

Bit Rosie: A Case Study in Transforming Web-Based Multimedia Research into Digital Archives

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ABSTRACT

This article is a case study in transforming web-based multimedia research initiatives into digital institutional archives to safeguard against the unstable nature of the Internet as a long-term historical medium. The study examines the Bit Rosie digital archives at the New York University Fales Library, which was created as a collaboration between a doctoral researcher in ethnomusicology and the head music librarian at the Avery Fisher Center for Music and Media. The article analyzes how the Bit Rosie archives implements elements of both feminist and activist archival practice in a born-digital context to integrate overlooked women music producers into the archives of the recorded music industry. The case study illustrates how collaboration between cultural creators, researchers, and archivists can give legitimacy and longevity to projects and voices of cultural resistance in the internet era. To conclude, the article suggests that more researchers and university libraries can use this case study as a model in setting up institutional archival homes for the increasing number of multimedia initiatives and projects blossoming throughout the humanities and social sciences.

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KEY WORDS

Female music producers, Collaborative digital archives, Case study, Music archives, Feminist archives, Activist archivy, Digital humanities, Multimedia research, Internet archives, Archive-It, Home studio music production, Women artist archives, Born-digital archives, Archive creation, Feminist methodology, Archives appraisal, Embedded curators, Accessibility, Canonization

In the twenty-first century, the Internet is a valuable platform for sharing and discovering cultural objects created by people and populations hitherto unrepresented in institutional archives. For academic researchers, and for the growing numbers of autodidact web researchers, the Internet is a vast resource for weaving “many partial and fragmented sources together in unique ways” to create narratives for marginalized voices.¹ In this view, online media created by and representing women in recorded music production holds the promise of new feminist narratives and, potentially, more equitable futures for women in music technology fields.

As an ethnomusicologist, my research addresses why women are so underrepresented in music production fields—especially in the roles of producer and engineer—within contemporary recorded popular music from both a scholarly and an activist standpoint. A 2019 Annenberg study shows that women represent only 2 percent of the credited producers on all songs on the 2012–2018 Billboard Hot 100 end-of-year charts. No woman has ever won the Grammy for best producer in the nonclassical category.² Moreover, women and gender-nonconforming producers and engineers working in cismale-dominated recording studios often experience an array of negative gender-based obstacles including having their skills discounted, being undercredited, receiving lower pay, and being sexually harassed, along with a general feeling of being out of place or uncomfortable.

In addition to my scholarly analysis of the gender imbalance in the contemporary recorded music industry, I produce and direct a web series called Bit Rosie (www.bitrosie.com) that features female and gender-nonconforming home studio producers. The project, an integral digital humanities component of my dissertation research, provides much-needed media representation to producers and engineers working in a male-dominated industry. When I started the Bit Rosie project in 2016, I conceived of the Internet as a radical communication tool for realizing feminist change. Using the web-hosting platform Squarespace and the video streaming platform YouTube, I intended the videos to provide inspiring role models for female producers now and in the future. Bit Rosie has indeed become a valuable alternative media platform that provides inspiring stories and role models. Five years later, however, I am concerned about how far into the future the platform will last.

While the Internet certainly carries archival and feminist potential, social and economic forces often undermine its long-term cultural impact. As librarians Kent Underwood and Robin Preiss observe: “websites are fragile and impermanent, and they cannot endure as historical documents without active curatorial attention and intervention.”³ In thinking about the future prospects of this digital humanities project, I feared both the precariousness of the Internet as an archival medium and the ultimate forgetting of feminist media. With these

concerns in mind, I set in motion a collaboration with Kent Underwood, head of the Avery Fisher Center (AFC) for Music and Media, to turn the Bit Rosie website into a digital collection at the New York University Fales Library.

This article is a case study in transforming web-based digital humanities research into a library collection to safeguard against the unstable nature of the Internet as a long-term historical medium. I show how our collaboration in setting up the Bit Rosie collection takes up the overlapping frameworks of feminist archival practice and activist archivy. In particular, I present our collaboration as a case study in implementing activist archival strategies such as 1) collaboration between institutional archivists, community members, and researchers, 2) inclusion of self-reflexive writing about the archival process and intentions to create transparency, and 3) proactive archiving of born-digital and web collections. In the discussion, I posit that affiliating Bit Rosie with an institutional archives gives the platform cultural legitimacy and longevity. The Internet—once a space of countercultural production and organization—has in many ways become the newest site of cultural exploitation, whereas traditional cultural institutions, like archives and libraries, have become sites of cultural resistance. To conclude, I suggest that more researchers and university libraries can learn from our model to set up library homes for the increasing number of multimedia projects blossoming throughout the humanities and social sciences.

Context: Cultural Forgetting of Women in Music and the Feminist Potential of Archives

One reason for creating the Bit Rosie web series was the idea that better media representation is one of many interconnected steps in documenting, disseminating, and celebrating the work of independent female music producers. But even when women at a particular moment in music history are well documented, and their music and names widely circulated, their significance and musical contributions can quickly be forgotten. Sociologist Catherine Strong describes how influential female musical figures—those who are widely documented in popular and critical music press outlets—are often marginalized or completely written out of mainstream music history narratives.⁴ Theorizing the relationship between popular music and collective remembering, Strong notes that “songs or artists—regardless of how successful they may have been during their time—are not equally remembered, nor are they equally likely to continue to be played as time progresses.”⁵ She argues that whether or not artists or songs are remembered reflects broader structural inequalities in society, such as those appended to race and gender.⁶

Strong observes that women are often involved in prominent creative positions at the birth of music scenes. The historical narratives that subsequently

build up around scenes, however, “work to exclude women from the stories that are told about their formation and from the canons of ‘great works’ that are then constructed.”⁷ For example, she demonstrates how bands like Hole, L7, and Babes in Toyland were central figures in the 1990s grunge movement in the Pacific Northwest and were given significant coverage in independent and mainstream music magazines and television at the time.⁸ These bands were subsequently written out of the canonized lineage of grunge music, however, which came to signify an antisystemic working-class identity told from a predominantly white male perspective. This dominant narrative could not easily accommodate female bands, which were often relegated instead to the parallel (and frequently downgraded) history of Riot Grrrl—a scene to which these grunge bands did not belong. Similar studies demonstrate the forgetting of prominent women in music scenes related to genres such as jazz, punk rock, rockabilly, rap, and electronic dance music.⁹

A similar forgetting happened with the women’s music movement in the 1970s. Ethnomusicologist Boden Sandstrom laments that the contemporary music media gives little credit to the women’s music movement and its historical contribution to independent music production and to redefining women’s roles in popular music.¹⁰ In 1976, for example, Olivia Records produced and released the most successful independent record to date, *The Changer and the Changed* by Cris Williamson, which Billboard ranked as the best independent record for that year. Sandstrom observes that music journalists tend to overlook Williamson’s important album and instead attribute the birth of women’s music as a marketing category to the release of Alanis Morissette’s album *Jagged Little Pill* in 1996 and the establishment of Sarah McLachlan’s Lilith Fair festival in 1997—both of which were, Sandstrom observes, deeply positioned within the male-dominated mainstream. The 1990s also saw the co-optation of Riot Grrrl’s motto “Girl Power” as the slogan for Virgin Records’ pop group the Spice Girls. These examples illustrate how women who originated or greatly contributed to key music scenes can be forgotten or even displaced by derivative commercial knock-offs promoted by major record labels.

DECIDING TO REMEMBER

One reason for the forgetting of women in popular music history is lack of inclusion in archives and, as a consequence, in official histories. Prior to the postmodern turn in the mid-twentieth century, archivists tended to see their job as the passive preservation of documents from the past—often the distant past. From this point of view, “the archive itself was perceived as a ‘natural’ accumulation, an organized ‘residue,’ a kind of net-darwinian construction, if you will, of the survival of the fittest applied to the workings of the registry

office. The archive was thus naturalized; it was not interrogated as problematic.¹¹ By midcentury, however, theorists and practitioners alike began to question what gets saved and what gets discarded, and why. Now, most scholars and archivists agree that archives are inherently political. In other words, they view archives as an aggregate of agendas—personal, social, and ideological—that determine what is saved and what is discarded, which in turn determines what is remembered and what is forgotten.

In the 1970s, women's history emerged as a new scholarly discipline that challenged the male-centered aspect of most hegemonic historical archives.¹² Researchers began to point out that "women's voices and their texts were often obscured or lost altogether."¹³ Historian Gerda Lerner writes about "the significance of history for human consciousness and psychic well-being."¹⁴ She posits that women's lack of inclusion in the record and narratives of patriarchal history has been detrimental to our sense of possibility and self-worth.¹⁵

In the music theory classes and production workshops I teach, I try to include as many examples of female composers and producers as possible. But it is hard to include underrepresented groups when their traces have already been erased by a lack of archival inclusion. When it comes to our work as scholars, as archivist Linda Henry pointed out many decades ago, "research follows the records."¹⁶ It is hard to study what is not there. I would also add that it is hard to be what you do not see in the historical record, which reflects Terry Cook's adage that "we are what we keep."¹⁷ Our possibilities for thought, action, and being—on both a personal and a collective level—are shaped by what we preserve in the archives and, inversely, what we throw away. Excluding voices from archives comes out in who we are as individuals, who we are as a society, and what we can discover as scholars.

But there is room to change, manipulate, and work around hegemonic archives. Observing the omissions and inclusions of history leads critical theorists Michel Foucault and Geoffrey Bowker to describe the archives as a system or structure of power. Foucault writes about the archives as a system of power that determines what can be said, when it can be said, how it can be said, and who can say it. He sees this power functioning in a two-step process: "The archive is . . . the system that governs the appearance of statements as unique events . . . and . . . also that which determines that all these things said do not accumulate endlessly in an amorphous mass. . . ."¹⁸ For Foucault, the archives is the sociolinguistic apparatus that 1) renders some utterances meaningful and others nonsense/forgettable, and 2) determines which of these utterances (once uttered) matter more than others historically. He compares the archives to the universe and how its structure of distances and densities governs which stars shine the brightest from our vantage point on Earth. To apply this Foucauldian schema to popular music history, it is the archives that makes Kurt Cobain the

shining star of grunge music while Courtney Love—Cobain’s wife and leader of the band Hole—remains an asteroid orbiting in Cobain’s gravitational field in many historical narratives. For Foucault, the archives is the entire set of social systems (institutional, economic, aesthetic) that make both musical figures culturally relevant, *as well as* the systems of, in this case, sexism and gender inequality, that often make Cobain shine brighter than Love.

Bowker refers to the regulatory quality of the archives as its “jussive force.” He writes that the archives, “by remembering only a certain set of facts/discoveries/observations, consistently and actively engages in the forgetting of other sets.”¹⁹ For him, the archives determines what “can and cannot be remembered.”²⁰ The archives is not a place or a collection of objects. Nor is it the set of all possible statements or objects. Continuing with the grunge example, the archives is not Cobain, Love, their recordings, photographs, or texts written about them. Nor is it a particular place where all these cultural objects are stored. Rather, the archives is the total system of social, discursive, and institutional forces that rendered these people memorable in the first place.

For these theorists, the objects contained within an archives are not neutral representations of fact. Rather, they represent the consolidation of the stories, relations, and motives that brought them to the archives in the first place. To study the archives, then, is to examine these forces vis-a-vis the objects they produce. In the history of recorded popular music, for example, systems of power help to determine which songs become the soundtrack of a generation and which fade away into obscurity. Such systems include chart listings, official playlists on music-streaming platforms like Spotify, and, especially, music journalism and “best of” lists. Strong argues that music journalists play a significant role in this process. She asserts that “the continued reinforcement of the status of certain bands as ‘the best’ based on the tastes of particularly influential groups (who, it would appear, often have similar characteristics to the artist they are more likely to favor) keeps these groups alive in collective and public memories in a way that does not apply to other bands.”²¹ To extend Foucault’s imagery here, these journalists strengthen the luminosity of some bands while, as a consequence, creating light pollution that diminishes the historical visibility of others. It is the politics and perspectives of actors like these journalists, along with any and all other interest groups related to a band, song, album, or musical movement, that constitute the archives of recorded popular music.

For Foucault and Bowker, the archives is a system of power that determines what is remembered, what is significant, and what can be known. While this view might seem totalizing and deterministic, the upside to seeing the archives in this way is the possibility of making interventions into it and influencing its evolution. Recognizing that archives are made through human choices to include and exclude, not passive inheritance, opens the possibility of making

new archives. If we want to remember different groups and perspectives, then we can implement different motives in archives creation and acquisition.

In the book *Contesting Archives: Finding Women in the Sources*, the editors distill three methods feminist historians tend to use in working around the omissions of hegemonic archives to construct new narratives. First, they integrate “varied sources found inside and outside official archives.”²² Second, they read against the grain of existing archives to locate “women in official documents.”²³ Third, they create new collections of primary sources altogether.²⁴ Speaking to this third method, Kate Eichhorn writes that “the creation of archives has become integral to how knowledges are produced and legitimized and how feminist activists, artists, and scholars make their voices audible. Rather than a destination for knowledges already produced or a place to recover histories and ideas placed under erasure, the making of archives is frequently where knowledge production begins.”²⁵ With this case study, I take up archives creation as feminist methodology.

The Case: Bit Rosie at the New York University Fales Library

Key to the development of the Bit Rosie web series is the existence of the Internet as a fast, ubiquitous, and searchable medium. I use the web design and hosting platform Squarespace to host the main Bit Rosie website and the video-sharing platform YouTube to upload and host high-definition .mp4 video files. The website and videos are easily discoverable through search engines like Google. Many other archives documenting the work of women in the arts rely on the Internet for publication and circulation. For example, from 1983 to 1992, Polish American artist Marisa Lewandowska recorded interviews with female visual artists in New York City to create what she calls the Women’s Audio Archive. Her collection of recordings, now available on her personal website, is a valuable resource for constructing female-oriented narratives of visual art in the 1980s.²⁶ On the website, the archives is described as a way of capturing and preserving a history that might otherwise have disappeared. Similarly, Reactfeminism.org is an archives of videos, images, and audio recordings of feminist performance art in Europe. The curators, Bettina Knaup and Beatrice Ellen Stammer, see their work as creating a living archives that is in constant dialogue with those who interact with it.²⁷

Feminist web archives like these, which support the creation of counter-hegemonic histories and discourses, are plentiful. As I have already pointed out, however, websites are fragile archival documents. Many digital content creators (myself included) tacitly assume that the free online media hosting platforms (Youtube, Instagram, Spotify, Facebook, Bandcamp) we use to store and circulate our digital content will also serve as eternal archives. I find myself relying on

my website as the primary archives of my music, videos, and digital scores, allowing my hard drives and physical scores to accumulate dust or outright disappear in the depths of my closet. Contrary to this belief, digital formats and the constantly evolving infrastructure of the Internet make websites “extremely unstable, fragile, and vulnerable to loss, so that anyone with an interest in the documentation of history should be concerned about the volume of significant content that disappears daily from the web and from the cultural record.”²⁸ Moreover, sharing creative content online rarely leads to significant income for content producers. This means that digital humanities projects like Bit Rosie typically operate at a loss, making producing and web hosting fees difficult to pay in the long run.

The precariousness of the Internet as both an archival and economic platform led me to seek the support of an institutional archives. Eichhorn observes that donating collections to established public and university archives is the way many feminist cultural producers “legitimize their voices in the public sphere.”²⁹ She observes that an institutional alliance is often “a necessary and effective authorizing apparatus in an economy that is hostile to the production and circulation of works produced quite literally at the cost of profit.”³⁰ Indeed, this was precisely my motive in seeking institutional affiliation.

My impulse to turn to an institutional archives coincided with Kent Underwood’s search for websites for the New York University Collection of Contemporary Composers’ Websites project.³¹ For this initiative, the library uses the web archiving subscription service Archive-It (a project of the Internet Archive) to target and archive digital content created by contemporary composers and music organizations. Bit Rosie, as a collection of videos featuring under-the-radar female producers with unique music and production styles, was an ideal match for the library’s search for websites that curate musical materials and links around “a common theme, central activity or event.”³² Underwood’s interest in the content of my series and my interest in a long-term repository for the collection led to a fluid and mutually beneficial collaboration from the beginning. The archival component emerged close to the beginning of the production of the web series and has since become integral to the project’s identity and design. Because I was thinking about the archives in the early phases of production, I was able to integrate the library’s preferences for video and audio file formats into my workflow and build a spreadsheet of detailed metadata about each producer that facilitates the librarians’ cataloging process.

Our collaboration in setting up this archives models practices in activist archivy. In particular, our process brings together what archivist Terry Cook refers to as a “new era in archive appraisal” and archivist Lynne Thomas’s notion of the “embedded curator.” For Cook, the new era of archival appraisal is characterized by 1) collaboration between archivists and community members,

and 2) documenting the archival process and appraisal values for the purpose of creating self-reflexive historical repositories.³³ The “embedded curator” is an archivist who “uses his or her physical and virtual presence within a selected community to document that community while simultaneously serving as a resource to it.”³⁴ In this section, I will give an overview of activist archivy and outline how our collaboration puts into practice and develops these methodologies. I contend that this collaboration also opens up a new direction in archives creation by blurring the boundaries between art, research, archives, and design. I intend for this overview to serve as inspiration and a guiding star for future collaborations between researchers—especially those involved in creating digital web collections as part of their research—and archivists.

Professional archivists took up the challenge of acquiring and creating alternative, counter-hegemonic archives as early as the 1970s. Historian Howard Zinn proposed the idea of the “activist archivist” at the 1970 Annual Meeting of the Society of American Archivists. In his talk, he encouraged archivists to take up the challenge to document “the lives, desires and needs of ordinary people.”³⁵ Elizabeth Johnson sees this proposition as a seminal moment in an identity shift in the profession from thinking of the archivist as “the keeper of the past to the archivist as a shaper of the past.”³⁶ Archivists needed to begin actively collecting documentation pertaining to women, African American populations, other minorities, and the working class.³⁷ Linda Henry echoed these sentiments a decade later, observing and warning that passive archival collecting led to the accumulation of the papers of the elite and that histories, in turn, would continue telling the stories of these elites.³⁸ In general, archivists concluded that, to document (or preserve the existing documents of) the lives of “ordinary people,” they needed to take a more active role.

This shift led to a number of new practices in the archival profession, including documentation strategy and macroappraisal. In basic terms, documentation strategy sets up an institutional planning group that 1) structures an inquiry into the necessary documentation of a particular group or region (which typically includes consulting experts in the field), 2) formulates a collection strategy, and 3) places the documentation in the appropriate repository.³⁹ Similarly, macroappraisal shifts the focus of archival appraisal from the content of records to their process of creation. This appraisal process “constructs informed evaluative narratives describing records-creating processes, assesses these processes’ comparative societal significance, and from this, makes judgments as to the relative importance of records-business relationships.”⁴⁰ While the particulars of these methodologies differ, their overarching goal is to help archivists create a more comprehensive record of cultural history through new appraisal strategies and institutional planning.

The new era of archives appraisal, by contrast, is more directly involved with communities and their members. According to Cook, in this era, archivists are “ready to share that appraisal function with citizens, broadly defined, where we engage our expertise with theirs in a blend of coaching, mentoring, and partnering.”⁴¹ In the case of our collaboration, Underwood is the archivist and I am the citizen, and it is precisely through a process of coaching, mentoring, and dialogue that this archives took shape. Moreover, this new era is characterized by self-reflexive historical repositories with “richly layered metadata.”⁴² In other words, instead of aiming for objectivity, these collaborative archives reveal their curatorial agendas and intentions through including self-reflexive writing. The Bit Rosie archives will include my dissertation to clarify our process and to demonstrate the scholarly analysis of popular music, production, and gender in the 2010s that informs our reasons for creating it in the first place. In other words, we are including the stories, relations, and motives of the archival process because they are, as in Foucault’s thought, what defines the archives as much as the content contained within it.

Lynne Thomas is particularly concerned with collaborative documentation in the web environment. Instead of waiting for artists or cultural creators to become important through the “test of time,” the embedded curator documents the work of creators—especially those producing born-digital content for online publication—from the beginning of their careers. In the case of our collaboration, Underwood and I share and adapt the role of embedded curator. I function as both a creator (the director of the web series) and an embedded curator (documenting the work of female producers whom I selected), while Underwood functions as another embedded curator (archiving my work documenting female producers). Thomas argues that building these relationships early on creates higher chances for the preservation of more and more diverse perspectives. She writes: “As we build relationships with our creators and discuss self-archiving and forward migration of electronic files, building collections much earlier in their careers, when they get to the ‘important enough’ stage, the digital and paper files have a much better chance of existing. Even if the people we’ve selected turn out to be ‘not important’—we still have created a valuable snapshot of the selected field at a given point of time.”⁴³ By preserving the Bit Rosie videos and acquiring the digital content of participating producers now, we are ensuring the preservation of their art in the likely case of file formats changing, discs becoming corrupted, or websites disappearing. We have decided that this work is “important enough,” as both a representation of work by female music producers and as a snapshot of popular music production in the 2010s more broadly.

Some within the archival profession, however, worry that opening up archives appraisal to social justice concerns, and collaboration with particular interest groups, jeopardizes the integrity of the practice. Archivist Mark Greene

warns that the purposeful inclusion of particular agendas in the archival record will result in a state in which “archivists and their institutions will become completely politicized, the talking horses or pawns of every stripe of partisan effort.”⁴⁴ While Rand Jimerson advocates for a move away from neutrality and toward a more overt political stance within archival creation and acquisition, Greene urges archivists to stay neutral to create a more complete record of social history. He thinks that archivists should collect across the spectrum of political viewpoints—and presumably across the spectrum of social groups and identity politics—to comprehensively document the historical playing field of particular events or issues. From a practical standpoint, he also thinks that taking sides on political issues during the archival process is counterproductive:

It is completely unclear to me . . . just why it is necessary to become a social activist on either side, thereby indeed jeopardizing the archivist’s ability to acquire materials from the other side. It is, in fact, hard enough to gain trust from both sides of a polarizing issue simply by having succeeded in bringing one or more collections in from side A, because side B may well assume the archivist or his or her institution IS an activist for side A.⁴⁵

While I generally agree with Greene’s push for neutrality, I think that the issue of archival activism is more nuanced in light of limited archival budgets. The Bit Rosie archives is not exactly caught in the throes of a controversial social issue. The underrepresentation of women in historical records—especially in music—is widely accepted. It is not so much an issue of A vs. B, as Greene sets up, but rather an issue of how to allocate limited institutional resources. Archives cannot collect everything. Cook estimates “that between 1 and 5 percent of all institutional records created will survive as archives.”⁴⁶ In acquiring Bit Rosie, the library is putting funding into this collection *instead* of channeling the funding elsewhere. We were doing an appraisal calculus—including variables such as institutional funding, existing collections, and the dominant media coverage of the time—that reflects the feminist motives behind the acquisition of this collection. It is a subtle, and, yet, I think necessary, form of nonneutrality.

To create transparency about this nonneutrality, we included my dissertation as archival metadata. If we accept that archives are inherently political, I think that the best thing we can do is be forthcoming about our motives. These motives include the wish to preserve primary sources so that future generations have the opportunity and the means—through evidence-based scholarship—to understand the history of music in our time, as well as the desire to preserve the work of female producers in particular, who are often omitted from archives. In making these motives clear, researchers of the future will have an easier time deciphering this archives vis-a-vis the objects contained within it. Instead of aiming for neutrality by collecting all possible viewpoints, as Greene

advocates, we are pointing to our nonneutrality by being forthcoming with our archives appraisal values in our metadata.

The Bit Rosie Archives: Nuts and Bolts

The Bit Rosie archives has three components. The first is a digital collection available through the NYU Fales Library and Special Collections called “Guide to the Adele Fournet Papers on the Bit Rosie Web Series.” This collection consists of high-resolution video master copies of the Bit Rosie web series. There are three videos per producer—a live performance video of a song, a short educational documentary, and an unedited interview about her/their history and production process. These videos are accompanied by a spreadsheet of metadata allowing users to search by criteria such as producer name, artist name, genre, software, location of filming, country of origin, date of filming, and video personnel.

To determine the best file formats and data transfer procedure for this collection, Underwood put me in touch with digital archivist Don Mennerich and moving image preservation specialist Kimberly Tarr, both of the New York University Library. Collectively, we determined that the best formats were Apple ProRes 422 .mov files for video and .wav files for audio. I deliver these files on an ongoing basis to the library on a journaled internal hard drive, which the digital media staff then copies to their drives for preservation and cataloging.

This first component of the archives is currently the number-one search result for “female music producers” in the NYU library catalog. The collection is typically only viewable in person at the Fales reading room but, due to the extenuating circumstances resulting from Covid-19, the library is also currently granting remote access.

The second component of the archives is the documentation of the Bit Rosie website itself using a process called web archiving. “Web archiving makes static copies of a website at periodic intervals. It then saves those copies to a digital repository, thus preserving successive versions of the website that would otherwise be lost as the site evolves over time. The result is analogous to an album of photographic portraits documenting the lifetime of a person.”⁴⁷ To do this with the Bit Rosie website, the library uses Archive-It, a tool developed by the Internet Archive that allows archivists at institutions like NYU to curate and develop collections of websites.⁴⁸ Currently, the library is using the service to take annual snapshots of the Bit Rosie website every October (in 2017 and 2018, the library had Archive-It take multiple captures a year to test the process).

The web archives component of the collection is accessible to the general public via a search for “Bit Rosie” on the Archive-It website (www.archive-it.org). The collection (see Figure 1) has three components: 1) links to thirteen “captures” of the website (taken between May 5, 2017, and October 26, 2020); 2) a collection

FIGURE 1. Three components of the Bit Rosie web archives on the Archive-It.org website (captured snapshots, videos, and related archival materials)

of fifty-nine video files also captured from the website; and 3) a link to the Fales Library video collection of “Adele Fournet Papers on the Bit Rosie Web Series.” Clicking on a link to one of the captures directs the researcher to a static snapshot of the website on a specific date, which includes photos and text but does not include embedded video files, audio, or links to external websites. Clicking on the link to the videos allows the researcher to watch the videos using Adobe Flash media player. Clicking on the link to the “Adele Fournet Papers on the Bit Rosie Web Series” leads to a list of links for the videos in the Fales Library collection, which are also viewable using Flash.

Archive-It’s reliance on the Flash media player is problematic insofar as Adobe stopped distributing and updating this software at the end of 2020. Moreover, I am *already* unable to watch the videos via the Archive-It website due to failures with Adobe Flash on my computer. The Fales Library digital archives staff has assured me that all of the video files are indeed stored in the backend of the Bit Rosie Archive-it collection and that they have no problem viewing the videos. The inconsistency in accessibility is a shortcoming of the web archives component of the project.

The third and final component of the archives consists of collections by Bit Rosie-affiliated producers. One of our goals in creating the Bit Rosie archives

was to also document the work of producers featured in the web series to create a more robust snapshot of recorded music production in the 2010s. To that end, Underwood contacted the producers featured on Bit Rosie as a representative of the library to see if they would be interested in archiving their catalogs of musical output. So far, Bit Rosie-affiliated producers K. Marie Kim, Julie Covello, and Julie Kathryn have provided materials that have been used to set up additional collections at the Fales Library and Special Collections.

Discussion: Determining Success in Terms of Accessibility and Canonization

A concern about hosting archives in established institutions is that these places often feel alienating to the population or community the archives represents. Anthony Seeger observes that the most interested users of collections are typically members of the communities that have been documented.⁵⁰ These communities may not have easy access to institutional archives. Moreover, as Evans and Duran note, complications around rights can “result in archives limiting access to digitized sound recordings to the reading room.”⁵¹ Indeed, the Bit Rosie archives is less accessible than I had hoped. The first component of the archives, the video collection, is only accessible if the researcher is physically on site or submits a formal request for remote access. The web archives, which is accessible to the general public through the Archive-It website, provides inconsistent access to the video files due to problems with Adobe Flash player.

The affiliation with institutional archives also has a deeper cultural significance than the matter of accessibility. In her analysis of the Riot Grrrl collection at NYU Fales Library and Special Collections, Eichhorn argues that this institutional affiliation aligns the DIY punk movement more “with second wave feminist theory, continental philosophy, and avant-garde literary and art traditions” than with the anti-establishment subcultures that once defined it.⁵² Inclusion in institutional archives has the potential to signify absorption into the societal status quo, which youth culture movements, like Riot Grrrl in its heyday, rebelled against.

My project is an inversion of the Riot Grrrl paradigm insofar as it was born in the status quo and turns to the institutional archives as the site of feminist resistance. This inversion of space politics reflects how digitization and neoliberalism have impacted feminist practice over the last thirty years. Unlike the Riot Grrrl movement, which created a subculture out of print materials and face-to-face grassroots organizing, Bit Rosie has been a digital and virtual project since its inception. The producers in my research, who work from home studios the world over, only exist as a community insofar as I have brought them together vis-a-vis the website. Many of the producers featured in Bit Rosie

work at the margins of the mainstream recorded music industry while nevertheless aesthetically and socially orienting themselves toward it. While pockets of feminist separatism exist in contemporary music production, a majority of women working in professional audio fields are hoping to achieve equality and inclusion in mixed-gender settings.

The corporate internet platforms (Squarespace and YouTube) I use to host Bit Rosie content enabled the creation of the website in the first place but are unreliable long-term archival repositories. Moreover, Bit Rosie will never provide the widespread exposure and circulation of larger music media platforms like Vice or Pitchfork. Therefore, affiliating Bit Rosie with an institution frames the platform, and the videos and producers featured on it, within a more traditional paradigm of cultural legitimacy—the archives. Within the space of the library, value is not determined by likes, views, or clicks; rather, it is determined by historical inclusion. The Internet—what was once a space of countercultural production and organization—has in many ways become the new primary power structure, and traditional cultural institutions, like archives and libraries, have become sites of resistance.

Inclusion in institutional archives, however, does not necessarily equate with resistance or cultural change. I remember the first time I went to the Performing Arts division of the New York City Public Library to call in a box of materials from the American composer Mary Howe. As I sat quietly flipping through her papers, I experienced an unprecedented feeling of inspiration while reading her Romantic era–inflected scores and personal journals and letters. At the same time, I was completely bewildered and frustrated that I had never before heard anyone mention her name or music. For me, it was an experience in how the documentation of a composer’s life and work can exist in a box at a first-rate institutional archives, yet still not make it into undergraduate curricula, contemporary performance programs, or the popular imaginary of great composers. A similar fate could await the contents of the Bit Rosie archives.

In thinking about the impact of the past on the future, Strong writes that “canons influence the narration of the past, and they inspire the radius of creativity for the future.”⁵³ Here, she is referring specifically to canons, not archives, and I think this distinction is important. The canon is the set of historical events that get repeatedly pulled out of the archives and reanimated through the stories music journalists, musicologists, and musicians tell about what music means and which music matters. For Foucault, this process of pulling out or leaving behind is the system of power that constitutes the archives. Circling back to grunge, Cobain and Love both exist within the archives of popular music history, but Cobain gets pulled out and reanimated far more frequently than does Love. Currently on the music streaming platform Spotify, Cobain’s band Nirvana has 15,530,775 monthly listeners, whereas Love’s band

Hole only has 1,533,250 monthly listeners. Curt Cobain's voice gets reanimated more than ten times more often than does Love's. In practical terms, how do we go from archives to canon?

Moving from the *potential* to create social change to manifesting *actual* social change is something to keep in mind moving forward with this project. In thinking about activist art, sociologist Stephen Duncombe wonders how to measure the impact of art on social change. He writes: "The artist who hopes to bring about social, economic or political change through art must address questions about its impact. Artists have implicitly signed on to the project of using their creativity to create change, and if we are going to take this pledge seriously, it means asking over and over: Does it work?"⁵⁴ Duncombe's method for determining the success of an activist art project is to compare the project's goals with the actual outcome. With the Bit Rosie archives, the goal is for researchers, producers, journalists, and other interested parties to engage with and feel inspired by the collection.

To achieve more engagement with the collection, I am currently working to generate awareness and visibility. I am doing this by introducing more professors and other music educators to the archives so that they can integrate it into their curricula. So far, a number of professors have contacted me to say that they have included the archives in both undergraduate and graduate music courses, and one graduate student has contacted me to discuss her research project on the Bit Rosie archives. I also give periodic talks about the project as a guest lecturer and as a panelist for different music organizations.

Moreover, I have anecdotal evidence suggesting that those who engage with the archives feel inspired by it. I receive emails and comments from users describing how transformative it was for them to engage with the Bit Rosie materials. The curators of the online video archives Pad.ma (Public Access Digital Media Archive) write in their "10 Theses on the Archive" that we should think about the affective impact of archives. They think of archival practices "as the little practical, experimental and strategic measures that we pursue to expand our sensibilities."⁵⁵ I have noticed that, for those who interact with it, the collection of Bit Rosie episodes becomes a trove of inspiration illustrating a reality alternate to hegemonic, male-dominated music cultures. This alternative reality inspires and expands one's sense of what is possible within music. For me, this reported expansion of sensibility indicates success for the project.

Conclusion: Implications

The implications of this case study for generalized archival practice are two-fold. First, this case can serve as inspiration for future collaborations between scholars engaged in web-based digital research initiatives and institutional

archivists. Increasingly, scholars are engaged in applied, activist, and other forms of public-facing research that rely on the Internet for both research and circulation. Yet, the Internet remains a precarious long-term historical medium. My case demonstrates how researchers and archivists can partner at early stages in these kinds of projects to address their long-term viability.

Second, this case study demonstrates that archives creation can be seen as an integral component of both scholarly and creative work. By designing a multimedia website with an integrated archival component, I am combining art, research, and institutional collaboration to carve new history. This project expands the idea of activist archivy to include archives creation as an artistic process that produces and molds collections of materials into histories, just as a sculptor molds clay into a statue. To borrow Kate Eichhorn's words, I see the archives as a "creative locus for activism and art," which allows us to be "agents of change in time and history."⁵⁶

In writing about the work of Marissa Lewandowska, the creator of the Women's Audio Archive, Caroline Guasden describes the archives as a creative process as well. She writes: "With the meeting of archival impulses in art and the acknowledgment of creativity in archives, the figures of artist and archivist converge, making it a small step to imagine the archives as not simply a place of reproduction but as a work of art itself."⁵⁷ In this new era of archives, the possibility exists for convergence between artist and archivist, creator and curator. In the case of the Bit Rosie archives, institutional collaboration supports the adoption of history as a medium of creative design.

NOTES

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