“Can software or tools be feminist,” asks Tara McPherson in *Feminist in a Software Lab: Difference + Design*, “or are tools wielded with feminist intent?” [McPherson 2018, 23]. That question weaves through the three challenges McPherson sets for herself in this complex and sometimes frustrating book. She reframes the text-centric origin story of the digital humanities (DH) to push back against prevailing narratives of text-centric and major project / method trajectories; she models ways in which critical making and critique can co-exist; and she presents an ethnographic narrative about a seminal project in Vectors that was founded and functions as a truly collaborative endeavor. The Vectors journal and lab, an object-oriented research and publishing mechanism, has since its inception centered on Black feminist theory and praxis, and in so doing has informed and inspired the intersectional approach of many emergent DH projects. In the process she traces the hegemonic development of UNIX in the 1960s that in many ways conflicted and belied the concurrent civil unrest and calls for social change. In so doing she raises uncomfortable questions for readers about the UNIX-based systems and applications on which we rely to undertake and disseminate our work. She does all of this while pushing the limits of the design-rich house style of its series – then at HUP and continued since at MIT Press – in an attempt to recapture and remediate scholarly work that was never intended to be presented in print. Indeed the work of editors and designers in the Vectors journal was meant to pursue “the relation of form and content, of interactivity, of shifting screen languages, and of emergent genres for scholarly publishing [that] are necessarily flattened in a bookish format” [McPherson 2018, 25]. So it is this effort to describe the work of Vectors that gives a sense of poignancy and frustration, given that many of the works she presents have been made inaccessible and therefore lost to us because of the ineffable burden of sustaining them over a long period – in the very UNIX operating systems and applications that supported them in the first place.

The book comprises two long essays, one short essay, a series of multimodal interjections, and a variety of editorial and navigational apparatus. There is a “Visual Introduction” that presents a brief imagistic recounting of inspirations for design in digital publications. The preface, “Opening Vectors,” outlines reasons why a text-centric understanding of DH is so limiting, and recognizes the importance of scholars who work in digital media, design, and critical making and how their works align better than is sometimes acknowledged with other forms of production and critique. In the preface McPherson also emphasizes how crucial it is to recognize the collaborative nature of DH work, and in particular the kinds of complex feminist software and critical race platforms that were undertaken at the Vectors Lab. “How to Read This Book” is a wayfinder for readers who might be particularly interested in one or another of the book’s components, and so offers encouragement for nonlinear reading. The two long essays, “Designing for Difference” and “Assembling Scholarship: From Vectors to Scalar,” in turn recognize the gendered, racist perspectives buried in the guts of the computer work we do and recount the efforts of the Vectors collective to push back against that hegemonic construction of data at its core. The book ends with a brief essay, “Outro: Scholarship in the Wild,” in which McPherson expresses anxiety about how the forms of scholarship made possible through DH are so fragile. There is also a section on
“Guidelines for Evaluating Multimedia Scholarship,” in which she proposes ways in which such work should be recognized and evaluated. Perhaps the most effective and engaging are the five sections that punctuate the second essay. McPherson describes them as “recombinatory” attempts to re-present and thus make durable the voices and visions of the teams of editors and designers whose digital scholarship was published with and by the Vectors team [McPherson 2018, 26–27]. Throughout the book McPherson capitalizes on the ambitious aesthetic of the Harvard series (no doubt collaborating with its design team) to both play and provoke. The screengrabs of web pages and data visualizations, the different paper color and stock, font families, and page layouts underscore the othering involved in communicating and critiquing both digital process and product. As we explore the work of Vectors, we are pushed into unusual and sometimes uncomfortable modes of engaging with the material.

Feminist in a Software Lab is one in a growing number of monographs and volumes of collected essays that push against hegemonic assumptions about DH, including Roopika Risam’s New Digital Worlds (2018), Safiya Noble’s Algorithms of Oppression (2018), Catherine D’Ignazio and Lauren Klein’s Data Feminism (2020), and several volumes in the Debates in DH series, including Bodies of Information (Jacqueline Wernimont and Elizabeth Losh, eds., 2018), The Digital Black Atlantic (Roopika Risam and Kelly Baker, eds., 2021), Global Debates in the Digital Humanities (Dominico Fiormonte, Sukanta Chaudhuri, and Paola Ricaurte, eds., 2022), and People, Practice, Power: Digital Humanities Outside the Center (Anne McGrail, Angel David Nieves, and Siobhan Senier, eds., 2022). What distinguishes McPherson’s volume is its frankly autoethnographic tone, especially in the sections reflecting upon the growth and construction of the Vectors projects and how those in turn informed the development of the Scalar platform. McPherson’s representation of the overt rootedness of the Vectors team in critical race theory and Black feminist praxis reveals its difference – and its chosen alignment with other major projects built upon concepts of North American feminist praxis, notably including the Canadian Writing Research Collaboratory: https://cwrc.ca/, the Women Writers Project: https://www.wwp.neohumanities.edu/, the Advanced Research Consortium: https://arc.dh.tamu.edu/, and Mukurtu: https://mukurtu.org/ (led by Susan Brown, Julia Flanders, Laura Mandell, and Kim Christen, respectively). The model that McPherson puts forward is truly demonstrative of the ways that major projects both mature and when coming into being should develop their missions, and be intentional about long-range strategies for sustainable production.

The first essay in the book, “Designing for Difference,” presents a clear-eyed explication of how embedded are the roots of computing in white male-led American military- and corporate-funded projects that developed and disseminated systems built upon the UNIX programming language, concurrent with the fight for racial justice and countercultural movements of the 1960s and 1970s. McPherson builds upon earlier work in which she unpacks the interrelationship between ‘cultural and computational operating systems,’ and how the latter served – wittingly or not – to embed covert racism into the very systems we use to communicate. McPherson thus challenges us to resist neoliberal modularity, using our coding and database design at the beginning rather than at the end of our work: “[g]ender, race, sexuality, class, and disability might then be understood not as things to be added on to our analysis (or to our metadata) after the fact, after the first principles, but instead as operating principles of a different order, already coursing through discourse and matter” [McPherson 2018, 99].

The second essay, “Assembling Scholarship: From Vectors to Scalar,” offers a fascinating forensic reflection upon how the needs for new forms of dynamic publication were pursued at the Vectors Lab at USC for over a dozen years, weaving into that search the development of the multimodal, multivalent Scalar platform. Whereas some such biographical works might embed the labor committed to this kind of development to footnotes and appendices, here the memos, emails, schematics, and specification documents are wholly a part of the recounting. That such work was so carefully archived in the first place is an act of difference; think how often, at the pace with which we develop our digital projects, we leave our documentation to some later moment when we will have time (we think) to reflect. McPherson explains the principles that guided Vectors. The founding members were “committed to work with scholars who were engaging issues of gender, race, affect, memory, sexuality, nationhood, mediation, space, and social justice” [McPherson 2018, 146]. Their works were object-driven and dynamic, and were chosen because they could not be adequately presented in print. The team did this work in ways that required deep collaboration – even immersion – into each scholar’s work, sometimes for months at a time, driven by an “impulse to reanimate the archive through narrative and design – to bring a waning form to new life while blurring the line between form and content, repertoire and archive’
Such work necessitated making more explicit the intersection of humanistic and artistic scholarly expression, designing new types of databases that broke with rigid data hierarchies, pushing back against prevailing metadata schemas that reinforced colonial knowledge graphs, and building middleware and interfaces that privileged object over text. Description of that process reveals how highly customized and therefore how fragile the work was, and ultimately how the Vectors group designed the open-source, open-access Scalar platform to find a balance between specific design needs and sustainable publication.

As indicated above, perhaps the most compelling parts of the book are the “Windows” that offer case studies of the projects developed at Vectors. The first three “Windows” are dedicated to the Vectors journal itself, and to the development of its first project, “The Stolen Time Archive.” “Window 4” features snapshots of the visions of authors and designers of “Neue Nationalgallerie,” “Narrating Bits,” “WiFi-Bedouin,” “Cast-offs from the Golden Age,” “Unmarked Planes and Hidden Geographies,” and “shu jian.” Each includes statements of intent, woven amongst authors and designers that reflect the excitement and challenges presented by these complex projects – some of which seem never to have made it beyond the scoping phase. It’s hard to tell. The fifth “Window” features “The Scalar Feature Showcase,” presenting Scalar’s specifications, functionality, and a selection of projects produced within the platform, therefore positioning it as the direct evolution of the Vectors journal.

It is the “Windows” inserts that reveal the most problematic nature of digital media projects: their ephemerality, that is rooted in access needs over long periods of time, choices of software applications, and plugins that are made redundant, and what all of that means for our ability to think about preservation. It is McPherson’s attempt to describe the work that produces a feeling of unreclaimable distance for the reader. We can read about Alice Gambill and Raegan Kelly’s intention for “The Stolen Time Archive,” a project that was meant to transform and capture ephemeral time spent working with archival documents, but we cannot recapture it. Not only does the book push us away, but Adobe stopped supporting the Flash plugin in 2020, and so the Flash player-based content can no longer be accessed. Just as McPherson points to the flattening of these projects in bookish format, she reveals the precarity of this work, and anticipates the reader’s unease with the warning, “due to technological obsolescence and other factors a number of Vectors Journal projects have become unavailable since their original publication” [McPherson 2018, 235]. Any scholar who has worked in DH – or who has tried to cite a DH project – has experienced this kind of anxiety: the 404 error, the puzzle piece icon, the dead link. At a certain point even the most carefully curated and archived digital work will go missing and scholars who rely on digital forms of publication and presentation would be well served to consider this eventuality at the beginning of their work.

But herein lies the poignancy of the book: these projects can only be described as lost referents. There is currently no way to experience them in the way that they were envisioned and designed. And who would be responsible for updating the artifacts so that they could be reclaimed? Perhaps that is McPherson’s ultimate gift to us through this book: to offer a kind of eulogy for all the work now lost.

There is one problematic aspect of the book which the Press would be wise to redress. Despite extensive endnotes, references, and credits that rely on (and even are presented to suggest) hyperlinks, there is no e-edition of the text or even a PDF that would allow the reader to access the sources McPherson consulted as she wrote the book. Such oversight (unless for some reason the author or Press meant to omit) betrays the kind of privileged gate-keeping that still dictates how we share our scholarly work.

Ultimately, McPherson uses the book to carve out a place for critical digital media theory and production. She models how purposeful analysis and production can be when they are driven by careful attention to collaborative labor practice. And she challenges us to think about whether we can ever truly publish the totality of our DH research, even as we strive to find new ways to document our work.

Works Cited
