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Kate Dohe

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CARE, CODE, AND DIGITAL LIBRARIES: EMBRACING CRITICAL PRACTICE IN DIGITAL LIBRARY COMMUNITIES

In Brief

In this article, the author explores the necessity of articulating an ethics of care in the design, governance, and future evolution of digital library software applications. Long held as the primary technological platforms to advance the most radical values of librarianship, the digital library landscape has become a re-enactment of local power dynamics that privilege wealth, whiteness, and masculinity at the expense of meaningful inclusive practice and care work. This, in turn, has the net result of self-perpetuating open access digital repositories as tools which only a handful of research institutions can fully engage with, and artificially narrows the digital cultural heritage landscape. By linking local narratives to organizational norms and underlining the importance of considering who does the work, and where they can do it, the author explores

manifestations of care in practice and intentional design, and proposes a reframing of digital library management and governance to encourage greater participation and inclusion, along with “user-first” principles of governance.

By [Kate Dohe](#)

Introduction

Digital programs in research libraries, such as institutional repositories and digital collections of unique special collections materials, are deep in their second or even third decade. The broad swath of products, technologies, projects, and professional practices that undergird individual efforts are mature, even as individual libraries are subject to economic stratification that impedes full engagement with those technologies and practices (Dohe 2018). A variety of specializations within the digital library practitioner community continue to emerge each year—digital scholarship, digital curation, digital publishing, or digital strategies to name a few—and it is rare to find an academic library in the Association of Research Libraries (ARL) that does not include digital initiatives in its strategic plan or mission. Clearly, the profession places a great deal of value on such efforts, and the most idealistic and ambitious mission statements emphasize the power of digital libraries to bridge cultural and geopolitical divides (“ICDL Mission” n.d.), share “the record of human knowledge” (“HathiTrust Mission and Goals” n.d.), or facilitate global access to scholarly product (“Mission and Vision, Texas Digital Library” n.d.).

Digital projects have long been hailed as the ethical or even radical solution to our crises of the hour, whether those crises are journal pricing,

original publishing, scientific reproducibility, research data management, or textbook affordability.

Yet here we are, twenty years later, and none of those crises have been solved. We built our digital repositories, invested our time and infrastructure, and struggle to reach users ([Salo 2008](#)). The contemporary digital library product landscape is currently reduced to commercial options owned by the same content owners and vendors ([Schonfeld 2017b](#)) that exuberantly pillage our collections budgets every year ([MIT Libraries n.d.](#)), and a handful of open source options with similar governance structures and substantial community dominance by a smattering of wealthy, historically white ([Hathcock 2015](#)) ARL member institutions. Digital library initiatives across the U.S. are reckoning with very real questions of financial or legal sustainability, while the doors to participation remain firmly closed to broad swaths of the higher education landscape. Even as a significant amount of the profession emphasizes the importance of digital projects work, the cloistered technical community that contributed to this state of affairs is poorly understood by many librarians outside “Digital Etc.” specialists. The end result is elite institutions making products for other elite institutions, and every year the technical and economic barriers to entry grow higher.

How did we get so far from the truly radical roots of digital libraries, when the Budapest Open Access Initiative urged libraries, governments, and scholars to “unit[e] humanity in a common intellectual conversation and quest for knowledge” ([Chan et al. 2002](#))? Why are our technical products failing our users? How is so much talent and investment

(Arlitsch and Grant 2018) producing such mediocre results? More importantly, how do we re-invigorate our own open source projects and fulfill the ultimate missions of digital libraries? How can we create truly participatory digital library project communities? Familiar wolves are at the door, slyly promising vertical product integration and improved discovery as they buy commercial digital projects platforms left and right [\(Schonfeld 2017a\)](#). This isn't ground we can afford to cede back to the same commercial interests that have put libraries on the ropes financially for decades.

After an illuminating discussion over breakfast with a male colleague in my library's technology division, I began to interrogate the ways this problem is a byproduct of social reproduction at our local institutions. He and I shared responsibility for digital library initiatives as peer department heads in our ARL library's IT division. My librarians¹ managed our digital collections, stakeholders, and users, while his developers were responsible for technical implementation of our portfolio of digital library applications, including code contributions to international projects. We had developed a mutually trusting work partnership and collegial friendship by the time we sat down at a diner on the second day of the Code4Lib national conference. Our seemingly innocuous conversation over coffee prompted me to reflect upon the full weight of gendered assumptions regarding the divide between our positions and the value of our respective labor, and underscored the ways these assumptions between individuals ripple through communities. While this conversation occurred between two colleagues at one research library, we also occupy roles and

operate within social systems reproduced throughout the profession that dictate and shape the nature of our work relationship. Open source digital library communities are largely driven by the priorities of technical staff *like us* at elite research libraries *like ours*, who frequently exist in a siloed, overwhelmingly white, predominantly cis-male micro-culture within their home libraries (Askey and Askey 2017), creating a masculinized environment that outsiders often negotiate through participation, emulation, or willful ignorance (Brandon, Ladenson, and Sattler 2018). The inherently gendered tensions between predominantly male IT groups and a feminized library workforce inevitably permeate the communities and applications imbued with our professional values. Radical change to community projects requires a codified framework for equitable, just, and caring interpersonal communication that begins at the local level.

Whose Community Projects?

Any given library's digital collections, institutional repository, and digital scholarship projects are typically powered by a variety of software applications, components, and services, rather than a single monolithic "digital library" application capable of serving up all types of content and data effectively. Some of these services come packaged from commercial vendors, like Worldcat's ContentDM or Elsevier's recently acquired Digital Commons, and the relationship between the software provider and customer library is similar to that of any other software or content package. Many more digital library technologies (including some of those implemented in commercial

products) are community-supported open-source projects. Some of the most prominent examples include digital repository applications Fedora and DSpace, digital collections interface tools Samvera and Islandora, content viewer frameworks like the International Image Interoperability Framework (IIIF), content creation tools like Omeka and Open Journal Systems, and discovery services based on Blacklight. This is far from a complete picture of the digital library project landscape, but serves to highlight the complex nature of implementing and maintaining an open source digital library program.

It is fitting that collections and content intended to reach the global citizenry should be available with open source software applications. Moreover, many of these applications are created, customized, and maintained by staff at the research and cultural heritage institutions that also steward the content. These are among the few products that we *make*, that are *most directly* for us, our content, and our users. This should represent a shift in power dynamics from vended solutions that is nearly as significant as the shift to open access to information. To borrow an analogy from Safiya Noble's dissertation "Searching for Black Girls: Old Traditions in New Media" (Noble 2012), open source digital library technologies are comparable to solar panels that "facilitate independent, democratic participation by citizens, and [show] that design impacts social relations at economic and political levels" in opposition to controlled and closed systems peddled as a "galaxy of knowledge" (Appleton 2019) even as they proclaim their openness and transparency.

Community—and consequently, community *membership*—is critical to understanding these

open source digital library projects. As open-source applications, anyone may download, install, and run digital library applications, though the technical skills to effectively customize and maintain these applications are non-trivial and often out of reach for anyone but professional software developers. This technical overhead can be an exceptionally high barrier to clear for participation in the community. As an example, the Samvera community and toolkit requires adopters to make a staggering amount of critical and frequently binding technical decisions before even getting started; production-level adoption of the latest version of Fedora is constrained to fewer than two dozen institutions worldwide at the time of this writing ([“Fedora 4 Deployments – Fedora Repository,” 2018](#)); DSpace has a robust adoption base but until the still-forthcoming release of DSpace 7, two mutually exclusive user interfaces. Upgrading applications over time—a necessity for a professional digital library program that promises permanence and preservation as a core service—also proves to be a fraught, labor-intensive effort, as seen in the slow adoption of Fedora 4 ([“Designing a Migration Path – Fedora Repository – DuraSpace Wiki” n.d.](#)), or [widely reported problems upgrading to OJS 3](#).

Governance structures of many of these projects tend to overlap in both structure, reward systems, and membership. Institutions often have two avenues for participation in the governance and decision-making of these products—pay membership fees to secure a seat in leadership, and/or employ software developers who are talented enough to contribute code back to the application’s core source code. Skilled developers

with a high degree of institutional support may become official “committees,” which is often a meritorious individual achievement on par with elected professional national service, and the committees themselves have a strong say in product development and roadmaps. Because this labor is extremely technical, administrative representation in steering committees or product leadership are often themselves technical department heads, division managers, or ADs/AULs. Institutions with the resources to participate in these application communities at this level are often further privileged with grant funding opportunities to develop new tools or applications within this digital content ecosystem, and thus reify their status as community leaders. Avenues for participation outside the programmer/management dyad within these open source product communities can be largely limited to programmer support roles like documentation, request management and release testing (as is the case with the DSpace Community Advisory Team), or specialist interest groups with no codified governance power, as is the case with the proliferation of groups in the Samvera ([“Samvera IG/WG Framework – Samvera,” n.d.](#)) community.

Largely absent in these communities are liaisons, curators, or actual end users, and consequently there is a fundamental disconnect between developers of these applications and the front line users who must navigate, curate, and use the contents of such systems. Many of the design discussions I have been privy to in local and organizational settings privilege the discussion of objects and data over people—the pursuit of a more perfect object model without centering and

clearly articulating the user's needs. Hand-waving at "more discoverable" is often unexamined without clearly arriving at discoverable by who, for what purposes, and how we know that. The net result of this insular community development is that programmers and the people who supervise them at wealthy and historically white American institutions are making considerable product and implementation decisions about the most potent tools in our arsenal to resist neoliberalism.

Excluding those who possess insight into the social, political, and experiential impacts of technology from the messy discursive process of making it undermines the value of a collaborative professional tradition, and protects institutional white supremacy and all its trappings of valorized productivity. "The master's tools will never dismantle the master's house" (Lorde 1984).

The economic and racial stratification resulting from this community insularity is counter to the self-proclaimed social justice spirit of early digital initiatives that emphasized their commitment to the public good of global open access to information, and open source technology to serve it. Access barriers for users cannot be lowered when the technological barriers for a diverse member community are simultaneously raised. No HBCUs are listed as Fedora adopters of any version outside consortial support. Only four community colleges have deployed and registered their own DSpace repositories (and two of the listed, registered repositories are defunct at the time of this writing) even as the Community College Consortium for Open Educational Resources (["Community College Consortium for Open Educational Resources." n.d.](#)) and similar initiatives

emphasize the vital importance of access to locally-developed open educational resources for the (frequently non-white, non-traditional, poorer) student populations at community colleges. Accessibility, particularly compliance with WCAG 2.1 AA standards required at a growing number of institutions in response to lawsuits ([Carlson n.d.](#)), continues to be elided with responses that individual members of “the community” need to identify and resolve such fundamental issues on their own ([“DSpace 6 and WCAG Website Accessibility.” n.d.](#)).

While repository registries are voluntary and therefore inherently incomplete, they do paint a picture of self-identified organizations more likely to engage actively in governance and community initiatives for those products. The explanations for this delta between applications that serve clear needs and a potential user base are often presented as self-evident—these institutions “lack the resources,” which is typically a euphemism for “can’t afford a full time developer and systems team inside a library” ([Hamill 2015](#)). Often in the same breath, applications like DSpace or the aging ePrints application are presented as “turnkey” solutions in literature ([Maynard et al. 2013](#)) and documentation ([“What Is DSpace? – DSpace KnowledgeBase” 2011](#)). Professional hosting for open source repository software is a comparably new phenomenon when one considers the lengthy history of such projects, many of which are designed as “single tenant” applications that can be difficult to scale for multiple institutions, or even multiple projects. Furthermore, while the software is open source, there are obvious risks regarding public service sustainability any time a vendor

comes into the picture. Extensible repository systems like Fedora are of abstract utility outside a very limited community, and the talent to configure and manage those applications comes dear. Positions go unfilled, and issues can only be solved by a handful of developers at a few institutions.

Organizations without resources to participate in the open source communities may select vendor solutions for digital projects, which often prove to be less costly than the required FTE and skill set for supporting a major open source digital library initiative. It is no coincidence that major companies like Wiley and Elsevier are buying products like Atypon and Digital Commons respectively ([Schonfeld 2017b](#)), to integrate with the scholarly enterprise software suites each company is building and marketing to provosts, directors of research, and university presidents. In this landscape, open access and cultural heritage content ceases to be an ethical imperative and instead becomes a lucrative revenue stream for organizations that have nakedly demonstrated their opposition to the free and open exchange of information over decades of doing business with libraries.

The disadvantages of this state of affairs in the open source digital projects community are several-fold. Open source tools aren't designed to be adopted by the communities they could theoretically best serve, as users and content creators. This in turn artificially narrows the cultural heritage landscape as digital content is never shared or has no long-term stewardship. The communities that do adopt these applications are frequently so small that only a few people are

equipped to share expertise with each other (which mitigates the advantages of *having* a community of practitioners). Ultimately, the products become worse over time and present market opportunities for the same commercial interests that are hollowing out the mission of academia ([Seale 2013](#), [Bourg 2014](#), Mountz et al. 2015), and put the entire open access and digital scholarship enterprise at risk.

Local Cultures

Examining “...the people building these systems and the environments in which the software is produced, as part of the software’s ecology” ([Sadler and Bourg 2015](#)) is essential to understanding how digital library applications evolved in the manner they have. Open source digital library architecture is not built by Silicon Valley techbros gleefully commodifying the labor of women and people of color ([Hoffmann and Bloom 2016](#)). It is built by our colleagues and friends; people we interact with every day on listservs, on calls, in Slack channels, and in the halls. Many developers and technical staff chose comparably lower-paying positions in higher education, and libraries in particular, because they value the library’s mission and workplace, and care about work-life balance—a far cry from “programmer” culture ([Crum et al. 2015](#)). We are on the same side, and value the same things. Yet library IT culture is still a place apart within libraries, often very literally ([Askey and Askey 2017](#))—a place with its own language, norms, rhythms, and priorities.

Libraries have long been understood as feminized workplaces, with (largely white) female librarians and non-technical support staff, and a higher

proportion of (largely white) male managers (Schlesselman-Tarango 2016). Library IT, particularly in academic libraries, is often the opposite. Women occupy a minority of positions and are less likely to take supervisory positions, and are less likely to be compensated comparably with male supervisors with equivalent experience and expertise ([Lamont 2009](#)). The work environments are rarely as openly hostile or sexist in the vein of Silicon Valley, but entire books ([Brandon, Ladenson, and Sattler 2018](#)) are dedicated to women who must navigate alienation, imposter syndrome, overt sexism, and unconscious bias throughout their careers in library IT. Gender is a vital dimension to understanding technological influence within libraries; as Roma Harris's influential article on the topic states: "Given the strong cultural and ideological associations between masculinity and technology in Western society, it is impossible to consider the social shaping of technology in librarianship without taking into account the gendered nature of library work, particularly since studies of technological change in other sectors of the labor force reveal that the work of women and men is generally segregated, in part along lines structured by their association with or their use of particular technologies" (Harris 1999).

Institutions with the resources to hire "Digital Etc. Librarians" often rely on these positions to "bridge the gap" between librarians and library IT, or "collaborate" through internal marketing and external proselytizing about the merits of a system designed largely by technical staff. These librarians often end up in service provision roles to ameliorate systemic usability flaws (mediated institutional repository submission workflows are a prime

example of this). This in turn limits the opportunities for these librarians to collect and advance user needs or participate in the creation of *better systems* and projects. The work of a Digital Etc. Librarian bears all the signifiers of carework typified by the broader profession of librarianship and explored at length in “on capacity and care” ([Nowviskie 2015](#)), “Library Technologies and the Ethics of Care” ([Henry 2016](#)), and others. It is also frequently composed of bullshit task completion ([Schmidt 2018](#)) generated by questionable user interface decisions in software applications. Furthermore, occupants of this role often feel most immediately the tensions between the patriarchal and technocratic “future of the library” and feminized care work explored in Mirza & Seale’s “Dudes Code, Ladies Coordinate” presentation at DLF 2017 ([Mirza and Seale 2017b](#)) as well as their “Who Killed The World?” chapter ([Mirza and Seale 2017a](#)) in Gina Schlesselman-Tarango’s *Topographies of Whiteness*. In both works, the authors examine the ways in which the technocratic libraries of “the future” (and present) elevate technological production at the expense of care work required to support the end users of those products. This valorization of final *product* over emotional *process* positions Digital Etc. Librarians as handmaidens to a vision of libraries that poorly emulates the commercial IT industry.

Moreover, as digital initiatives, maker spaces, and technology initiatives for libraries occupy a progressively more prominent place in the strategic objectives of a given library, this isolated microculture is increasingly pushed forward as “the future of libraries” ([Mirza and Seale 2017a](#)) at the expense of feminized labor and values of

librarianship. This explicit valuing of technological solutionism by local institutions is then echoed in the committees and organizations responsible for maintaining and governing open access digital library projects. Just as technology is a reflection of the human values of its creators (Noble 2012, Winner 1986), the governance structures of digital library projects are a product of the values of the most influential adopters of these technologies, with explicit and nearly exclusionary value placed on functional code and technological work as an “in kind” contribution to those projects, as seen with Fedora ([“Fedora Leadership Group In-Kind Guidelines” 2018](#)) and Islandora ([“Islandora and Fedora 4” 2014](#)) as notable examples. These are the only products that “count” (Mountz et al. 2015) in this corner of the academic community. This, in turn, is underpinned by interpersonal dynamics within organizations, and the net result is that some of our worst biases manifest in the products we make.

“Just like all politics is local, all culture is local,” Dr. Chris Bourg stated in her Code4Lib 2018 keynote speech in Washington, DC ([Bourg 2018](#)). Aimed squarely and unapologetically at the ways white men can use their de facto positions of power and group belonging within library IT departments to create—or hinder—inclusive environments, the keynote combined evidence and sociological theory with blunt instructions for white cis men in library IT to be better. Vouch for colleagues. Make space. Reduce stereotypical and exclusionary cultural markers. Be cognizant of the bleed between social and professional. Definitely don’t get beers with the fellas and talk about the womenfolk.²

My own professional background echoes many of the findings and narratives of workplace studies and examinations of library IT culture, including those described in Dr. Bourg's keynote. I am a white female Digital Etc. Librarian by trade, accustomed to being described by others in terms of my interpersonal skills and characteristics, with my technical chops left as a vague afterthought. I currently supervise only white and male faculty librarians in my library's IT division, and I worked with nearly exclusively white and male developers throughout my decade or so in the profession at ARL institutions and private companies—places with money. My current library is similar to the physically isolated IT spaces Askey and Askey describe, with our generally male technology division housed in a maze-like basement behind swipe card access points, and a highly collegial environment that relies heavily on technical knowledge and project-driven work that often seems disconnected from “the upstairs.” I've always been “the woman in the room,” and even sometimes “one of the fellas” (always with an asterisk by my name), ready with an invitation to Game Night or a deep dive on George R. R. Martin's *A Song of Ice and Fire*. Alienation in both the male spaces of library IT and female-dominated librarian communities has shadowed me for much of my career. Dr. Bourg's Code4Lib keynote rang true to my lived experience as a woman marginalized within a system I recognized I was complicit in perpetuating.

I was deeply surprised, then, when my colleague and breakfast companion asked for my impressions of the keynote the next day, and then confided³ to me that he became emotional and

somewhat defensive during Dr. Bourg's speech. He continued that maybe some men needed to be spoken to as she had, but he felt put off by what he perceived as stereotypes and assumptions about men in her presentation. I had long perceived this colleague as both *cool-as-they-came* and a reliably empathetic ally, so this admission unsettled me for its resemblance to white fragility (DiAngelo 2011) from someone I had never found susceptible to it, and who had long ago earned my respect for his introspection. If this genuinely well-intentioned male colleague's perceptions were so far from my own, I thought, then how on earth can our library technology departments become more approachable and accessible?

Whither the Ethics of Care?

Ethics of Care has emerged in recent decades as a powerful, intentionally feminist ethical framework centering relationships and emotion in moral development, typically credited to Carol Gilligan for originating the theory ([Webteam n.d.](#)). With time and effort, the understanding and application of this ethic has evolved to encompass a broader array of intersectional (Eugene 1992, Graham 2007) professional (Noddings 1990), and political (Tronto 1993, Hankivsky 2014) implications for care work.⁴

Joan Tronto delineates four components of ethics of care ([Tronto 2012](#)). –

- Responsibility: Assuming a willingness to respond to a need within a relationship
- Attentiveness: Observing a need within a relationship
- Competence: Addressing a need effectively

- Responsiveness: Empathy for the perspective of others

The explicit values of Tronto's framework—equality, freedom from oppression, democracy—align handily with the mission of librarianship, and the relational, emotional, empathetic work of academic librarianship across disciplines are easily understood as care work. Tronto's exploration of care work provides actionable criteria for characteristics of care. These criteria in turn make it possible to meaningfully assess the effectiveness of caring actions. In short, it helps us articulate the difference between simply telling colleagues and users “my door is always open” or “you can email me with any questions” and proactively working to reduce the psychological and interpersonal barriers that prevent people from taking those actions.

High performing librarians exercise strong empathetic skills to identify, respond, assume responsibility, and effectively seek solutions to reducing those barriers. In particular, Digital Etc. Librarians are often asked to do constant translation and code switching between programmers, curators, students, and faculty under the auspices of “bridging communication gaps,” yet frequently earn less than their programming counterparts, and have diminished influence in the direction and governance of digital library products. These librarians are doing the heavy lifting of emotional labor on behalf of the technical colleagues who are empowered to enact actual change in their repository communities, while they themselves call into yet another interest group to debate whether “Title” should be required or only recommended in a system workflow.

My breakfast companion and I were both aware (perhaps to varying degrees) that other staff in our library frequently approached me explicitly as this colleague's "translator." I often found myself assuming a disproportionate amount of emotional labor to explain technical concepts, or how decisions were made by our software developers, and occasionally provide encouragement and support for team members who felt apprehensive talking to my colleague. I had long understood this dynamic as problematic, particularly as a female peer manager in a technology division, but minimized my own feelings of frustration over it as "part of my job." Furthermore, much of my career as a Digital Etc. Librarian had involved the same work, codified as position responsibilities—who was I to be annoyed when someone would privately take me aside and ask "ok, can you tell me what he meant by this? I couldn't follow the technical explanation and I'm embarrassed to ask him about it."

Care in Our Home Institutions

When care work is denigrated by our own research libraries, through both our employment practices and our local interpersonal behaviors, we create patterns of behavior and exclusion that manifest both locally and in our products. If we continue to privilege coding over care as if the two are fully disconnected, and hand the reins of what should be our most *intentional* and *accessible* applications to a homogenous cohort of well-intentioned but isolated decision makers who are removed from direct and constant care work for end users or colleagues, then we are complicit in the neoliberal hollowing of the academic library mission to use our resources for the public good.

We produce software that serves the needs of technologists employed at rich white universities first, and everyone else as an afterthought. This is solvable and avoidable. Locally, we can embrace and elevate the care work done by the librarians whose fates and careers are increasingly bound up in the viability of digital library software.

Stepping back to that fundamental question from my breakfast with my colleague—if reflective and helpful white men who want to be allies are struggling to respond competently to calls for more inclusive, caring spaces, what can be done? Like too many women in this #metoo moment (though one with the privileges of whiteness, financial security, sound health, and more), I am *tired*. I am tired of patiently explaining, or pulling back the curtain on my own experiences. I am tired of answering men who ask “why didn’t you tell me?” when I believe a better question they could ask themselves is “what could I have done differently to help others be comfortable confiding in me?” Moreover, this telling and retelling of what men can do to be better allies and why they need to take action may help with attentiveness to the problem and even assuming responsibility, but does little for developing competence or responsiveness on its own. “Doing the thing is doing the thing,” as Amy Poehler put it in her memoir ([Poehler 2018](#)), and our profession needs more opportunities for those who would support marginalized communities to practice the thing.

For the previous three years, I had worked with another former colleague on an improv workshop specifically for librarians and technologists, which took into account the shifting landscape of librarianship in higher ed and gave our players an

informal space to practice the essential skills of collaboration without the pressure of real expectations ([Pappas and Dohe 2017](#)). Many of our workshop's objectives echoed Dr. Bourg's recommendations, with a performative twist—make your partner look good. Be present. Practice listening with undivided attention. Commit to affirmation as a means to develop the best ideas. Avoid assumptions about common knowledge. Decenter yourself and focus on the needs of the ensemble. While the intent of the workshop was to foster collaboration across domains of distributed expertise, the same skillset applied to both allyship and effective care work, and represents a low-stakes learning environment to develop communication competence. These are concrete abilities that one must practice like coding, not fuzzy personality-driven soft skills that are difficult to assess or articulate. The pursuit of professional development opportunities and training on these skills should be taken as seriously as any request to attend a coding workshop, and just as we would expect a programmer to share a new tool or language with the team, we can and must expect the same from participants in a communication workshop.

Furthermore, the care work performed by librarian-technologists and Digital Etc. Librarians can be emphasized and recognized within library IT departments and divisions in a number of ways.

- De-emphasize and decouple quantity of submissions (especially faculty submissions) in repositories as a metric of performance.
- Elevate and make visible the user research that informs local product decisions as an essential

part of application research and documentation.

- Emphasize demonstrable methods of emotional work, not “collaborate with stakeholders” as a panacea in position descriptions.
- Stop treating diversity exclusively as a pipeline problem and reward efforts to connect with and meet the needs of underrepresented communities.
- For the love of capybaras, *get in front of users* before decision points have whistled by.

COAR, Care, and the Evolution of Digital Library Communities

At the time of this writing, digital library applications are at a pivotal juncture in their development and future evolution. High-profile crises in major projects, notably the closure of the Digital Preservation Network, and layoffs at the Digital Public Library of America, are focusing community attention on the governance of digital library projects and sustainability of membership-driven initiatives. Questions of in-kind labor contributions are likely to rise as local library budgets continue to shrink, but so long as these contributions are limited only to coding and development activities, prospective participants and supporters will continue to be artificially limited.

The Coalition for Open Access Repositories (COAR) has requested comments on their “Next Generation Repositories” proposal ([“COAR Next Generation Repositories | Draft for Public Comment” 2018](#)), and the proposal does specify at a number of points that inclusivity and user

engagement are guiding principles for the document. However, the user stories provided highlight a number of self-perpetuating assumptions about the nature of a human user as a high-level researcher that one would typically find at a high-level research institution in a Western nation. Students, public users motivated by personal interest, disabled users, and exclusively mobile users are nowhere to be found in the design of the “Next Generation Repository,” leaving one to wonder if the Next Generation User is expected to evolve as well.



Search results for “Accessibility” on COAR Draft
for Public Comment

Shifting practice within a community requires reconceptualizing the values of that community, and in this regard Black feminists, womanists, and care scholars are instructive. In “To Be of Use,” Toinette M. Eugene emphasized connections, caring, and personal accountability, rather than the “arbitrary and fragile” market model of community (Eugene 1992). This humanist and explicitly Afrocentric centering of *community* broadens its scope beyond coders and managers, and instead encompasses the communal ways of knowing and doing work in this space. The organizations that sustain and steward digital repository products have a number of opportunities to engage with

and support an ethics of care in the design and governance of their applications. One easy win is to establish parity between the influence of committers and non-programmers. What if quality end-user documentation, or design work, or user survey design, or accessibility assessments were credited and elevated by the projects in the same explicit way code is? What if those contributions shaped the strategic direction of those applications and communities? What if community outreach were baked into the charges of working groups, to seek new opportunities for growth and inclusive design? Put in the parlance advocated by the collective authors of “For Slow Scholarship: A Feminist Politics of Resistance through Collective Action in the Neoliberal University,” what if we *counted differently* (Mountz et al. 2015)?

The [Mukurtu project \(Christen, Merrill, and Wynne 2017\)](#) and community is emerging as a leader in inclusive digital cultural heritage practices. While the project’s primary application does not fulfill many of the essential tasks required of a repository, the content management system does accommodate behavioral metadata, cultural signifiers, and the expression of permissions aligned carefully to its community of indigenous peoples. Moreover, these features were not identified and prioritized in a vacuum, nor was development work undertaken with the expectation that a community on the receiving end of centuries of violence and oppression would be eager to accept an existing repository platform. Instead, the project originated as a grassroots program driven by community needs, evolved in response to the shared requirements of historically marginalized communities, and centered

collaboration and consultation as the guiding principles of development. Ultimately, Mukurtu demonstrates the potential of an application and community with an inclusive ethics of care embodied in the mission of the platform and its evolution.

Conclusion

Four years after Bess Sadler and Chris Bourg's *Code4Lib Journal* article calling for explicitly feminist discovery products, and twenty years after Roma Harris shone light on the gendered power differentials in library technology change management, little has meaningfully changed with regard to the participants and governance structures of our digital repository ecosystem. In fact, newly emerged technologies such as IIR continue to mimic governance structures of other technical products, which in turn replicate the same imbalances in decision-making explored above.

What is now emerging is an unabashedly feminist and inclusive call to action as a critical mass of librarians interrogate the ecosystems of digital library participation and reproduction. The practitioners of emotional labor and care work continue to be de-emphasized in conversations about products with very real impacts on their users, their careers, and the health of a hugely important strategic initiative within libraries. Repositories and linked data platforms have the potential to be our most potent leveler of access and privilege, if we choose to embrace our responsibility and respond with intention. As Chris Bourg stated in her keynote at Code4Lib, this isn't a pipeline problem, one that can be solved by just

getting more “diverse humans” into the mix, as though it can be fixed with some magic combination of attributes. It’s an environmental problem that originates in our home institutions and the elevation of coding over collaboration, of objects over humans, and in-jokes over inclusion, and ultimately serves to starve our own digital repository applications.

Evolution of these communities without a rethinking of product governance may be slow. On a night during a conference when my “one of the fellas” asterisk was available to me, I spoke with a number of repository developers who proceeded to complain about the changes at the DLF Forum over the last few years, scoffing that “no one even puts code on the screen anymore.” As an individual who had co-taught improv at the DLF Forum as a means of strengthening collaboration between those who can teach, and those who can code, I found this to be a terribly myopic attitude. It came across to me as a distillation of the belief that collaboration and soft skills and learning from users should be someone else’s skillset, or that there’s nothing to be gleaned from presentations that center the experiences of students, people of color, people with disabilities, public communities, and the complex, messy universe of invisible “end users” of our digital products if those presentations don’t also include an illegible (and inaccessible) screenshot of a JSON file.

DLF is where I saw “Dudes Code, Ladies Coordinate.” I attended that year’s Forum with my Code4Lib breakfast companion, and I remember at the time wishing that he had attended that particular session. I especially wished this a day later, when that same colleague forgot our prior

plans to meet for lunch, and instead went out with repository developers from another institution to talk about emerging technical issues with strategic implications. I was not invited to that discussion, and instead I spent a few hours reflecting on how little I might be professionally or personally respected by the same people I needed to work with most closely. I understood his invitation to breakfast at Code4Lib, and the emotionally challenging conversation we shared, as a tacit effort to repair a fairly serious personal rift between us. I recognized it as one reciprocal act of care, in the bounds of one working relationship, at one ARL institution. One site of cultural change.

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Huge thank yous to my reviewers Dr. Melissa Villa-Nicholas and Ian Beilin, and my publishing editor Kellee Warren at In the Library with the Lead Pipe, for your labor and thoughtfulness in helping to shape this piece. I'd like to thank a number of people for reading and engaging with the earliest versions of this article, especially Erin Pappas for encouraging me to seek publication, Joseph Koivisto and Vin Novara for extensive feedback, and Bria Parker, Joanne Archer, Rebecca Wack, Rachel Gammons, and Kelsey Corlett-Rivera for their suggestions and support throughout. And finally, I have to extend my gratitude to Ben Wallberg, whose generosity as a colleague, collaborator, and friend made much of this article possible.

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1. There is much more to explore in the demographic composition of “technical librarians” in systems, digital curation, data management, and other positions that require stronger IT skills as a function of their position. Further, people in these positions who may be perceived as “outsiders” to the majority cohort anecdotally take on masculine qualities in an effort to either fit in or establish dominance, which is surfaced in several narratives included in *We Can Do I.T.* edited by Jenny Brandon, Sharon Ladenson, and Kelly Sattler [↩]
2. Unsurprisingly, this keynote earned Dr. Bourg the vitriol of internet trolls who reduced these exhortations to “she’s saying girls can’t like Star Trek!” and decried the leftist takeover of libraries. The Code4Lib conference organizers and community issued a statement of support:

<https://code4lib.github.io/c4l18-keynote-statement/> [↩]

3. This colleague has read earlier versions of this article, and has told me I may share this conversation as a part of the piece. We had multiple conversations about this article in which I asked him to affirm his consent and reflect on this conversation, and his feedback and changes have been helpful. However, in the development of the article, I frequently became anxious about what this would mean for him in particular and other colleagues more generally, which caused me to consider and reflect seriously on the ways in which I still elevate and prioritize white male feelings. All I can do is the work. [↩]
4. While this article focuses on gendered dynamics within a specific community, it is also vitally important to consider the intersectional nature of racial, ableist, and economic systems that come to bear on care ethics within academic settings and the ways in which many people are excluded from the Digital Etc. practitioner community. [↩]

digital curation digital libraries

digital publishing digital repositories

digital scholarship digital strategies

ethics of care open access open source

< [Dismantling Deficit Thinking: A strengths-based inquiry into the experiences of transfer students in and out of academic libraries](#)

[Intersubjectivity and Ghostly Library Labor](#) >

3 RESPONSES

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Naomi

🕒 *2020-02-06 at 1:42 pm*

Thank you for this article! This is a statement that I have been thinking a lot about for libraries.

https://collegefund.org/wp-content/uploads/2020/01/Creating-Visibility-and-Healthy-Learning-Environments-for-Natives-in-Higher-Education_web.pdf



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