Button Portraits: Embodying Queer History with Interactive Wearable Artifacts

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Abstract. *Button Portraits* is a tangible narrative (TN) that represents queer history using artifacts from the Gender and Sexuality Collections at Georgia State University. The experience tells the stories of queer activists who influenced and produced Atlanta's patchwork of LGBTQ + organizations from the mid 1970s to the present. As a case study, this project offers insights on how wearability, embodiment, and queer archival methods can shape the design and experience of tangible historical narratives and their ability to call for reflection on our relationships to archival materials and history. This paper argues that queer methods can develop and reveal embodied, liminal stories in TNs in the following ways: 1. Using queer methods and queer archival scholarship to understand and design tangible narratives engenders experiences that resist binary narrative categories. 2. Designing queer history tangible narratives requires understanding the sociocultural context and the ways the experience itself can be *queered*. 3. Embodiment through wearability in a queer TN experience *troubles* the relation of bodies, spaces, selves, and stories—reinforcing our queer theoretical framing. Overall, this design case study illustrates how tangible storytelling design can be deepened through attention to queer methods, especially when used alongside embodiment and wearability.

Keywords: Tangible narrative · Archival materials · Oral histories · Interactive narrative · Queer history · Queer south · Wearable artifacts

1 Introduction

Tangible narratives (TNs or TINs) are storytelling experiences told through interaction with physical objects embedded with digital capabilities [31]. Beyond the traditional fictional stories, we posit that TNs can also be powerful experiences for reflection and reimagination when experiencing historical narratives. The potential of TNs lies in their ability to draw palpable connections between bodies and their environments, which can be extended to include archival materials and historical subjects. Our project specifically focuses on queer history narratives, in which reflection plays an important role in the experience. To tell these stories, we examine how the relationships between body, environment, archival materials, and historical subjects can be queered—or thought of as intentionally fluid, fluctuating, and in process. To do so, we use queer archives scholarship, coupled with queer methods, to reflect on the design process and experience of tangible narratives.

Specifically, our project *Button Portraits* explores Southern queer history as an under-represented subject matter in archival and storytelling efforts. Narratives about Southern queer history are continually (and increasingly) unearthed as part of concerted efforts by activist organizations, archivists, and storytellers. These stories are told in a variety of forms, including podcasts, online articles, books, workshops, and panel discussions, that push to make this history more visible [22, 25, 43, 57, 58]. As part of that body of work, *Button Portraits* is a tangible, non-linear portrait of two prominent Southern lesbian activists in the 1970s that uses replicas of the activists' own buttons—the type that are pinned to a garment (Fig. 1)—as vehicles through which to experience their stories.

Fig. 1. Photograph of "March on Washington for Lesbian and Gay Rights" button [13].

Through the embodied interaction of pinning on these buttons and listening to a narrative fragment, participants intimately relate to archival materials, the queer activists who owned them, and their stories (Fig. 2). We argue that the intimacy engendered by interacting with wearable tangible archives allows participants to draw connections between themselves and historical subjects, as well as *trouble*, or intentionally entangle and unsettle, these relationships through embodied experience.

This paper presents *Button Portraits* as a case study and offers reflections on how queer archival scholarship and methods can enrich the design and experience of historical narratives and artifacts. We further examine how wearable tangible narrative design can *queer* an individual's relationship to historical artifacts and their spatial and sociocultural context, methodologically refusing to define or categorize the subjects of history.

Fig. 2. *Button Portraits* interaction: A participant selects a button to wear on their audio player, places it on a magnetized area, and listens to a corresponding oral history.

Finally, we look at how embodiment through wearability can be used in the design of a queer TN experience to trouble the relationship between bodies, spaces, selves, and stories, reinforcing our queer theoretical framing. As illustrated by our case study, our reflections contribute approaches to advance tangible narrative design that is itself fluid, fragmentary, and experienced nonlinearly. We consider these approaches to tangible narrative design to be especially relevant not only to queer storytelling, an underrepresented and much needed area, but also to storytelling that largely eludes solid linear narratives.

2   Related Work

Button Portraits builds on existing work in several areas, including tangible interactive narratives (TNs or TINs) and the role of embodiment, historical artifacts as TNs, queer interactive narratives, and queer archives. With the exploration of queer historical artifacts through TNs, we rely on queer methods and the notion of queering the archive as a mode of storytelling interaction.

2.1   Tangible Narrative and Embodiment

In proposing a TN as a case study, our work draws specifically from Harley et al.'s framework for tangible narratives [31] as well as Tanenbaum et al.'s exploration of tangible non-linear storytelling in "The Reading Glove" [54], while acknowledging the larger body of recent work that supports narrative design using tangible interfaces [6–9, 16, 29, 32, 37–39, 51, 53]. Harley notes that tangible user interfaces, specifically diegetic tangible objects, allow for participants to "bridge the gap between the world of the story

and the world of the user. The physical characteristics of the objects carry narrative meaning that the user interprets virtually and through tangible interaction" [31]. This makes tangible narratives well positioned to explore queer archives, particularly for this emphasis on "making strange," "negotiating differences," and "resisting categorization," which are core to queer methods [29]. Furthermore, these diegetic tangibles allow participants to develop "not only a personal relationship to the unfolding story, but also personal responsibility" [31] which invites self-reflection on the participant's role in the story, the history, the artifacts and key figures, and the larger sociocultural context.

This framing of object interaction producing narrative meaning also recalls Grosz's "Bodies-Cities", where she argues for a troubling of the relationship between the body and space, and that bodies and environments produce each other in a complex feedback loop that continually transforms reality. Similarly, participants and physical narrative objects produce and reflect one another, allowing for bodies to "reinscribe and project themselves" onto the narrative space and for the tangible narrative to "reflect the form and interests of the body" [28].

Inspired by these two approaches, we use tangible buttons in our experience, which are worn on the body and trigger stories, allowing participants to further embody their relationship to queer history. Additionally, the embodied interactions of choosing a button, wearing it, and listening to the oral history further produce the environment, which influences the interactions.

2.2 Historical Artifacts and Tangible Narrative

Button Portraits also draws upon research of TNs and cultural artifacts, including in co-design [3], and design toolkits [45]. In this paper, we explore Chu and Mazalek's Tangible Embodied Narrative Framework (TENF) which is a conceptual structure for "designing tangible and embodied narrative interaction with cultural heritage artifacts" in museum contexts [10]. They argue the TN design must present cultural aspects of an artifact to support visitors in "drawing connections between the digital replica and the original artifact." They also maintain that interactions must refer to the original context of the artifact or cultural practice, while providing simultaneous digital feedback. In other words, for visitors to understand the meaning of a historical artifact, the form of the tangible experience design, their interactions with it, and any digital feedback must be grounded in the artifact's cultural context. We draw from and build on this framework, crafting the experience of *Button Portraits* around the cultural context of Atlanta's queer history.

Chu and Mazalek [10] also develop spectra on which to map a tangible narrative interaction for cultural artifacts, building on Ryan's original framework [46] and Murray's characterization of "threshold objects," which exist in physical and virtual space, providing immersion and participation in the narrative [42].

In their framework, Chu and Mazalek propose three spectra: (1) diegetic vs. non-diegetic, determining whether the interactor can physically situate themselves within the story; (2) internal vs. external, describing a first person versus omniscient perspective; and (3) ontological vs. exploratory, determining whether the interactor directly alters the outcome of the story or simply explores its parts. TENF offers a powerful starting point for understanding the narrative dimensions of tangible interactions with respect to

grasping an artifact's historical meaning. However, we posit that it is equally important to examine the archival process surrounding historical artifacts, and in doing so we arrive at a more nuanced framing for our experience. In the discussion section we return to how *Button Portraits* as a case study can expand and enrich TENF.

2.3   Queer Interactive Narrative and Archives

In interactive digital narrative (IDN), queering of narratives has primarily been explored through storytelling methods [33, 47, 49]. However, queering an archive and its use in TNs is underexplored and is particularly challenging due to the inherently fluid and fragmentary nature of queerness relative to archival work.

Beyond storytelling methods, IDN research has explored the role of queer communities in interactive narratives, which speaks to the broader sociocultural context of storytelling. Salter et al. examine the visual novel engine Ren'Py and discuss how it engenders not only queer gameplay, but queer storytelling and related communities through open-source design, principles of inclusivity, and attention to stories "on the margins" [47]. We similarly seek to elevate queer stories, while referring to the broader social, collective involvement in framing and sharing such narratives outwardly.

With respect to context, we further look to queer archives scholarship to situate this work not only within TN design, but also within archival research. Even beyond queer archives, the nature of archival work is largely fragmentary and piecemeal: we are continually working "ad hoc and ad interim," piecing histories together into a "grand contraption," as Geertz notes [24]. Similarly, as Darnton echoes, "History is tentative. Just as archives provide evidence for arguments, they undo them" [11]. The narratives that we construct from and through history are often arbitrary, as we piece together "endless fragments from countless lives" [11].

With queer archives specifically, this work becomes even murkier when we acknowledge that queerness itself is inherently resistant to categorization. Avery H. notes the tension between "containing and protecting specific versions of the past," queer theory's claim that "archives feign reproductivity," and that queerness must embrace "ahistoricity" in resistance of misrepresentative narratives or categorization [2]. This tension between the framing and categorizing common in archival practice and the inherent fluidity of the queer experience presents a paradox in representing queer history [1, 35, 36].

As with bodies and environments [28], we also acknowledge that our stories are collectively produced, that there is a "constant reweaving of the social fabric" [12], that we exist "in transmission, in communication," and so do our histories as continual evidence. Therefore, we must similarly approach archiving as a collective process, along with the archive and individuals who make it as co-producing one another. Building on these practices, much work has been done to queer the archive [35, 36, 55], to document queer history, and to examine the nature of a queer archive. However, we must equally consider how archives are viewed and experienced. We describe drawing from these considerations and engaging queer archives in more detail in Sect. 4.1.

3 Methods

3.1 Design Research Methods

This work draws from design research approaches that foreground reflection, knowledge production through design, embodiment, and self-reflexivity, including research through design [21, 23, 56] and reflective design [48]. These approaches employ the "methods, practices and processes of design practice with the intention of generating new knowledge," where both output and process build on each other [21].

Reflective design encourages designers to "use reflection to uncover and alter the limitations of design practice," ultimately questioning their role in the design process, supporting critical reflection, and rethinking underlying assumptions of technology [48]. This reflection becomes an integral part of the design process, and "dialogic engagement between designers and users through technology" enhances this activity [48]. By drawing from reflective design and research through design, we engage a self-reflexive approach that builds knowledge through the design process, while reflecting on the context and underlying forces at work.

3.2 Queer Methods

We also draw from queer methods, reflecting on and reinforcing the design of tangible narratives by attending to their queer theoretical context. Using queerness as a methodology, *Button Portraits* positions queer physical spaces as multidimensional. By placing ourselves in these spaces through tangible narrative, we implicate our own bodies and identities in history, further adding to and complicating the archive. For context, we look to Ghaziani and Brim's *Queer Methods* [5, 26]. They apply aspects of queer theory, such as fluidity, instability, and that which is perpetually becoming, to the research of queer subjects [26]. They argue for "embracing as methodology their refusal to clearly define or isolate their objects of investigation," which characterizes how we might complicate or trouble our histories, relationships, and locales [6].

Similarly, Migraine-George and Currier's "Querying Queer African Archives," calls for approaches to the archive that shift focus from "the archive as repository to the archive as process" [40]. This approach calls into question the "institutionalization of knowledge" along with the practices and methods of archiving [40]. By introducing movement into queer methods, Migraine-George and Currier's work parallels Grosz's framing of bodies and environments as continually producing one another [28]. Together, these approaches speak to embodiment, queerness, and archival practice as ongoing processes [26]. *Button Portraits* acknowledges movement in queer methods, along with the co-production of bodies and environments, by specifically drawing attention to the gestures and corporeality in tangible narrative interactions.

Using queer methods in conjunction with our chosen design methods, we seek to resist taxonomic modes of archiving and trouble histories through design and self-reflection. Our resistance of traditional archival categorization is referred to by Brim and Ghaziani, quoting Hennen, as a "scavenger method," and speaks to a fluid and purposefully queer traversal of the archive [26]. Applying this to design, we similarly build knowledge through a nonlinear, "scavenger" process. Specifically, we traversed archival

materials nonlinearly, deliberately taking a relational approach that not only looked at oral histories and objects, but also included conversations with archivists and the activists themselves.

We lastly refer to Shaw and Sender's characterization of queer technologies and their affordances, which considers how "hacking and resistance of heteronormative technologies offer alternative forms of engagement and experience" [49]. Our efforts in queering design methods similarly composed of "hacking" or piecing together and taking apart fragments of oral histories, archival materials, and our own self-reflexive interpretations, to arrive at an experience that moves through narrative in a manner just as abstract, partial, and liminal as our archival practices.

4 Narrative and Artifact Design

Button Portraits tells a non-linear story of Atlanta's queer history, using oral histories of two prominent lesbian activists, Maria Helena Dolan and Lorraine Fontana, paired with historical artifacts from their collections as storytelling objects to frame the narrative. These activists were crucial in establishing a foundation for the city's LGBTQ + community, and specifically lesbian rights movement, through their writing, publishing, community organizing, and work with activist groups from the 1970s until the present. In representing their stories, we portray "portraits" of their lives and work through interactions with replicas of their own objects. We intend to continue to expand our efforts to include additional Southern queer activists who helped shape the movement, while acknowledging the work of countless others that are still underrepresented in our archival efforts.

4.1 Engaging the Archive

Button Portraits began with the Gender and Sexuality Collections at Georgia State University that chronicles much of Atlanta's LGBTQ + activism from the 1960s to the present. We approached the collection with a wide lens, sifting through periodicals about the city's gay and lesbian scene in the 1970s and 80s, reading firsthand accounts of organizing activities, and examining photographs of early pride marches. The research started first with an *inhale*: taking in the archive and wading through, rather than starting with a purpose of aiming to categorize, or tell a linear story, as alluded to in *Queer Methods* [5, 26].

We chose to focus on primarily physical artifacts, specifically "ephemera" and wearables in the collection, as our research question centered around applying queer methods to wearable tangible narrative design. Additionally, in queer archives scholarship, "ephemera" are considered an integral dimension of chronicling queer stories, as these are objects typically left out of traditional records [35]. In the Gender and Sexuality Collections, wearable ephemera consisted of items such as t-shirts, armbands, bags, bandanas, name tags, scarves, and most notably, buttons and pins. Out of the wearable objects in the collection, buttons and pins (Fig. 3) were not only commonly collected amongst several of the activists, but they also revealed rich stories of their lives through their visual and textual links to social causes, identities, events, and locations. Buttons

also lent themselves to wearable tangible interaction, as they could be easily pinned to clothing, as well as physically handled, eliciting the intimacy of a worn experience.

Fig. 3. Photographs of selected buttons and pins [4, 13, 14, 17, 18].

By understanding the archival button collections as *portraits* of their originators' lives, we aimed to reveal their stories *through* their objects, pairing artifacts with oral histories. We specifically focused on buttons belonging to Fontana and Dolan, as their collections also contained oral histories, which would comprise the second piece of our project. Linking the artifacts directly to their originators' oral histories further served as an aspect of narrative continuity [15, 19, 20]. Additionally, their writing, work, and activist involvements represent key pieces of Atlanta's LGBTQ + rights movement. In manifesting their stories with this initial project however, we acknowledge that theirs are not the only stories to tell when chronicling Southern LGBTQ + history, and that we intend to expand this project to involve additional individuals and artifacts.

4.2   The Artifacts and Oral Histories

While considering Dolan and Fontana's collections, we investigated the ways that a tangible interactive narrative, created using their buttons and oral histories, could craft portraits of their lives and legacies. Dolan and Fontana's buttons (see Fig. 3 for a sampling of the collection) had originated from an array of sources throughout their lives and

spanned themes of activism, identity, activities, political causes, events, and locations among many others. Some of the buttons pointed to known historical events, but many were of unknown origin or reference, left up to interpretation by the curator or archivist, and subsequently the researchers and authors of this paper.

As a body of artifacts, the buttons themselves told a nonlinear story: revealing fragments of identities, events, and communities in piecemeal portraits. Similarly, the activists' oral histories referenced these themes, but they nevertheless digressed, following a wayward, nonlinear path [15, 19, 20]. By pairing the two together, we aimed to evoke this nonlinearity, alluding to the fragmentary nature of not only historical narratives, but also of their traversal in archival work. This wayward traversal itself is a queer method: in doing so, we trouble the nature of taxonomical categorization or linear historical narratives. Furthermore, we self-reflexively acknowledge our roles as researchers and curators as we interpret and frame history, understanding that even our own categorization of queer archives, or queerness itself, poses a paradox.

With this fluid, self-reflexive aim, our ensuing design project elicited a nonlinear narrative through the tangible experience of interacting with and wearing these buttons, linking each to a relevant, evocative fragment of the originator's oral history. The choice of a button as a tangible interface worked particularly well, as the design metaphorically alludes to a continual opening and closing, a link between past and present, and a connection point between individuals. Buttons serve as signifiers of our identities, causes, and communities. They communicate solidarity or support, and as symbols, they "turn on" or "activate," as in activating knowledge or connection.

When considering Chu and Mazalek's TENF framework [10], the button artifacts in this case are nondiegetic objects, in that they are not referenced in the narrative of the oral histories. However, in their framework, nondiegetic interactions are useful in "reasoning about abstract concepts that underlie the story" [10], and these interactions heighten a participant's sense of involvement in the story and situate them in the narrative by virtue of their physicality [31, 32].

Not only do the buttons situate participants in the narrative, but they also refer to spatial situations beyond the tangible interaction. For instance, buttons are meant to circulate in space, to be passed and linked between individuals. Once in circulation, they are read by others, and in the specific case of LGBTQ + history, they are often coded and meant to be recognized by other members of the queer community, signifying solidarity or kinship [59]. In this way, buttons refer once again to Grosz's characterization of the coproduction of bodies and their environments; and to the collective, fragmented nature of these continual relationships [28].

In this vein, buttons also represent an important aspect of the larger historical context, as they are central to queer activism, identity, and community formation, though they are not directly referenced in Dolan or Fontana's anecdotes. Referring to the larger contextual meaning of these objects in queer archives scholarship adds a dimension of queer methodology that moves beyond the narrative framework, refers to, and troubles the objects' position within the archive and history.

4.3 Designing the Experience

In constructing the tangible interactive experience, we listened to oral histories given by Dolan and Fontana [15, 19, 20], identifying key fragments that paired with their buttons in the collection.

As we listened to their autobiographical accounts, we chose buttons that represented themes discussed in the oral histories, creating thematic affinity maps, such as the one pictured in Fig. 4. We applied these maps to identify and pair artifacts to story themes for use in the final experience. To associate narrative segments to buttons, we used keywords, phrases, and images from 233 total buttons in Dolan and Fontana's collections to their counterparts in 10 h of oral history transcripts, as part of an emergent, co-productive process. In some instances, keywords such as "The March on Washington" were easily identified in oral histories. For other cases, we imposed a more curatorial hand, such as associating a button with the slogan "I Got Real" to an anecdote about gender presentation, alluding to the concept of "realness" in drag and queer culture [60]. We actively resisted creating a linear story or guided narrative structure from the buttons and oral histories, as is traditionally done in museum exhibitions. Instead, in our design, the effect of nonlinearly discovering stories from the artifacts is meant to parallel both the messy entanglements of archival practice and of queer stories and relationships.

Fig. 4. Thematic affinity map showing themes from oral histories and buttons that correspond.

As per the requirements of the collection, artifacts cannot be removed or modified in any way. We instead produced replicas of the buttons, shown in Fig. 5, using a button maker and hi-res photographs of the artifacts (allowing us to retain any aging, marks, or modifications), which were digitally enhanced to increase legibility.

Fig. 5. Button Replicas of Artifacts [13, 14, 17, 18].

For the interaction, we created a wearable audio player device, influenced by the form and functionality of museum audio guides, which contains a Raspberry Pi and NFC reader (Fig. 6). In interacting, a participant places the audio guide around their neck, wears headphones for increased intimacy, and magnetically attaches a button (mimicking the act of wearing a button), containing a unique NFC tag, to the audio guide, which rests at approximately chest level. Placing the button on the audio guide allows it to read the unique NFC identifier attached to the button, which then causes the audio guide to play the corresponding fragment of oral history. Each button is mapped to a unique narrative

fragment, so the story is experienced entirely nonlinearly: a participant can choose any given button, in any order, and listen to the corresponding anecdote.

Fig. 6. A second view of the *Button Portraits* interaction: A participant chooses a button to wear on their audio player, places it on a magnetized area, and listens to an oral history story fragment corresponding to that button. Each button has a unique NFC tag read by the audio player.

Experientially, this physical gesture of holding a button to one's chest and intimately listening to an interview with the button's original owner serves to not only implicate participants in this history, but also to reframe their relationships to the stories through attention to their own bodily experience.

In an exhibition context, *Button Portraits* would be situated adjacent to the archives space, referring to the collection and inviting further exploration. However, *Button Portraits* can be experienced outside of the archive while referencing the original collection through signage and wall text. The exhibition will comprise a table with the buttons clustered together, the audio player, a mirror to view oneself wearing the button, and instructions for how to experience the piece (Fig. 7).

Fig. 7. An exhibition view of *Button Portraits*, where button artifacts are placed on a table with a mirror, and participants choose any button to interact with.

While listening to oral histories, participants may stay close to the table or walk around the space, which can include the archive, evoking the spatial and corporeal connection to both the buttons and the participants' surroundings.

Initial informal feedback on the experience, aiding our design iterations, focused on increasing accessibility for the wearer and visibility of the buttons while being worn. For instance, we chose a more universally wearable button for our design, as opposed to a jacket or more fitted piece of "ephemera," which would unnecessarily limit participants based on size. Additionally, we aim to provide a mirror within the exhibition space to increase visibility of the button for the wearer, and to further implicate participants in their embodied experience of queer history.

5   Discussion and Implications: Queering Tangible Narrative

Button Portraits is a case study in applying queer methods and queer archival scholarship to the design of tangible narrative experiences, while exploring dimensions of wearability to heighten and trouble relationships between participants, history, and their spatial context. The experience purposefully draws out a fragmentary, nonlinear narrative experience, evoking the partial and entangled nature of archives scholarship, while troubling or *queering* participants' relationships to historical events by physically situating them alongside archival materials and subjects. In this way, the work builds on tangible narrative scholarship to heighten participants' involvement in a story through wearability and to examine this interaction through a queer lens. Through this embodied interaction and contextualization within a queer theoretical frame, the work destabilizes and troubles relationships between participants' bodies, narratives, and histories.

5.1 Beyond Narrative Binaries

We argue that queer methods and queer archival scholarship can influence the way we understand and design tangible narratives for historical artifacts by allowing us to resist binary narrative design categories. Returning to the TENF framework [10], *Button Portraits* may at first be categorized in the following ways: non-diegetic, as the participant is not a character within Dolan or Fontana's stories; external, as the participant's perspective is partially third-person; and exploratory, as the interactor does not influence the story but rather explores it. However, in the experience of *Button Portraits*, none of these characterizations are categorically fixed. The buttons may seem at first non-diegetic, but they slip into diegetic if either of the activists mentions a reference from a button's text, thereby heightening the wearer's involvement in the story. Second, though a participant's perspective may seem external, by virtue of wearing the button and listening intimately, this embodied interaction may suggest a dialogue with the activist, implicate the wearer in the story, and cause their perspective to shift internally. Third, though a participant may not influence the story in a direct narrative interaction, by understanding that bodies and environments co-produce one another [28], and by implying the social and collective dimensions of the button objects, wearers may influence stories and relationships beyond those of the immediate interaction.

In describing the fluidity of these narrative categories, we find that though TENF's categories are referred to as spectra, their analysis foregrounds the binary ends of these narrative elements. Indeed, binary, categorical descriptions of narrative elements are prevalent throughout TN and IDN frameworks [34, 41], and Chu and Mazalek acknowledge this fixity as a limitation of TENF [10]. We interpret this as a generous invitation to build on and enrich their work and take this as an opportunity to expand approaches to interactive narrative largely. We suggest expanding TENF to further invest in holding space for narratives that exist in between points, within multiple places on continuous spectra. By offering reflections on how binary framings structurally overlook the fluidity and liminality inherent in queer narratives, we work to expand and enrich tangible narratives to support more diverse storytelling. *Button Portraits*' experiential fluidity and resistance to categorization highlight a potential path for queer methods and theoretical framing to impact the broader understanding and design of tangible narratives.

5.2 Beyond Narrative: Queering, Contextualizing, and Embodying the Experience

When designing tangible narratives around queer historical artifacts, we must also think about the sociocultural context and how the experience can be queered. This highlights one dimension in which Chu and Mazalek's TENF [10] can be expanded–adding representation for the sociocultural context of the narrative within the framework. Building on this, we call for attending to the structural, methodological, and social dimensions of working with archival subject matter, as well as framing and understanding how a tangible narrative experience exists in that space.

In *Button Portraits*, our design process critically examines the larger context of archival work, using queer archives as a lens, along with the social and collective dimensions of space when experiencing an embodied narrative interaction. Not only does the

experience of the work explore the relationship between bodies, stories, and environments, but it also sits within and is produced by an existing community of Southern LGBTQ + activists, archivists, and individuals. The project is more than a narrative and experience; it began as a relationship between the authors and archivists and continues to evolve to include the activists represented, along with other members of the community, inviting discussion and reflection on the role of archives in our present and future.

Based on our research in designing *Button Portraits*, we suggest that a tangible narrative that chronicles queer history cannot only be *about* queer subjects, but it must also be framed and experienced queerly, with attention to the inherent fluidity and fragmentation of all aspects of the design process. *Button Portraits* embodies the fluidity of a queer tangible narrative experience by resisting the binary categories typically used to describe narrative design. It moves between diegetic and non-diegetic sensibilities, implicates participants in a story through embodiment while allowing them to remain at a distance, and invites them to understand their role in a larger, collective relationship to archival subjects and history. In addition to narrative design and experience, *Button Portraits* foregrounds queer archival scholarship and methods as foundational considerations, arguing for tangible narrative design that acknowledges its artifacts' archival and sociocultural context, alongside its narrative framing. Beyond queer tangible narratives, we argue that this consideration can apply to any form of storytelling, where individuals must consider and "do justice to" the contextual and dialogical understanding of a narrative [44], collapsing boundaries between storyteller and subject, between story and setting.

Embodiment drawn out through wearability in this queer tangible narrative also powerfully troubles the relation of bodies, spaces, and stories [28]—and this troubling reinforces our queer theoretical framing. Wearing artifacts allows participants to embody their relationship to queer history: the gesture of choosing a button, pinning it on, and listening to the voice of an activist foregrounds a relationship between the interactor, the object, and the narrative. Further, this relationship speaks to the co-production of bodies, objects, environments, and stories, which parallels the movement and liminality discussed in queer methods [26, 40], and adds additional theoretical dimensions to our understanding of tangible narrative.

5.3   Queer Methods for Queer Archives

In designing *Button Portraits*, the act of creating replicas of buttons for the purposes of interactive storytelling is notable in that it evokes and critically examines the sentiment of curating. It alludes to the notion that histories and artifacts are continually selected, mediated, and framed by the archivist, researcher, and in this case, designer of the storytelling interface. In reframing, retelling, and replicating artifacts and stories, we self-reflexively acknowledge our own roles as researchers and mediators, recognizing the always partial and incomplete framing of historical narratives.

The work invites us to question and reflect on our own identities in relation to one another, as well as to our communities both past and present. It evokes the sensation of "trying on"–as with a button– an identity and story, but it nevertheless alludes to our inability to perceive one's interior life or history [27]. In exploring and interacting with

the fragmented narrative, participants will only ever discover pieces of history, reflecting the unknowable and always partial, collective nature of historical framing.

In presenting archival objects, *Button Portraits* also self-reflexively alludes to themes of equity, context, and power: who is represented in queer history, which stories are told, which communities are portrayed, how is that history retold, and by whom? In equitably representing stories in a digital or tangible interactive format, we look to Parvin's "Doing Justice to Stories" [44], Tuhiwai Smith's "Decolonizing Methodologies" [50], and TallBear's "Standing With and Speaking as Faith" [52] for insight. To practice equitable representation, we embrace "telling stories back," being in and of the communities within which these stories live, and dialogical forms of storytelling and listening. We trouble "assumptions, dominant narratives, and predefined modes of action inclusive of those that animate digital storytelling initiatives" [30, 44], especially by virtue of the interactions we design. As mentioned, *Button Portraits* exists in and of Atlanta's LGBTQ + community and has been conceptualized by its members. Our aim as authors is to continue to work within this context to dialogically share and reflect on the stories presented, and to argue for this continued broader approach to tangible narrative design for archival materials and stories.

Button Portraits also has implications that extend beyond queer storytelling to museums and archives largely. As a case study, *Button Portraits* reflects on how embodiment, wearability, and queering the archive through queer methods can shape the design and experience of tangible historical narratives. In archives and museums, visitors would benefit from these tangible experiences that allow for a deepened understanding of history through embodied interaction and nonlinear exploration.

5.4 Limitations and Future Work

Currently, *Button Portraits* focuses on only two activists and the artifacts within one archive, and we acknowledge that this work does not seek to represent queer history universally. Additionally, we intend to extend our research beyond specific stories, fostering ongoing dialogue and relationships with queer spaces, communities, and activists both established and burgeoning.

As this design project is meant to evolve within Southern queer communities, future iterations will seek to work with and dialogically tell stories of underrepresented members, especially QTBIPOC (queer, trans, Black, Indigenous, People of Color) and other marginalized voices. As part of an ongoing archival effort, QTBIPOC oral histories are currently being added to the Gender and Sexuality Collections under the Transgender Oral History project [25], and this design project will evolve to collectively tell those stories. It is our hope that this project continues to grow within and through its members, that histories continue to be shared, and that the dialogical nature of our engagement persists.

Lastly, while this paper discusses the theoretical contributions and design process of *Button Portraits*, further work is needed to explore how participants interact with and reflect upon the experience. We plan to conduct a user study as our immediate next step, and in our next publication, we will report on findings from this study, focusing on how the artifact and interactions engender embodiment and a deepened understanding of queer history.

6 Conclusion

Button Portraits as a case study builds on the existing body of tangible narratives of historical artifacts by adding dimensions of queer archives scholarship and queer methods to design and experience considerations. Our design suggests that a queer design research methods approach, coupled with dimensions of wearability and consideration of queer archival process, seek to not only place participants in relation to historical narratives and figures but to trouble, reframe, and *queer* these relationships. By virtue of this design, the intimacy and physicality garnered by wearability, paired with an abstract nonlinear narrative, evokes the paradox of being close to and yet distant from individuals and their interior lives and stories. It alludes to the opacity and ever shifting, fragmentary, and fluid nature of both history and its actors. Further, it presents a powerful opportunity to reshape participants' experiences of the archive, calling for intimacy, reflection, and collective involvement in understanding our histories.

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