital Preservation Coalition. *Digital Preservation Handbook*. 2nd ed. 2015. <u>https://www.dpconline.org/handbook</u>, which offers a peer-reviewed, open-access knowledge base on digital preservation.
- In addition, we highlight this foundational **guide to data curation** for digital humanities practitioners and communities, which offers insights on understanding humanities data and their representation, relevant standards and policy, and other considerations: *DH Curation Guide: A Community Resource Guide to Data Curation in the Digital Humanities.* <u>https://archive.mith.umd.edu/dhcuration-guide/guide.dhcuration.org/index.html</u>.
- For digital scholarship practitioners and creators and communities, we suggest the following guidance on ethical approaches to collaborative data science research that is reproducible and reusable. This guide offers pathways for different stakeholders, including early-career researchers, research software engineers, and project leaders, to open accessibility, research transparency, and longevity for research results: The Turing Way Community. The Turing Way: A Handbook for Reproducible, Ethical and Collaborative Research. Version 1.0.2. Zenodo, 2022. https://doi.org/10.5281/zenodo.3233853.

Technical sustainability for digital scholarship in libraries, archives, museums, and centers

- For funders, administrators, and practitioners in libraries, archives, museums, academic institutions, and other stewardship institutions, we highlight the 2020 National Digital Stewardship Alliance report on challenges and key areas for research and development supporting global capacity for digital stewardship: National Digital Stewardship Alliance (NDSA) Agenda Working Group, "2020 NDSA Agenda," April 2020. https://doi.org/10.17605/OSF.IO/BCETD.
- For digital humanities centers, libraries, archives, and museums, and academic institutions undertaking maintenance of digital humanities projects at scale, we suggest the following reflection on the King's

Digital Lab "extensive archiving and sustainability project to ensure the ongoing management, security, and sustainability of ~100 digital humanities projects, produced over a twenty-year period ... This article details the conceptual, procedural, and technical approaches used to achieve that, and offers policy recommendations to prevent repetition of the situation in the future" in Smithies, James, Carolina Westling, Arianna M. Sichani, Pip Mellen, and Arianna Ciula. "Managing 100 Digital Humanities Projects: Digital Scholarship and Archiving in King's Digital Lab." *Digital Humanities Quarterly* 13, no. 1 (2019). <u>https://www.digitalhumanities.org/dhq/vol/13/1/000411/000411.html</u>.

- We also highlight the following technical guidance on gaps in the infrastructures enabling the preservation of digital scholarship, Burton, Matt, Matthew J. Lavin, Jessica Otis, and Scott B. Weingart. "Digits: Two Reports on New Units of Scholarly Publication." *Journal of Electronic Publishing* 22, no. 1 (2019). <u>https://doi.org/10.3998/3336451.0022.105</u>.
- For libraries, archives, museums, and communities seeking to preserve digital primary sources and other project outcomes, we again suggest the Digital Preservation Coalition. *Digital Preservation Handbook*. 2nd ed. 2015. <u>https://www.dpconline.org/handbook</u>, and the DPC's constellation of other resources, including guidance for implementation, policymaking, and getting help with digital preservation.

Evaluation, Pathways, and Labor

This section addresses new modes of digital scholarship, reflecting innovative ways of working and necessitating new models of scholarly evaluation, career pathways, and mentorship models. It also considers the broader reconsideration of labor structures. The resources listed here are intended to guide and support practitioners and institutions in evaluating diverse digital scholarship, fostering sustainable and equitable collaborative practices, and ensuring viable career pathways.

- Guidelines and venues for evaluating diverse digital scholarship
- Guidance on sustainable, equitable approaches to collaborative work
- Career pathways in digital scholarship
- Context: Unsustainable labor structures in digital scholarship
- Examples, guidance, and tools for fostering inclusion and equitable partnerships

Guidelines and venues for evaluating diverse digital scholarship

- Reviews in DH, <u>https://reviewsindh.pubpub.org/about</u> (Editors: Dr. Jennifer Guiliano and Dr. Roopika Risam), offers a peer-reviewed journal and project registry to enable evaluation and dissemination of digital scholarship.
- Journal of Open Humanities Data, https://openhumanitiesdata.metajnl.com/ (Editor-in-Chief Barbara McGillivray), is a home for peer-reviewed publications describing humanities research objects and techniques, with the goal of facilitating the evaluation and sharing of diverse data and methods.
- The following examples of guidelines from major professional organizations were developed to redress the lack of broadly accepted guidance for the professional evaluation of diverse modes of digital scholarship:
 - Association for University Presses *Best Practices for Peer Review*<u>https://peerreview.up.hcommons.</u> org/, updated in 2022 to include guidance on digital modes of scholarship.
 - American Historical Association Guidelines for the Evaluation of Digital Scholarship in History.
 - Modern Language Association Guidelines for Evaluating Digital Scholarship (2024), <u>https://www.mla.org/About-Us/Governance/Committees/Committee-Listings/Professional-Issues/Committee-on-Information-Technology/Guidelines-for-Evaluating-Digital-Scholarship</u>, which build upon previous Guidelines for Evaluating Work in Digital Humanities and Digital Media, <u>https://www.mla.org/About-Us/Governance/Committees/Committee-Listings/Professional-Issues/Committee-on-Information-Technology/Guidelines-for-Evaluating-Work-in-Digital-Humanities-and-Digital-Media.
 </u>

• College Art Association & Society of Architectural Historians Guidelines for the Evaluation of Digital Scholarship in Art and Architectural History, <u>https://www.collegeart.org/pdf/evaluating-digital-scholarship-in-art-and-architectural-history.pdf</u>.

Guidance on sustainable, equitable approaches to collaborative work

- For examples of alternative visions and equitable approaches to **valuing the nature of labor of digital scholarship**, we suggest:
 - Nowviskie, Bethany. "Where Credit Is Due: Preconditions for the Evaluation of Collaborative Digital Scholarship." *Profession* (2011): 169–181. <u>https://www.jstor.org/stable/41714117</u>.
 - Mattern, Shannon. "Evaluating Multimodal Work, Revisited." *Journal of Digital Humanities* (2012). <u>https://journalofdigitalhumanities.org/1-4/evaluating-multimodal-work-revisited-by-shannon-mattern/</u>.
- For practitioners looking to undertake sustainable collaborative practices and networks, we highlight the model of the *Collaborators' Bill of Rights*: Clement, Tanya E., Doug Reside, Brian Croxall, Julia Flanders, Neil Fraistat, Steven Jones, Matthew Kirschenbaum, Seth Lodato, Laura Mandell, Paul Marty, Dot Porter, Bethany Nowviskie, Susan Schreibman, Lisa Spiro, and Tom Scheinfeldt. *Collaborators' Bill of Rights*. 2021. <u>https://hcommons.org/deposits/item/hc:31187/</u>.

Career pathways in digital scholarship

- For leaders and administrators in academic institutions and libraries, archives, and museums, on ensuring career pathways for research software engineers and other digital humanities expertise: "As generational change occurs and in line with reorientations across the digital humanities community (see Boyles et al. 2018) [referenced below], it has become increasingly clear that the surest way to sustainability is to ensure continuity of technical expertise, domain knowledge and tacit understanding," from Ciula, Arianna, and James Smithies. "Sustainability and Modelling at King's Digital Lab: Between Tradition and Innovation." In *On Making in the Digital Humanities*, edited by Julianne Nyhan, Geoffrey Rockwell, Stefan Sinclair, and Alexandra Ortolja-Baird, 78–104. University College London Press, 2023. https://doi.org/10.14324/111.9781800084209, and Smithies, James, Anna-Maria Sichani, Tzu-Ting Chang, James Fenner, Matthew Wood, Neil Jefferies, David de Roure, et al. "iDAH Research Software Engineering (RSE) Steering Group Working Paper." June 20, 2023. https://doi.org/10.5281/zenodo.8060003.
- For administrators and practitioners, particularly but not exclusively in the domain of scholarly publishing, we highlight this *Values and Principles Framework and Assessment Checklist*, which aims to help scholarly publishing service providers assess support for agreed-upon academic values and principles, including diversity, equity, and inclusion; transparency; openness and interoperability; access to knowledge; financial and organizational stability; and representative governance, from Skinner, Katherine, and Sarah Lippincott. "Values and Principles Framework and Assessment Checklist." *Commonplace* (2020). https://doi.org/10.21428/6ffd8432.5175bab1.
- For library administrators and digital humanities librarians, we suggest Smiley, Bobby L. "From Humanities to Scholarship: Librarians, Labor, and the Digital." In *Debates in the Digital Humanities* 2019, edited by Matthew K. Gold and Lauren F. Klein, 413–20. University of Minnesota Press, 2019. <u>https://doi.org/10.5749/j.ctvg251hk.38</u>.

Context: Unsustainable labor structures in digital scholarship

• For an introduction to how digital scholarship presents new challenges to academic careers and evaluation structures, we suggest Flanders, Julia. "The Productive Unease of 21st-Century Digital Scholarship."

Digital Humanities Quarterly 003, no. 3 (September 29, 2009). <u>https://www.digitalhumanities.org/dhq/vol/3/3/000055/000055.html</u>, and Flanders, Julia. "Jobs, Roles and Tools in Digital Humanities." In *On Making in the Digital Humanities*, edited by Julianne Nyhan, Geoffrey Rockwell, Stefan Sinclair, and Alexandra Ortolja-Baird. London: University College London Press, 2023.

- For an overview on how the rise of academic precarity and neoliberal labor practices are shaping digital scholarship, we suggest the following:
 - Griffin, Gabriele. "The 'Work-Work Balance' in Higher Education: Between Over-Work, Falling Short and the Pleasures of Multiplicity." *Studies in Higher Education* 47, no. 11 (November 2, 2022): 2190–2203. https://doi.org/10.1080/03075079.2021.2020750.
 - Boyles, Christina, Anne Cong-Huyen, Carrie Johnston, Jim McGrath, and Amanda Phillips. "Precarious Labor and the Digital Humanities." *American Quarterly* 70, no. 3 (2018): 693–700.<u>https://doi.org/10.1353/aq.2018.0054</u>.
 - Brundage, Lisa, Karen Gregory, and Emily Sherwood. "Working Nine to Five: What a Way to Make an Academic Living?" In *Bodies of Information*, edited by Elizabeth Losh and Jacqueline Wernimont, 305–319. University of Minnesota Press, 2018. <u>https://doi.org/10.5749/j.ctv9hj9r9.20</u>.
- For an overview on how **collaboration in digital scholarship** can create new opportunities and challenges, we suggest:
 - Graban, Tarez Samra, Paul Marty, Allen Romano, and Micah Vandegrift. "Introduction: Questioning Collaboration, Labor, and Visibility in Digital Humanities Research." *Digital Humanities Quarterly* 13, no. 2 (2019). <u>https://www.digitalhumanities.org/dhq/vol/13/2/000416/000416.html</u>, which "interrogate[s] critical factors which effect the invisibility of work, and offer a potential framework to move forward."
 - Pilsch, Andrew, and Shawna Ross. "Labour, Alienation, and the Digital Humanities." In *The Bloomsbury Handbook to the Digital Humanities*, edited by James O'Sullivan, 335–45. London: Bloomsbury Academic, 2022. <u>https://hcommons.org/deposits/item/hc:50071/</u>, which proposes "ways in which DH can—through small-scale, short-range, and narrow-focused projects and through the careful cultivation of accountability and creativity—intervene in the conditions of academic labour."
 - We also highlight Griffin, Gabriele, and Matt Steven Hayler. "Collaboration in Digital Humanities Research—Persisting Silences." Digital Humanities Quarterly 12, no. 1 (2018). <u>https://www.</u> <u>digitalhumanities.org/dhq/vol/12/1/000351/000351.html</u>, which studies "three types of DH collaboration: 1) human-human interactions; 2) human-machine/material interactions; and 3) machine/material-machine/material interactions. We argue that engagement with collaboration processes and practices enables us to think through how DH tools and practices reinforce, resist, shape, and encode material realities which both pre-exist, and are co-produced by them."
 - Huculak, J. Matthew. "Is Promotion and Tenure Inhibiting DH/Library Collaboration? A Case for Care and Repair." Dh+lib (blog), July 29, 2016. <u>https://acrl.ala.org/dh/2016/07/29/a-case-for-care-and-repair/</u>, which explores how "major cultural differences between the library and humanities community in terms of funding and tenure & promotion models impede closer collaboration especially when it comes to tool development and envisioning long-term access to digital scholarship."

Funding and Institutional Support

This section explores reimagined models of financial and institutional support for digital scholarship. It covers financial sustainability for community-based initiatives and digital scholarship units within institutions, guidance on developing

new institutional structures, and guidance for creators on aspects of project management. The resources listed here aim to support and inspire funders, administrators, and practitioners in establishing robust and sustainable digital scholarship practices.

- Financially sustaining community-based initiatives
- Financial sustainability for institutional units
- Developing institutional support and digital humanities units
- Guidance on project management
- Scholarly reflections on alternative models of supporting digital humanities units
- Examples, guidance, and tools for fostering inclusion and equitable partnerships

Financially sustaining community-based initiatives

- For funders, administrators, and practitioners interested in supporting and financially sustaining community-based initiatives, we highlight:
 - Jules, Bergis. "Architecting Sustainable Futures: Exploring Funding Models in Community Archives." *Shift Design*, 2019. <u>https://architectingsustainablefutures.org/</u>.
 - Nowviskie, Bethany. "New Questions, Next Work." *Digital Humanities Quarterly* 16, no. 3 (2022). <u>https://www.digitalhumanities.org/dhq/vol/16/3/000632/000632.html</u>, which focuses on the need for "robust networks of *mutual aid* — based in equity and reciprocity, and meeting actual, core needs of our communities."

Financial sustainability for institutional units

- For research on **sustainable funding and investment models** for digital scholarship, and especially for supporting **digital humanities centers**, we suggest:
 - Zorich, Diane M. "A Survey of Digital Humanities Centers in the United States." CLIR pub143. CLIR, 2008. <u>https://www.clir.org/pubs/reports/pub143/</u>.
 - Maron, Nancy L., K. Kirby Smith, and Matthew Loy. Sustaining Digital Resources: An On-the-Ground View of Projects Today [ITHAKA Case Studies in Sustainability]. JISC and ITHAKA S+R. Last modified July 14, 2009. <u>https://doi.org/10.18665/sr.22408</u>.
 - Maron, Nancy L., and Sarah Pickle. *Sustaining the Digital Humanities: Host Institution Support Beyond the Start-up Phase* [Research Report]. ITHAKA S+R. Last modified June 18, 2014. <u>https://doi.org/10.18665/sr.22548</u>.

Developing institutional support and digital humanities units

- For academic institutions, libraries, archives, and museums supporting and maintaining digital scholarship, we suggest:
 - ECAR Working Group. "Building Capacity for Digital Humanities: A Framework for Institutional Planning." EDUCAUSE Center for Analysis and Research, 2017. <u>https://library.educause.edu/</u> resources/2017/5/building-capacity-for-digital-humanities-a-framework-for-institutional-planning, which provides the following framework to support planning around how to "**develop institutional digital humanities support** for IT staff, librarians, administrators, and faculty with administrative responsibilities."
 - Siemens, Lynne. "Starting and Sustaining Digital Humanities/Digital Scholarships Centers: Lessons from the Trenches." Digital Humanities Quarterly 17, no. 3 (2023). <u>https://digitalhumanities.org/dhq/</u>

vol/17/3/000677/000677.html, which examines 10 digital scholarship centers in North America to identify practices and models in relation to institutional structures, funding, services, staffing, and more.

For administrators and practitioners, particularly but not exclusively in the domain of scholarly publishing, we highlight this Values and Principles Framework and Assessment Checklist, which aims to help scholarly publishing service providers assess support for agreed-upon academic values and principles, including diversity, equity, and inclusion; transparency; openness and interoperability; access to knowledge; financial and organizational stability; and representative governance: Skinner, Katherine, and Sarah Lippincott. "Values and Principles Framework and Assessment Checklist." Commonplace (2020). https://doi.org/10.21428/6ffd8432.5175bab1.

Guidance on project management

 For digital scholarship practitioners and creators and communities, we suggest this curated collection of resources on digital humanities project management, which offers pedagogical resources on digital project planning, creating project charters, managing teams, obtaining and administering grants, etc.: Siemens, Lynne, curator. "Project Management." In *Digital Pedagogy in the Humanities: Concepts, Models, and Experiments*, edited by Rebecca Frost Davis, Matthew K. Gold, Katherine D. Harris, and Jentery Sayers. Modern Language Association, 2020. <u>https://digitalpedagogy.hcommons.org/keyword/Project-Management</u>.

Scholarly reflections on alternative models of supporting digital humanities units

- For all stakeholders considering and imagining alternative mechanisms for supporting digital scholarship, we suggest:
 - Cole, Deirdre, I. A. Mobley, Jacqueline Wernimont, Moya Bailey, T. L. Cowan, and Veronica Paredes. "Accounting and Accountability: Feminist Grant Administration and Coalitional Fair Finance." In *Bodies of Information*, edited by Elizabeth Losh and Jacqueline Wernimont, 57–68. University of Minnesota Press, 2018. <u>https://doi.org/10.5749/j.ctv9hj9r9.7</u>, which "highlights the need for a complete reimagining of funding structures" and grant administration processes to support community-based work.
 - In addition, we suggest Otis, Jessica. "Follow the Money?: Funding and Digital Sustainability." Digital Humanities Quarterly 17, no. 1 (2023). <u>https://www.digitalhumanities.org/dhq/vol/17/1/000666/000666.html</u>.



