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## Maintenance as a Core Value Recommendations for Increasing Gender Equity on Digital Scholarship Teams

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## Chapter 10

# MAINTENANCE AS A CORE VALUE

## *Recommendations for Increasing Gender Equity on Digital Scholarship Teams*

Amanda Koziura and Stephanie  
Becker

### Introduction

As two female librarians who have worked in digital scholarship at research institutions, we have observed how patriarchal gender norms can influence the way teams operate and the toxic impact they have on librarians. In this chapter, we will identify points of impact and suggest a feminist approach, which relies on maintenance and care, to further equity in the subfield of digital scholarship within academic libraries.

Historically, the academic community has debated the definition of digital scholarship so, for the purpose of clarity, we define digital scholarship broadly to include interdisciplinary work related to scholarly communication, institutional repositories, digitization, digital humanities, and all forms of research data. At Association of Research Libraries (ARL) institutions, digital scholarship is



typically supported by a team within the library whose members work with other library colleagues and external stakeholders, such as academic and research faculty, on scholarly projects throughout the research life cycle, from conception to archiving. These teams are composed of individuals who specialize in the various aspects (as defined above) of digital scholarship work.<sup>1</sup>

Within this broad definition, digital scholarship work tends to fall within two categories: innovation and maintenance. Contributing to or consulting on new digital scholarship projects, implementing cutting-edge or novel hardware and software, and spending time on research and development (R&D) all fall under the innovation category. This work is highly visible as it encompasses advanced idea generation, experimenting with new technologies, guiding methodological decision making, and, often, presenting the eventual project output. These are critical pieces of the research life cycle, but they represent only a portion of the overall labor required to successfully produce digital scholarship. Innovation does not often encompass the day-to-day work needed to carry out or maintain a project, only the pieces that are most marketable and can easily be presented to an audience. To borrow a common metaphor, it's the visible tip of the iceberg supported by the maintenance piece hidden beneath the water.

In contrast to innovation, maintenance is the mostly invisible work that happens behind the scenes to develop and sustain the infrastructure needed for successful digital scholarship projects. This can include day-to-day operations, developing and implementing workflows, training, data management and cleaning, digital archiving, copyright research, and generally developing and troubleshooting the behind-the-scenes technology, systems, and processes that keep projects going. It's the less flashy work that is needed to preserve legacy projects, systems, and data. Additionally, the work that goes into educational and outreach efforts that introduce people to digital scholarship, such as course-embedded instruction, workshop series, and open access advocacy, we also classify as maintenance work. While slightly more visible than the administrative and infrastructure work mentioned above, it is similarly both essential and unrecognized as the immediate impact can be difficult to track. To return to the oft-used metaphor, maintenance work is the portion of the iceberg below the ocean's surface that supports the visible tip.

While both categories of work are vital to the success of any digital scholarship team, we have observed that the divide between the two tends to mimic binary gender norms,<sup>\*</sup> with men carrying out valued and visible innovative labor while

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\* This viewpoint is based on a binary definition of gender that does not reflect the nuances of gender identity. We find the binary lens to be helpful in discussions of power and patriarchal impact, but we do recognize the limitations and exclusion of this framing.

women perform invisible and undervalued maintenance work. In the authors' experience, the gendered labor of innovation and maintenance reinforces itself within internal team dynamics and operations through individually assigned roles and responsibilities. These include, but are not limited to, who is assigned primary responsibility for administrative tasks, project documentation, day-to-day operations, and developing cross-departmental workflows. This approach, in combination with the higher levels of authority and autonomy granted to innovators in comparison to their maintainer colleagues, impacts individual recognition, salary compensation, support for professional development, and overall career growth. These impacts are felt disproportionately by women, especially women of color,<sup>†</sup> who perform maintenance-based labor. By critically examining these team dynamics and (re)centering maintenance as a core value, we can move away from patriarchal modes of working and instead establish a feminist approach to digital scholarship work.

## Literature Review

In her article “Vocational Awe and Librarianship: The Lies We Tell Ourselves,” Ettarh defines vocational awe as “the set of ideas, values, and assumptions librarians have about themselves and the profession that result in beliefs that libraries as institutions are inherently good and sacred, and therefore beyond critique.”<sup>22</sup> She links this concept with toxic behaviors and expectations that run rampant in pink-collar professions,<sup>‡</sup> such as job creep, lack of work-life balance and boundaries, overwork, the expectation of emotional labor, and under-compensation that result in burnout and other serious consequences. This continual expectation that librarians will always be available; give wholly of themselves even at great cost to their physical, mental, and emotional well-being; and work long hours for unsustainable wages in order to serve their communities is linked to gendered labor expectations and forms a toxic foundation upon which the profession lies.

In academic librarianship, these gendered norms promote a professional culture where female librarians take on the burden of invisible and emotional labor related to the professional goals of faculty and students with whom they may be working. This trend is amplified in more technology-driven subfields, such as digital scholarship. For example, women working on digital scholarship

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<sup>†</sup> While elaborating on intersectional identities falls outside the scope of this paper, it is important to highlight that women of color face an even larger set of challenges both in the workplace and in US society at large.

<sup>‡</sup> Care or service-oriented fields historically associated with female labor.

teams also tend to take on the invisible, emotional labor of serving as translators between software developers, faculty, administrators, and other library staff. In her article about care and digital libraries, Dohe recalls her personal experiences “assuming a disproportionate amount of emotional labor to explain technical concepts or how decisions were made by [male] software developers.”<sup>3</sup> She explains how colleagues would come to her with questions because they felt embarrassed to ask the developers who actually made and implemented technical decisions. The work of translation requires “strong empathetic skills,” yet those who provide that labor “frequently earn less than their programming counterparts,” most of whom are men.<sup>4</sup> Similarly, digital humanities librarian Morgan describes the importance of providing emotional, not just technical, labor during consultations. Her goal is for researchers to “learn about technology/digital humanities without feeling isolated” and stuck on not having the right technical skill set.<sup>5</sup> In her article, she recalls remarks from a male colleague who refused to provide emotional labor during consultations, calling it akin to hand-holding, and thus denigrating both the necessity and importance of such support for researchers. As digital scholarship frequently involves bringing people together from different disciplines to work toward a common goal, the ability to listen, teach, and translate concepts between audiences is critical to success, yet seldom appreciated or recognized.

In their study on women working in the library technology field, Whitfield and Johnson use the construct of organizational citizenship behaviors (OCBs), or tasks that need to be completed but aren't explicitly written into job descriptions, to demonstrate much of the invisible labor that women do in order to ensure organizational success.<sup>6</sup> In the context of digital scholarship teams, OCBs can be described as the invisible labor employees do to care for their workplace, colleagues, and patrons. Some examples of OCBs in digital scholarship work include writing technical and process documentation, unassigned but necessary administrative tasks, and providing emotional support via advising and mentoring roles. Whitfield and Johnson found that women complete far more OCBs than men, fulfilling the gendered expectation that women will be “good campus citizens” and take on these maintenance and service-oriented tasks, while men are allowed to focus on their innovator-oriented job responsibilities. Even if women are in a more privileged innovator role, they often find themselves taking on, or being assigned, this type of care and maintenance work while their male colleagues are allowed to focus strictly on the more valued portions of the job. Indeed, much of this maintenance work falls under the category of office housework, which Jang, Allen, and Regina describe as “administrative work, non revenue-generating, important, time-consuming, undervalued, menial, and

less desirable.”<sup>7</sup> Taking on these responsibilities traps maintainers in a perpetual cycle of undervalued administrative housework, including emotional labor and invisible OCBs, while their innovator colleagues move unencumbered from one scholarly project to the next.

This gender-coded divide between valued innovation work and invisible maintenance work is further codified in the documents that guide institutional priorities, such as mission statements and strategic plans. Digital scholarship teams customarily operate under a mission and vision that is adapted from their associated library and university’s goals. The language reflected in these mission statements tends to emphasize a productivist bias toward innovation and technology. The same can be said for strategic plans, which use words such as *transformation*, *nexus*, *cutting-edge*, and *experimental*. Media scholar Jackson highlights how biased “productivist imaginings of technology locate innovation, with its unassailable standing, cultural cachet, and valorized economic value, at the top of some change or process, while repair [or maintenance] lies somewhere else: lower, later, or after innovation in process and worth.”<sup>8</sup> The exclusion of maintenance from strategic plans and mission statements deliberately implies that maintenance, according to administrators, is less in value than innovation. This cultural obsession with “technological novelty obscures all of the labor, including housework, that women, disproportionately, do to keep life on track.”<sup>9</sup> The routine housework of the university, as discussed previously, is then seemingly absent from the core goals and values of our institutions.<sup>10</sup> This fact creates an environment where the work of innovators is highly valued while the labor of maintainers who tend to operations, infrastructure, and other often invisible needs is quietly relegated to the background. This tension can create a toxic work environment that breeds resentment as the labor of some is continually lauded while others receive no recognition for their critical contributions, all of which is compounded by the gendered nature of this divide.

The impacts of gendered differences in responsibilities and the value placed on them has a wide-ranging effect on career trajectory and success for women in academic librarianship. In academic libraries there are a wide variety of ways in which librarians can be classified, ranging from professional staff to tenure-track faculty and several iterations in between. One commonality across most classifications is that some combination of service, scholarship, and professional development is generally required for promotion.<sup>11</sup> Comanda and colleagues detail a number of constraints that librarians face in receiving funding for professional development and tenure- and promotion-related activities, noting that 84.5 percent of their respondents said they had to self-fund some of their professional development, something that isn’t possible for many, given their salaries.<sup>12</sup>

Additionally, the study notes inconsistent and unclear methods of disbursing funding as a significant barrier, including many instances where administrators showed favoritism or there was no explanation for why certain people received funding while others did not. Clearly, receiving appropriate funding to pursue presenting and professional development opportunities is already challenging, and can be more so if the librarian is in a maintenance-heavy position where the importance of their growth and development isn't as visible to those making funding decisions.

In the authors' experience, administrators are more likely to approve funding requests for men who can talk about the innovative work they are doing in the subfield of digital scholarship because it increases opportunities for the library to receive wide-scale recognition. Publicizing these efforts can lead to new cross-institution collaborations, awards, or even grants. All of these are positive things; however, the issue is that only the innovators reap the rewards of this work and are able to use it to build their curricula vitae (CVs) for promotion. Those doing the maintenance work providing the infrastructure and labor upon which the innovator's projects are built receive none of these benefits. Even when credit is given, such as listing names on the about page of a digital project, a simple list can be long and hierarchical, and obscure the amount of work that was truly contributed.<sup>13</sup> Additionally, faculty often spin off digital scholarship projects into other professional opportunities such as scholarly publications and presentations. Librarians in innovator positions are commonly asked by their faculty partners to coauthor or copresent on the new scholarship related to the initial project, while maintainers are left behind. Without inclusion on publications and presentations resulting from new faculty research, maintainers can be seen as having a smaller role in the research life cycle, even if they provided the infrastructure upon which the new scholarship is built, and face challenges proving their case for tenure or promotion. While they may have evidence that their work supports internal library operations, the exclusion of maintenance in mission statements and strategic plans makes it difficult for maintainers to contextualize their work as supportive of key library initiatives (including faculty partnerships). Depending on the requirements of the institution, this can hinder their progress toward promotion or tenure despite having put in the work. In institutions with merit-based raise systems, it can also impede their ability to get raises as their accomplishments may not be considered as notable or critical as those of their innovator colleagues.

Lengthening the time to promotion or tenure, or reducing merit-based raises based on negative perceptions of the value of maintenance work, has the added effect of compounding wage inequities. Howard, Habashi, and Reed examined

the wage gap between male and female librarians, noting that “while better than the US overall pay gap, males at every level make significantly more, both statistically and in terms of lost wages\* during the course of a career, than their female colleagues.”<sup>14</sup> This can be attributed to several reasons, including lower starting salaries and lack of salary negotiation, and is compounded over time by percentage-based raises. One of the primary ways that an academic librarian can get a meaningful raise is through the promotion process, and if there are unnecessary barriers to that as described above, it can be even more challenging for those in maintenance positions to achieve parity with their innovator colleagues. Over the course of their careers, the authors have also observed male innovators being hired in at or quickly promoted to higher ranks than their female colleagues, which aligns with Howard, Habashi, and Reed’s findings.<sup>15</sup>

Women are also more likely to have at-home care responsibilities, which makes professional development and devoting time outside working hours to their career harder, if not impossible.<sup>16</sup> Even when women receive support and budget approval for professional development, they might not be able to travel considering both the financial and emotional costs of child- or elder care. While strides have been made toward providing accommodations for nursing mothers, such as providing lactation spaces, the majority of national library conferences provide no information on childcare options, and no state conferences provide any indication that there would be on-site childcare options or funds available to offset the cost of childcare.<sup>17</sup> Additionally, even if those challenges can be overcome, women are likely to miss out on sessions and networking due to pumping, nursing, or other care activities that conflict with happy hours, lunches, and other formal and informal parts of conferences. Those who have a partner, alternative family support, or additional financial means that enable a woman to prioritize her career are perhaps able to overcome these challenges, but that is a privilege afforded only to some and should not be a requirement for career advancement in academic libraries.<sup>18</sup>

## Personal Experiences in Digital Scholarship

As women who work in varying aspects of digital scholarship, we have observed firsthand, within multiple institutions, how innovation is highly valued and supported while maintenance is often invisible and unrecognized by library

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\* We are interpreting the term *lost wages* to refer to the difference between what was earned and what should have been earned under fully equitable circumstances.



administrators. Similarly, we have observed gendered differences in how workplace responsibilities and resources are assigned, even among peers within innovator or maintenance categories. Outside of regular course-embedded and workshop instruction, job descriptions for various digital scholarship roles lack many of the maintenance-oriented responsibilities needed for an overall digital scholarship team to succeed. For example, several ARL institutions have in-house digital scholarship centers that fall under the purview of the related team. We have specifically observed that the operational management of a digital scholarship center, including the hiring and managing of center-associated student personnel, development and upkeep of center workflows and policies, and planning of events such as colloquia programming and lecture series, is high among the list of maintenance tasks that are left unconsidered within team job descriptions and goals.

Within regular team operations, administrators assign primary responsibilities for supporting digital scholarship based on individual areas of expertise and job descriptions, with some notable exceptions. Women who end up working in innovator roles (such as GIS or digital humanities) see less support, but more administrative oversight and operational duties, than their male colleagues. To provide a specific example, one of the authors was assigned an abundance of operational and administrative maintenance tasks that left no time for the innovator duties in her job description. She was consequently seen by the very same administrators as unqualified for promotion due to the lack of progress in her innovator role, despite positive reviews and praise for her work. When she asked to rebalance her workload to match her job description, or alternatively adjust her job description to reflect the work she was assigned, she was denied. Meanwhile, at the same institution, men hired into innovator roles carried out their innovator responsibilities without being hindered in the same way by maintenance responsibilities. While the division of labor between innovators and maintainers is gendered, the gender of the person within the role also significantly impacts the nature of their “other duties as assigned” and the overall support they receive for their role and career development.<sup>19</sup> Perhaps unsurprisingly, we’ve observed a high turnover rate among women in innovator positions at institutions we worked at, many of whom are replaced by men.

We have also observed that women in maintenance positions who manage core systems and processes that provide the critical infrastructure upon which successful projects are built are often hired at lower ranks, are not provided with stable programmatic resources, and are subject to more oversight than male innovators or even male maintainers. Maintenance work is resource intensive, requiring ongoing funds that may increase over time, including costs for vendor

contracts, digital storage solutions, handle servers, software updates and fixes, and of course the internal labor to make it all happen. The resources, care, and labor that go into managing them are largely invisible not only to library patrons, but also to library and university administrators. Despite being a mission-critical resource, infrastructure isn't on display in an exhibition, nor is it featured in campus-wide marketing efforts that tend to boost all things innovation. Without visibility, women, who already hold less power than their male colleagues, spend large amounts of their time and energy, sometimes spanning years, advocating for the programmatic resources they need to fulfill the functions of their jobs. Similarly, women in digital scholarship can have difficulty accessing the right software and hardware they need to fulfill their job duties. Instead of spending time on actual work, women find themselves having to justify their technological and other resource needs to administrators. This is supported by Whitfield and Johnson's findings, which show that women continually have their expertise questioned based on gender and constantly have to prove themselves while their male colleagues do not face such professional hurdles.<sup>20</sup> As an example, the authors have on multiple occasions sought out male colleagues in innovator roles to advocate for programmatic and technological resources on their behalf as it consistently shortened both the amount of resistance to the request and the amount of time before it was filled. Blumenthal and colleagues similarly note the near-constant advocacy needed to gain access to required resources for digital work, as well as the increased success of those with privilege in receiving said resources.<sup>21</sup>

Another issue is the culture of digital work being supported by soft money, one-time funds, and precarious labor. Innovative and experimental projects can be funded in the short term, but after they successfully debut and attention has waned, the resources needed for maintenance are suddenly scarce. Grant funding dries up, precariously employed people move on, and administrators look for the next big thing to catch a funder's eye. In their article about the value of digital collections labor, Becker, Kumer, and Langer explain how this short-term success metric greatly undermines any long-term sustainability efforts achieved through a financial investment in maintenance and is exactly the type of culture that leads to burnout among women, especially those who are precariously employed.<sup>22</sup> This issue can also be seen in the culture of digital humanities work, where one-off or short-term projects and open source technologies can burn out as quickly as they came to life due to precarious funding coming to an end.<sup>23</sup> One needs to look no further than the Text Analysis Portal for Research (TAPoR) to see a host of useful tools that are no longer being maintained, and innovative projects such as the Simulated Environment for Theatre (SET) seem to have

vanished into the virtual ether.<sup>24</sup> Others still maintain a virtual presence due to good planning, such as Hurwitz's Occupy Archive, but with the departure of the PI and others from the university hosting it, there is no telling how long it will remain.<sup>25</sup> Such projects further exemplify the culture of digital scholarship where innovation is valued, but maintenance, even of something useful to other scholars, is not.

All of these factors converged to form an environment where male innovators were highly privileged, receiving the majority of funding, accolades, and overall support. Meanwhile, female innovators and maintainers were relegated to doing the majority of the emotional and invisible labor to keep things running smoothly, even at the cost of their own career advancement. While systemic changes supported by administrators are needed to fully address the gendered culture around digital scholarship work, we are recommending some actions that can be employed at a smaller scale to begin to effect change.

## Recommendations

The differences between support, recognition, and opportunity for growth between maintenance and innovator positions, and the further impact of gender within them, can breed a toxic environment full of resentment as the privileged easily get what they need while others have to tirelessly advocate for even basic support. To help address the inequities between the different classifications of work and the overall impact of gender on opportunity, we suggest referring back to the feminist moral theory of care ethics. Feminist scholar Gilligan defines this as an ethic that centers on neutralizing power dynamics through human connection.<sup>26</sup> While “Kant claims that women are incapable of being fully moral because of their reliance on emotion rather than reason,” care ethics embraces and values emotions when making moral decisions.<sup>27</sup> Morality, however, does not happen in isolation from its larger context. It is embedded inside of other structural and social standards, inheriting the limitations from our culture imposed by white supremacy and capitalism. Trono argues that “we cannot understand an ethic of care until we place such an ethic in its full moral and political context.”<sup>28</sup> On a local level, within digital scholarship work, we can assess the political context of our workplace, locate those inherited limitations, and implement an ethic of care not just to care for our fellow colleagues and patrons, but also to extend that care to the information and objects we steward. The Information Maintainers highlight that “care for humans and for objects and systems are often connected,” and that care is enacted within “the context of power relations.... It is crucial to acknowledge that care takes place within cultural systems of whiteness and

capitalism that function as drivers of funding, access, and support” in cultural heritage institutions.<sup>29</sup> While implementing care ethics within digital scholarship work cannot fully abolish the harm caused by these larger cultural systems, it can help to mitigate the impact of that harm on the people and the information and objects we work with.

After attending a few professional conferences in 2016, archivist Mattson noticed that numerous presenters called for an ethic of care in archival and library work, and in her reflective blog post, she summarizes her takeaway of those presentations as a need for actual “professional standards and models that place care-giving, justice-seeking, and community-oriented frameworks at the center of our practice.” She goes on to say that “although we work in a system that replicates ‘harm, not care,’ it is within our power to change the terms of our work.”<sup>30</sup> Issues of inequity can easily go unseen and unspoken by anyone not directly impacted, while those who are impacted may not have the social or political capital to raise their concerns or be taken seriously. Thus, as Mattson suggests, enacting an ethic of care within digital scholarship work must be a collective endeavor by maintainers, innovators, and administrators in privileged positions of power. It is with Mattson’s call for care-centered frameworks in mind that we examined our lived experiences and provide suggestions for a more equitable future.

## Collaborative Consultations and Project Charters

Digital scholarship projects typically start when a patron (faculty, staff, or student) reaches out to an individual digital scholarship team member with a question or idea. The patron may already have a relationship with that person, or, based on their project requirements, may believe that person to be the best fit for them to work with. This initial contact generally turns into a project consultation between the patron and digital scholarship librarians. For institutions with formal digital scholarship teams or centers, one way to ensure that those who do maintenance work are seen and appreciated is to involve them in the initial project consultations. Typically, maintenance becomes visible only in panicked moments of breakdown and malfunction.<sup>31</sup> By including maintainers in project consultations, patrons and digital scholarship teams can collaboratively vision long-term project plans that take future possibilities of breakdown into consideration from the very start. Centering maintenance at a project’s core not only demonstrates respect and value for women who carry out that work, but it also leads to a more thoughtful scholarly output. For example, maintainers may

introduce tools such as the University of Pittsburgh's Socio-technical Sustainability Roadmap, which leads users through the steps of creating sustainable digital humanities projects.<sup>32</sup>

In order to guide and document decision-making during project consultations, we recommend having a detailed project charter\* that outlines the roles and responsibilities of everyone who will contribute to the project, regardless of the size of their involvement. This clarifies what each individual will contribute and sets an expectation for the project's overall scope and time line, ensuring that everyone is on the same page. Additionally, it makes visible and gives credit to all contributors, including precariously employed contractors, students, and volunteers. Contributions should be noted on the project web presence as well, and can take a variety of forms to ensure that appropriate credit is given for the type and amount of labor involved. Rivard, Arnold, and Tilton give a detailed breakdown of ways that all, including students and those who may have departed from the institution, can have their contributions be made visible.<sup>33</sup> These include going beyond lists to allow people to reframe how their work is represented according to their career goals and providing visualizations that show the length of their tenure and contributions.

Digital scholarship team members should also include information about the infrastructure and labor required to build, maintain, and sunset a project in the project charter. In pursuit of project goals, we too often take for granted the resources and services of various campus departments without considering the amount of labor required to make those resources and services available to us. When we document that labor in a project charter, it brings to light the efforts of women in maintainer roles who are critical to a project's success, but often overlooked and underappreciated. In particular, including information detailing the process for sunsetting or archiving a project brings to light the resources and labor required to keep the finished project available in the long term, something that is often overlooked.

## Documenting Operational Workflows

When it comes to internal team and library operations, including making external services accessible to the campus community, digital scholarship teams typically have intricate back-end policies that govern their work. Examples include providing cross-departmental workflows for digitization, metadata, and repository work; maintaining software licenses to ensure ongoing access for patrons; and negotiating contracts with academic publishers for access to their content.

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\* See appendix for an example project charter template.

The labor that goes into creating and executing these policies is significant, but frequently remains unseen and unacknowledged by administrators and colleagues as it becomes part of standard operating procedures.

Much like project charters, thoroughly documenting internal workflows with assigned responsibilities centers and makes visible the maintenance-based labor necessary for our teams and library to succeed. On par with documentation, it's important for digital scholarship team members to work together alongside other library colleagues on creating and maintaining a space for broad dissemination of and access to these workflows. By documenting and sharing the labor that goes into any given project or task, the opportunity for mutual respect and trust increases, both horizontally across colleagues and faculty collaborators, and vertically between staff and administrators. Additionally, staff should iteratively revisit workflows and responsibilities to ensure they are adapted as circumstances change and evenly assigned among all appropriate team members, and that everyone is continually aware of the time, effort, and expertise that goes into them.

## Cross-training and Committee Involvement

As noted in an earlier section, professional development funding and support can be difficult for a woman in a maintainer position to obtain. In order to gain new skills, hone existing ones, and continue to spread equity throughout the digital scholarship team, we recommend an internal cross-training program for library employees. Since it's common for each member of the team to have differing areas of expertise, training each other on aspects of your work can have multiple positive outcomes. For one, it allows team members to assist each other when one person has too much on their plate or needs to step away for an extended period of time due to caregiving responsibilities or other circumstances. When individuals have a better understanding of their colleagues' work, they can create workflows or include colleagues on projects that leverage and take their expertise into consideration. Cross-training also provides team members with a deeper understanding and appreciation for the various types of labor that go into digital scholarship. Participating in maintenance work specifically, and learning from those who are regularly responsible for it, can foster camaraderie and illuminates the value of maintenance-based labor. Either way, it is important for administrators to encourage and create space for internal cross-training.

Since maintainers tend to have significantly more administrative and committee work, part of any cross-training program should require all innovators to take part in this work to ensure that operational tasks are not disproportionately

relegated to female team members. By including on a committee individuals who do not have direct workflow or program responsibilities, you gain an outside perspective when making group decisions. This approach creates the opportunity both to increase the quality of work and to equalize the amount of work distributed among the team. An example is having a data specialist (typically an innovator position) be part of the digitization committee (mostly composed of maintainers). The data specialist may have insight into how to approach decision-making from a different perspective. For instance, they might have a better understanding of how patrons can leverage digital collections metadata if the metadata is formatted in a different way. That then leads to the data specialist learning more about the labor that goes into metadata creation and the metadata librarian learning more about how patrons want to use metadata in partnership with digital scholarship tools.

## “Other Duties as Assigned”

As noted previously, while administrators assign duties based on expertise and job descriptions, “other duties as assigned” are often distributed in a gendered fashion. In order to prevent this approach, managers should work closely with their reports to understand and document the full scope of their responsibilities, including office housework–like tasks. Additionally, they should keep track of unassigned maintenance duties to ensure that work is evenly distributed among the entire team. While managers can provide some latitude for employee preference and aptitude, it is important that administrative, operational, and other maintenance-based tasks are equitably distributed in order to avoid negatively impacting morale, annual evaluations, and overall potential for career growth. An overabundance of undervalued administrative tasks takes away from the opportunities that an employee has to work on strategically important functions. If the team is understaffed, as many are, then it is up to the manager to work with administration and determine which tasks can be set aside until appropriate staffing levels are achieved. Lack of staff is not an excuse to derail someone’s career by assigning them an abundance of non-job-related duties at the expense of what they were hired to do, and it is critical that administrators recognize and respect this fact.

Given that institutional needs are ever-evolving, as are the professional interests and expertise of those working in digital scholarship, we recommend that managers conduct an annual review of individual job duties for each team member. Reviewing and revising job descriptions and titles goes hand in hand with promoting equity, as it allows for previously unrecognized work to be

documented and codified as important. Such work can include key administrative, operational, and maintenance duties, but also comprises relationship management and other sources of emotional labor, such as translating needs among collaborators. When managers include the full spectrum of required labor within official job descriptions, appropriate weight and recognition can be given to the impact of these tasks in annual reviews and tenure or promotion packets, as well as documenting individual career growth. Similarly, administrators should include maintenance in their strategic plans and other governing documents to bring awareness to the criticality of this work and to secure the resources, including labor, that maintenance requires.

## Conclusion

Nowvskie states that “a feminist ethic of care seeks... to illuminate the relationships of small components, one to another, within great systems.”<sup>34</sup> This statement speaks to the importance of understanding the interconnectedness of all work by all contributors in digital scholarship, and by highlighting or valuing only a portion of it we are harming the morale and careers of maintainers without whose work digital scholarship teams could not be successful. Implementing the recommendations we have outlined above is one way to move toward instilling this ethic of care, of moving “repair (and repair workers) to the center of our thinking about new media and technology” and the way we value and approach labor in digital scholarship.<sup>35</sup>

We do not mean we should aim to uphold the status quo when maintaining a system or process causes undue harm to various communities of people. In their definition of maintenance, the Information Maintainers note that

where maintenance-minded approaches do promote continuity, they should not be uncritically conservative of systems of historical or contemporary oppression: nor do we wish to valorize the maintenance of systems that exacerbate other harms, such as those resulting from or contributing to anthropogenically-driven climate change, surveillance and exploitation of people through monetized data capture, or discrimination based on race, class, gender, or other perceived differences.<sup>36</sup>

In our local digital scholarship context, this approach includes working to change things such as the maintenance of discriminatory authority headings or other taxonomies we employ, designing projects without inclusive accessibility



features, the ongoing reliance on precarious or underpaid labor, and of course the consistent undervaluing of maintenance in favor of innovation.

While the adoption of our recommendations will not repair the systemic inequalities that govern our society and institutions, it can help further equity on a local level within digital scholarship teams and mitigate the harmful consequences of gendered labor. In order to (re)center maintenance as a core value, we must “move from buzzwords to values, and from means to ends.”<sup>37</sup> The language we use in our job descriptions, strategic plans, and mission statements must be intentional and reflect both innovation and maintenance. Doing so improves the visibility of maintenance work and enables women to frame their labor as mission-driven, not just operational. By collectively increasing the visibility of maintenance work, we can increase equity within digital scholarship teams and create a culture centered on care, which values and rewards all labor as central to success.

# APPENDIX: SAMPLE PROJECT CHARTER

## Project Title

## Project PI

## Description

*Brief description and goals of the project.*

## Scope

*Technical boundaries of the project. Type of web presence, types of media used, general organization, etc.*

## Time Line

*Detail a time line of the project from conception to completion and publication. Estimates are fine.*

## Roles and Responsibilities

Name	E-mail	Status (student, staff, faculty)	School	Role and responsibilities

## Funding (If Applicable)

*Detail any applicable funding sources and attributions for them here.*

## Data Management Plan

*Detail the data management plan, including any privacy concerns, expected storage platforms, etc.*

## Attribution

The Center for Digital Scholarship values proper attribution of all work regardless of the status of the contributors. **We require all PIs to attribute the work**

**done by all members of the project team, including Center personnel and students, unless those rights are waived.** PIs are encouraged to use the following language for attribution.

Project supported by the Center for Digital Scholarship at Your University. In particular, we would like to acknowledge the contributions of *[insert library staff names here; this is also where other campus offices whose infrastructure and labor make the work possible can be acknowledged]*.

I agree to attribute all work done on this project to the appropriate team members.

Signed \_\_\_\_\_ Date \_\_\_\_\_

## Copyright

The Center for Digital Scholarship encourages projects to be made as publicly and openly available as possible. To that end, we encourage the use of Creative Commons (<https://creativecommons.org/>) licenses. We also encourage completed projects to apply for a DOI and include a suggested citation on their site.

## Accessibility

*Detail anything needed for accessibility purposes.*

## Sunsetting

*Detail the plan for sunsetting the project, including the approximate date when the project is to be archived, where it will be archived, and how it will be sustained for future access.*

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