Probing a Community-Based Conversational Storytelling Agent to Document Digital Stories of Housing Insecurity

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ABSTRACT

Despite the central role that stories play in social movement-building, they are difficult to sustainably document for many reasons. To explore this challenge, this paper describes the design of a community-based conversational storytelling agent (CSA) to document digital stories of housing insecurity. Building on insights from an ongoing grassroots project, the Anti-Eviction Mapping Project, we share how a study initially focused on CSA-support opened an investigation of the role that artificial intelligence may play in housing justice movements. Drawing from 17 interviews with narrators of housing insecurity experiences and collectors of such stories, we find that collectors perceive opportunities to expand means of documentation with multimedia and multi-language support. Meanwhile, some narrators perceive potential for a CSA to offer therapeutic storytelling experiences and document otherwise unrecorded stories. Yet, CSA encounters also surface perils of machine bias, as well as reduced possibilities of human connections and relations.

CCS CONCEPTS

• **Human-centered computing → Empirical studies in interaction design**.

KEYWORDS

City, Community-Based Design, Conversational Interface, Grassroots, Housing, Narrative Systems, Social Movements, Storytelling

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1 INTRODUCTION

The documentation of digital stories has increasingly played a vital role in social movement-building. For urban social justice issues like housing insecurity and eviction, a systemic issue facing 30-40 million people in the US alone [12], storytelling can motivate change by documenting community histories of home and neighborhood [31, 38], materializing urban narrative systems [45, 113, 114, 116], and facilitating public engagement around urban design and planning [13, 33, 74, 91], namely displacement [72, 77, 82, 98, 124, 127]. These modes of storytelling foreground the documentary work of grassroots housing justice collectives like the Anti-Eviction Mapping Project (AEMP) who partner with community organizations to document dispossession and displacement through multimedia storytelling, data visualization, and digital cartography [72]. For example, in one recent project, the AEMP worked with global community partners to create a website that overlays oral eviction stories of the Covid-19 pandemic atop of a geospatial map (Fig. 1).

Despite the promise of digital story documentation, the process faces many hurdles. Prior work shows that gathering story-driven data can retraumatize and endanger storytellers facing landlord abuse, retaliation, and eviction threats [40, 48]. Meanwhile, grassroots efforts to document stories often require significant and skillful investment, demanding ongoing training and volunteering that is hard to extend beyond small groups. Relying on volunteers and coordinating in general poses difficulty [121]—never mind in the context of housing insecurity, which adds layers of complexity.

Part of the thinking about this study emerges from immersion in the AEMP, working to rally stories for housing justice (e.g., producing oral histories and documentary films) [72]. The AEMP has struggled with coordinating volunteers, using tools that "mismatch" their workflows [121], and navigating low-resources amid escalating evictions. Despite these constraints, conducting oral history interviews has supported tenants, as well as forged new relationships and mutual aid possibilities. Some people interviewed by the AEMP, for example, have since joined the collective, building capacity in that way [72]. Yet, housing groups such as the AEMP still have limited means of documenting stories [5], increasing access to storytelling, and expanding means of storytelling in general [87].

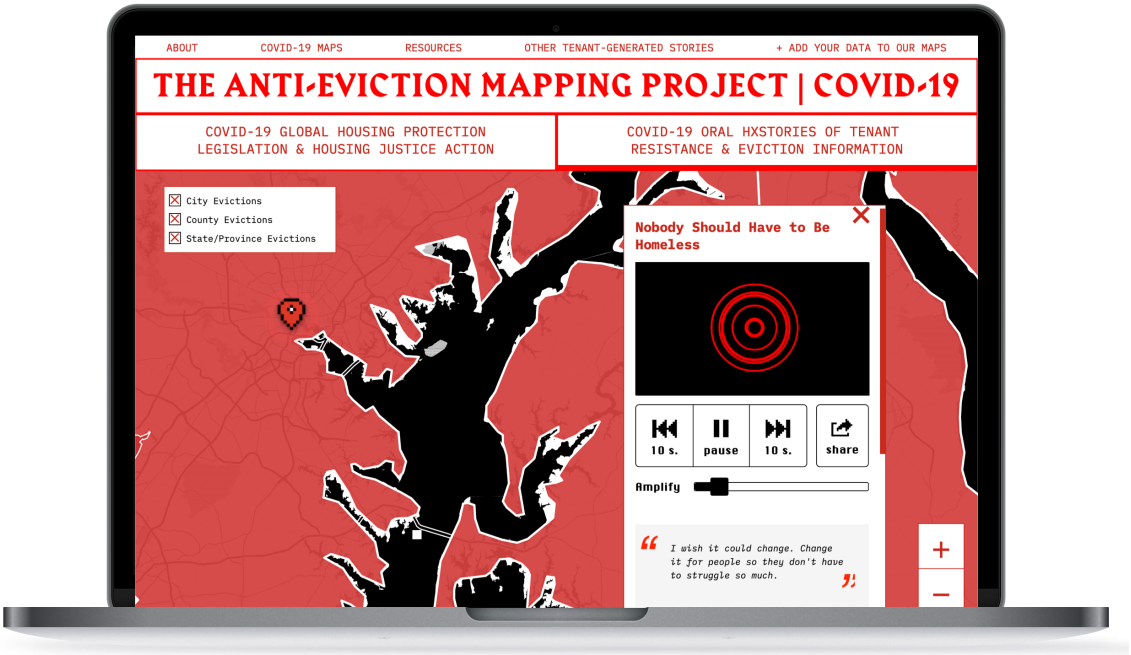

Figure 1: Resident story *Nobody Should Have to be Homeless* produced by the AEMP [102] (interface design by Halperin [46]).

While housing justice groups have worked to rally stories for movement-building, researchers have been investigating new ways to facilitate storytelling with digital technologies. One prominent avenue of exploration is the use of conversational storytelling agents (CSAs) to support story documentation. CSAs are computational systems that use machine learning (ML) powered natural language processing to automatically collect digital stories and facilitate dialogue with human narrators. Prior work shows that CSAs may extend documentary work [23, 52], as well as offer therapeutic advantages [122] like alleviating feelings of loneliness [3] and burdens of self-disclosure [92]. Yet, they may also offer insufficient emotional support [97] and generate problematic or hateful rhetoric [67, 104, 125] with possibilities for increased surveillance.

While some have begun exploring CSAs for application areas including advocacy [23] and oral storytelling [29, 128, 129], there is little known about how CSAs may support housing justice movements and its partners, as well as what grassroots coalitions make of the technology and how it might develop as part of community-based efforts. Thus, this study takes lessons from digitally-supported documentation research [28, 44, 80, 93, 129] to ask: ***What values, hopes, and fears do people express about artificial intelligence through the design of a CSA for housing justice?***

To investigate this question, we present a community-based design study, examining story collector and narrator perspectives of a CSA to document digital stories of housing insecurity. We conduct 17 semi-structured interviews with five narrators who have experienced housing insecurity (N1-N5), four volunteer collectors of such stories (C1-C4), and eight collectors/narrators with dual-perspective (CN-1-CN-8). While interviewing participants and asking them about their prior experiences with conversational interfaces, we show them a variety of CSA visual design mockups. We also ask the narrators to simulate storytelling with a CSA prototype and critically reflect on the interactive experience. We end each study session by asking all participants to share what they perceive as the pros and cons of the intervention.

This work makes two primary contributions to HCI literature on grassroots social movement organization, digital documentation, and storytelling. First, it contributes a case study of digital automation within a grassroots community-based project. In this analysis, we find that such interventions pose both benefits and risks, pointing to the importance of technical scaffolding that works alongside existing practices, but never intervenes in those practices explicitly. Second, this work expands existing debates on the implications of scaling storytelling practices with particular emphasis on justice. We illustrate the role that oral history methods might play in assessing technologies for social change, noting the importance of irreducible human connection (empathy, reciprocity, and emotional abundance) that story collectors offer in contexts of storytelling (here, housing insecurity).

2 BACKGROUND AND RELATED WORK

2.1 Housing Insecurity in the US

An estimated 30-40 million people in the US are at risk of eviction under the Covid-19 pandemic; this estimate is tenfold the average number of evictions that typically occur each year [12]. Meanwhile,

a 2020 study found that about 580,000 people in the US sleep without a home each night [105]: a figure projected to rise by about 50% over the next four years, disproportionately impacting low-income residents along axes of race, gender, disability, and more [34]. While prior work has traced how racial capitalism produces housing insecurity at scale (e.g., [76]), dominant narratives center on victim-blaming and shaming residents, obscuring the systemic poverty traps as personal failures attributed to not working hard enough with age-old tropes like: "just pull yourself up by your bootstraps" [123]. Such narratives distort the realities of struggle.

To overturn false narratives and reveal realities [80], grassroots organizations like the AEMP collect counter-narratives [83] from the vantage point of residents facing housing insecurity [77]. The AEMP is "a self-described collective of 'housing justice activists, researchers, data nerds, artists, and oral historians"' [27]. Maharawal and McElroy have described how the AEMP conducts oral history interviews to counter-map [77] narratives of displacement [72, 98] and more [78, 100]. Amid Covid-19, the AEMP started digital story mapping global housing protection legislation and housing justice actions [101], as well as eviction information and stories [102]. This study extends the AEMP's Covid-19-era digital documentary work.

2.2 Documentary Work in Grassroots Organizations and Community Contexts

Aligned with the AEMP, grassroots organizations include community-based organizations, nonprofits, collectives, and other groups doing social justice work. Storytelling has long benefited not only urban communities [28, 44, 110, 113, 116], but also rural groups [1, 15, 39, 61, 62], as well as nations on a more holistic level with digital interventions that cut across "rural/urban divides" [80]. While storytelling varies among organizations [32], documentary work often involves community organizing combined with media traditions (e.g., documentary film-making and oral storytelling) to record stories unlike those of the mass media. As Green et al. found "grassroots production models" have fundamentally different "values and qualities" than those of "professional production systems;" grassroots stories are "realistic" and "intimate" [43]. HCI scholars have long been interested in technology to support documentary work of housing justice [127], social justice in general, and community health (e.g., through memory sharing [44], story mapping [110], and amplifying silenced voices [85]). Relative to digital tools, however, scholars have also noted how analog tools like story cards [42] and storyboards [109] can offer greater accessibility for some. Thus, implications of digitality are an ongoing focus of critical inquiry in terms of access and who stands to benefit from its mediation.

Numerous researchers who have studied digitally-supported documentary work have pointed to the therapeutic and movement-building benefits that may augment, but not replace analog storytelling. As Dimond et al. found, technology can abet documentary work that social movement organizations have long done by crowdsourcing more narrators to participate in online storytelling about street harassment; as they learned, some narrators benefit by experiencing shifts in cognitive and emotional orientations, describing story sharing as "therapeutic and cathartic" [28]. This echoes what Clarke et al. discovered about how storytelling can serve not only as a "cathartic and therapeutic tool," but also facilitate cross-cultural understanding to build connections [22]. Meanwhile, other scholars have examined how technology design can enhance storytelling. For example, Michie et al. investigated how design can be oriented for activism by supporting digital storytelling to build reproductive justice movements [80]. These works reflect opportunities for design and technology to support social justice-oriented documentary work within community contexts and grassroots organizations.

While there are many benefits to digital story documentation, design and technology-mediation can also exacerbate challenges. Digitizing stories, for example, may further "age-old practices of extraction and colonization in new guises" *unless* each story is attentively heard to ensure that it reaches its full listening potential [94]. Meanwhile, as Fox and Le Dantec learned in an engagement with community historians, technology artifacts can also pit neighbors against one another, while also raising issues of surveillance tied to new technologies and documentation [38]. As Kozubaev et al. found, some public housing residents distrusted smart home technologies with recording capabilities—property managers described residents resisting the privacy invasion by taping over the devices [63]. Such technologies can be invasive not only to residents, but also to housing justice organizations. Asad et al. elucidated how digital technologies can "allure" without leading to substantive change and proposed "design for existing activist practices instead of imposing design onto activist communities" [5]. From these cases, we learn of the distrust and disruption that technologies can introduce in these contexts. Even when offering benefits, digital storytelling platforms can still disproportionately advantage privileged demographics, rendering intersectional groups relatively invisible, as Mueller et al. have noted [86]. We thus explore how technology and design can center certain residents to support existing practices.

By supporting existing practices to amplify crucial voices, technologies have potential to remove storytelling barriers. For grassroots organizations, barriers to story documentation include low-resources [53] and third-party tools that tend to "mismatch" their workflow needs and values [121]. Looking to address this, Hirsch explored how organizations often work with "hacktivists" and "advocacy developers" to appropriate tools and create new ones [50]. As for residents, Harrington et al. discovered "barriers to obtaining narratives" about housing in particular—residents had many concerns about their facilities, but were hesitant to disclose them in fear of judgment and retaliation [48]. What is not yet known is how technologies may remove barriers, intervene in person-to-person story collection, and play a supporting role as artificial intelligence.

2.3 Conversational Storytelling Agents (CSA)

This project explores opportunities and limitations for conversational storytelling agents (CSAs) to support the goals of housing justice organizations and the obstacles that they encounter in collecting and sharing resident stories to build social movements. Conversational agents, also known as dialogue systems, facilitate conversational interactions with natural language to mimic human-to-human interaction. Since the development of the seminal conversational agent ELIZA to simulate an experience with a psychotherapist [122], researchers have designed numerous dialogue systems to examine the potential for computer-assisted interviewing across applications, from personal health questionnaires [84] to airport

screenings [88]. For storytelling, question and answer patterns between students and teachers (e.g., activating, prompting, hinting, feedback, and evaluating) have also informed conversational agent design [73]. Ranging in forms from virtual chatbots [2] and voice assistants [26] to embodied and anthropomorphic physical robots [16], dialogue systems have increasingly supported storytelling for journalism [52], ethnographic data collection [119], narrative-based advocacy work [23], and narratology more broadly [70]. These areas of support motivate exploration of a CSA for housing justice.

With these nascent capabilities of conversational systems also come significant limitations and risks that warrant consideration. Scholars have raised ethical considerations particularly in regards to people who may be more vulnerable to abusive conversations. For instance, CSAs with children have raised concerns around bias, security, and privacy [21], as well as unsupervised possibilities of prompting unfavorable behavior [41]. As Radziwill et al. have noted, some other chatbots have even been maliciously designed to operationalize social harms (e.g., virtual attacks and misinformation) [104]. Meanwhile, even when designed for good, the technology presents risks in terms of its limited emotional support capacities upon implementation in sensitive contexts like mental wellness [97]. Lastly, the systems can deleteriously automate verbal expressions of racism, antisemitism, sexism [125], as well as colonialism, and ableism that all raise the question: what conversational futures are "worth having" to support—not suppress—crucial voices [67]?

Based on prior work, worthwhile conversations with CSAs include those that involve storytelling for entertainment, education, and mental health. For entertainment, CSAs have performed elaborate roles such as conversational characters [25] including Hamlet's Ghost [51] and interactive storytelling partners in games [64, 65]. Similarly, Dinkins exhibited an oral history chatbot, demonstrating how it can support storytelling about familial and life history [29] through inclusive AI [30]. In the context of museum education, Olson et al. showed how an interactive conversational storytelling system can tell stories that are seldom streamed in the mass media (e.g., "breakbeat narratives") [89]. As for other educational uses, scholars have studied CSAs to support collaborative learning for children in particular [14, 90]. For instance, Zhang et al. explored CSAs to facilitate co-creative visual storytelling with children [128, 129]. Blending entertaining, educational, and therapeutic capacities, Santos et al. also found how CSAs can facilitate expressive storytelling to support the mental health of children [111]. In such pursuits, scholars have found that the technology can offer empathy, albeit to a limited extent [20, 126]. These capabilities and contextual uses of CSAs suggest that they may help residents who have faced housing insecurity to tell their stories, while also potentially help educate them on their rights as tenants, support their mental health, and facilitate fun and engaging experiences for them in the process.

In the hands of grassroots organizations working toward housing justice, CSAs present numerous potential benefits. For one, like other self-administered tools such as surveys and user-generated content sites for uploading self-recorded videos, CSAs may support residents in sharing information, but in more engaging manners. Organizationally, CSAs may also help reduce the workload of overextended and low-resourced volunteer collectors by automatically documenting stories in a parallel workstream and thus reducing manual labor that can lead to burnout. In offering 24-7 story collection, CSAs may also increase storytelling access by making it more available and accessible. Unlike other story collection tools without conversational interactions, CSAs may also facilitate cathartic conversations like other dialogue systems for therapy [122], communal well-being [71], reflection [58, 60], and alleviation of loneliness and social isolation through storytelling [3]. Since domestic abuse and housing insecurity can overlap, of particular note is also the work of Park and Lee who explored a conversational agent to support sexual assault survivors, finding that the tool can even alleviate burdens of self-disclosure [92]. In other similarly high-stake scenarios, conversational agents have shown useful support for social needs by helping screen emergency room patients [59]. In these cases of disclosing sensitive data, researchers find that some people (e.g., sexual assault survivors and patients) prefer to interact with a conversational agent than with another person as it can be less burdensome. While these works show promise for supporting more general types of dialogue, they do not examine conversational storytelling or the context of housing insecurity. Such exploration may be beneficial given the many barriers associated with documentary work amid intensifying housing crises. Thus, we sought to explore potential benefits of a narrator-centered conversational system to support residents in storytelling about intimate housing struggles, while also expanding the storytelling capabilities of grassroots organizations in the process.

3 COMMUNITY-BASED DESIGN STUDY

We define community-based design as a planned method of social change [49]—"programs of social action to address social problems" [112]—in the social science tradition of community-based participatory research [68]. We also draw inspiration from methods of justice such as Asad's prefigurative design framework for creating counter-structures [4]. Conceptions of community, home, gentrification, dispossession, and resistance vary globally, as well as in the space of a neighborhood, street, or block [6, 36, 37, 108, 114]. Rather than define housing justice community, we recognize that transposing one locally grounded understanding of gentrification and eviction on each other often produces epistemic violence [79]. This gets at problems of universally designing [106] and scaling tools, which we are cautiously probing in this study.

Prior to this study, Halperin and McElroy had been immersed in the AEMP, working with community partners [103] to document stories and build digital tools, including a user-generated content tool for residents to self-record videos. While McElroy co-founded the AEMP and its project embedding "old school" oral histories on an interactive map [98], Halperin worked more on storytelling born digital under remote conditions of the pandemic [46, 95, 102]. The user-generated tool, however, was made with a community partner organization that operated and suddenly discontinued it amid the pandemic. Meanwhile, coordinating volunteers was taxing as many dropped and burnt out, grieving amid crises. These challenges motivated rethinking documentation with a "community-controlled" [24] tool not reliant on unsustainable manual labor. While the user-generated tool extended reach to increase access to storytelling, it did not offer the conversational benefits of oral history interviews

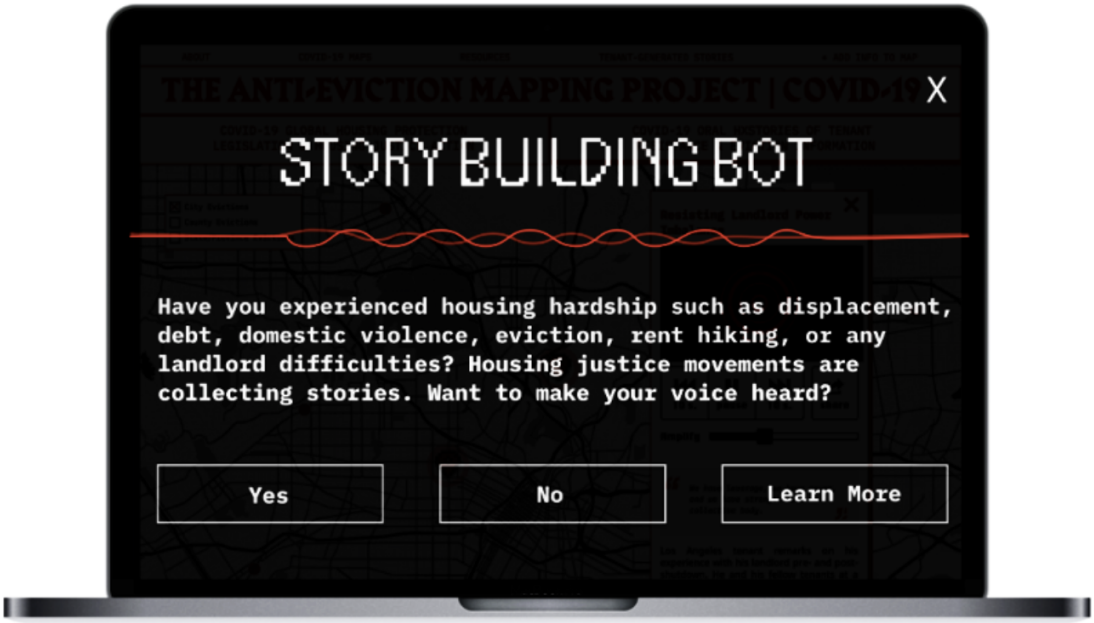

Figure 2: CSA visual mockup: splash screen.

(e.g., guiding, affirming, and supporting narrators). These limitations percolated the idea to explore the design of a potential new digital storytelling tool with a conversational user interface.

3.1 CSA Visual Mockups and Prototype

To facilitate conversation with participants, we developed a relatively simple set of prototypes designed with two main intentions: (1) to introduce the basic functions and user experience of a CSA for collecting stories about housing; and (2) to demonstrate interface design variations. We prototyped variations to both test modalities and inhibit participants from fixating on a specific design implementation. Prototyping consisted of three steps: (1) encountering the CSA plugged into the AEMP Covid-19 story map [102]; (2) exploring CSA mockup variations (modalities ranging from more visual to more text-based interactions, desktop versus mobile device layouts, multi-language support, and hypothetical conversation topics that the CSA could facilitate); and (3) simulating storytelling with the CSA prototype (for narrators only).

The main CSA mockup was designed with an alternate aesthetic to more standard chatbots (Fig. 2); it was meant to look and feel more like a multimedia storytelling experience. Fig. 3 (on left) shows the second CSA screen that participants encountered to choose a media format. Participants also saw mockups in traditional chatbot form (on right), exploring multi-language and multimedia support on mobile devices. These allowed for probing values and concerns.

For simulating conversational storytelling interactions with narrators, we used the Wizard of Oz technique [55, 75]. The Wizard types messages on a text document and narrators respond aloud. Fig. 4 depicts a sample text file of questions and utterances [57]. Dialogue scripts were designed based on manual procedures and interview protocols explicated in guides for personal narrative storytelling [8], digital storytelling [35], and AEMP resources [95, 99].

In prototyping conversational interactions, narrators were asked premeditated prompts about home and neighborhood. Narrators also encountered CSA utterances that segued conversations with pleasantries (e.g., "Thank you for sharing"), generically probed (e.g., "Would you like to say more about that?"), and affirmed their visions for change (e.g., "That's beautiful"). In rare cases, some narrators received improvised utterances to respectfully sustain the dialogue.

3.2 Interview Protocol

Upon IRB approval, we invited participants to explore conversational storytelling technology to support housing justice in a 60-minute interview via Zoom and to fill out a demographic survey in exchange for $40. Participants were also given the option to interview in other formats. Two participants requested audio-only Zoom interviews (C2, N3). Conscious that some may have cultural rules or practices around storytelling, we emphasized informed consent to clarify that they could opt out any time. We also clarified that they were not uploading stories, but rather exploring a prototype for academic research that could lead to future development. Lastly, we specified that we wanted to hear their candid critiques of it.

While scheduled for an hour, some interviews lasted up to 90-minutes at the will of participants. Most participants used desktop devices to explore the CSA while two used mobile devices (CN-4, CN2). This setup was based on similar developments of dialogue [92] and narrative systems [44] that used both desktop and mobile devices. Participants amid housing struggles were in temporary

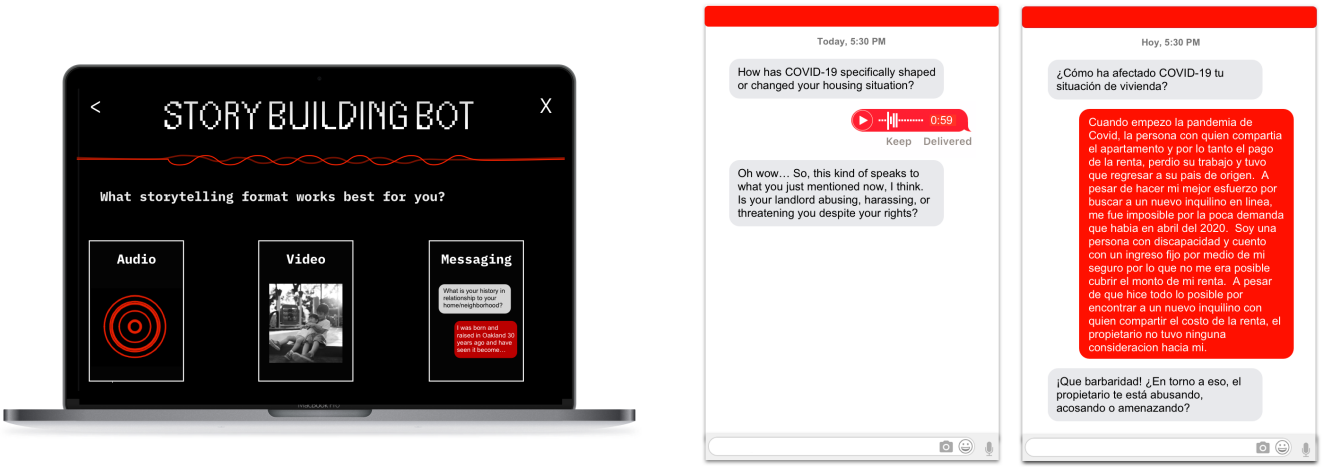

Figure 3: CSA visual mockups: (1) more inventive chatbot-inspired aesthetic as an interactive multimedia storytelling experience (left); and (2) more traditional chatbot messenger aesthetic with multimedia, multi-language, and mobile support (right).

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Can you describe your history in/relationship to your home and neighborhood?

Thank you for sharing that. How has COVID-19 shaped or changed your housing
situation?

It sounds like you mentioned difficulty with your landlord. Would you like to
say more about that?
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Figure 4: CSA Wizard of Oz prototype: sample dialogue script.

living arrangements to safely participate. To avoid imposing additional stress on people in severe crises, we did not interview anyone in unsafe environments or without any form of housing.

We devised a semi-structured interview protocol, asking participants to share prior experiences and explore the CSA. We tailored the protocol to three subgroups: collector (C), narrator (N), collector/narrator (CN). We began interviews by asking participants to provide consent, introduce themselves, and share experiences in this context. Depending on the subgroup, the interview then forked into one of three tailored question sets. For collectors, we asked them to share times that they conducted interviews. For narrators, we asked them to tell their stories to a CSA and then critique it.

With narrators, we first showed them the visual mockup of the AEMP Covid-19 story map [102] with a "storytelling portal" depicted in the bottom corner to represent the CSA entry point. Narrators were told that clicking on this portal would begin the CSA simulation. The interviewer then showed visual mockups (Fig. 2 and Fig. 3) of what the CSA could look like in future states, soliciting critiques before transitioning into Wizard-of-Oz prototyping.

To facilitate the CSA storytelling simulation, narrators were first informed that, while their stories could ultimately be edited in a double-consent process [95], they should simulate storytelling as if sharing a story for public dissemination (not just for the interviewer or Wizard). Narrators were also told that although the storytelling was limited to 20-30 minutes, it could be lengthened in future states. Finally, they were informed that they could say "skip" to any question. The Wizard facilitated uninterrupted storytelling based on what narrators were comfortable disclosing.

With collectors and collectors/narrators, the interview protocol followed a similar structure, but without extended storytelling simulations. These participants spent more time answering questions about documentation practices. They were also shown more visual mockups with greater time to explore hypothetical use-case scenarios. Collectors/narrators were also encouraged to share their own stories while exploring the visual mockups and modalities.

3.3 Recruitment

Halperin recruited participants through experiences volunteering with the AEMP (2020-Present) and Habitat for Humanity (2013-2014). People who collect housing stories and/or who have experienced housing insecurity were contacted. Nine participants were personal connections of Halperin; one participant was recruited via snowball recruiting; seven participants (whom Halperin did not know before the study) were affiliated with the AEMP, Habitat for Humanity, or other community-based organizations. McElroy, who co-founded the AEMP in 2013, knew 11 participants, but did not

conduct interviews. Halperin conducted all interviews while co-authors (who did not know participants or have AEMP affiliation) supported protocol development and analysis. We recognize our positions in relation to participants as built upon pre-established relationships from sustained, ongoing community-engagement.

3.4 Participants

While housing insecurity occurs all over, this study was scoped to residents in US cities based on our sites of community-engagement and partnership. We prioritized outreach to groups that are more likely to face housing precarity [34] while conscious of intersectional impacts across axes of race, disability, class, gender, and more [24, 27]. Most participants (14/17) identified as female or non-binary (11/17), LGBTQIA+ (9/17), disabled (2/17), or Black, Indigenous, Person of Color, or another non-white racial identity (9/17). Most participants (13/17) intersected two or more of these identities.

In total, 17 participants affiliated with 25+ organizations participated: five narrators (N1-N5), four collectors (C1-C4), and eight collectors/narrators (CN-1-CN-8) located in the San Francisco Bay Area, Los Angeles, New York City, or New Orleans. Narrators were residents who had experienced housing insecurity. Collectors were residents who document housing stories with expertise in community organizing, journalism, oral history, documentary film, and/or multimedia storytelling. Collectors/narrator were participants who had experience with both housing insecurity and documentary work; this dual-perspective group was formed upon realizing that numerous collectors had personal stories and prior experiences narrating them [72]. Thus, we distilled 25 perspectives (13 narrator and 12 collector) altogether. Narrators had low-variance in age and high-variance in hardship. Four narrators were ages 18-29 (N1, N3, N4, N5) and one was 40-49 (N2). Narrators had experienced landlord harassment (N1), domestic violence (N2), displacement (N2, N3, N5), landlord abuse (N3), gentrification (N3), self-eviction (N3), inhabitability (N4), discrimination (N5), and eviction (N5).

3.5 Data Analysis

We analyzed the interview transcripts by coding and re-coding the data to form a thematic map. First, we adjusted the computer-generated audio transcript to accurately reflect each conversation. We then examined transcripts to identify patterns of subject responses, guided by the techniques of thematic analysis [17, 81]. This consisted of a systematic process of coding each transcript and then cross-referencing emergent codes. To begin, Halperin coded each transcript and then discussed the emergent codes with co-authors. Then, Halperin re-read each transcript, re-coded, tested, and clustered codes to re-discuss. Co-authors assessed clusters to form themes by identifying patterns and recurring insights across interviews. To arrive at the most salient themes, close reading was applied for deeper examination of transcripts in traditions of STS and humanities [9] as it lends itself to counter-storytelling [10].

4 STORIES

To concretize housing insecurity and set the stage for our findings, we share a selection of narrators' stories documented with the CSA probe. These stories help paint particular pictures, illuminating the struggles of overlapping structural and historically-situated injustices. By drawing attention to the entanglements between individual hardships and structural harms, they cast housing security as a collective plight. We share these experiences to highlight nuances that defy formal documentation methods (e.g., legal eviction records and policy reports), as well as to counter dominant victim-blaming narratives [123]. Since housing precarity disproportionately affects certain groups [34], we note that these three narrators all identify as non-binary and LGBTQIA+; also, one identifies as a person of color (N4) and one identifies as disabled (N5). In this first story, one narrator voices concerns for security and safety in New Orleans:

> *A lot of Black and Brown people have left the city and not returned because of the affordability and access... I've experienced it the most by being just kicked out of rentals. There was a span of two years where I moved eight times because every single place that I moved into got sold out from underneath me... In July of 2020 I finally kicked out somebody who I had been living with. I was in an abusive relationship and had been trying to navigate getting out... I was suddenly safe from this person, but because this person knew where I lived, kept showing up... It took a really long time... several months for me to be like I just have to get out of here... and then figuring out... I can't really afford anywhere...* (N2).

By telling the CSA about their experiences of domestic violence, unaffordability, and repeated displacement, this narrator exposed how external forces of insecurity converged with internal ones—domestic abuse inside the home—to ultimately destabilize their housing. Thus, this narrator faced intersecting precarities, culminating in threats to physical, as well as mental, health and safety.

Meanwhile, another narrator focused on the emotional abuse of pernicious harassment that evades legal protections offered by San Francisco Bay Area municipalities from a policy standpoint:

> *I'm currently living with family in the neighborhood that I've been in in West Oakland. I wasn't previously living here before the pandemic, but... housing stability was afoot... It's an area that I believe lots of developers are looking at... There are children everywhere, which is yet another reason why places like this need to be preserved... It's a constant fear that it's going to be taken away... My [prior] landlord... tried to use Covid as a way to harass us into leaving. It was a very traumatic experience. Me and all of my housemates, who are all Black, Indigenous, People of Color, queer folk, all became incredibly housing insecure... Even though we were supposed to have these laws and legislation that were supposed to protect us as tenants... it didn't deter or stop... the emotional abuse...* (N2).

After storytelling with the CSA, the narrator clarified, saying, "*I was not legally evicted, but was threatened with eviction every month... This led our household to 'self-evict' due to emotional distress*" (N4). Not only does this reveal unchecked power abuse, but also policy implications around how laws are unenforced without concern for emotional abuse [117].

As the previous narrators evidence, eviction stories often start with resistance. Another San Francisco Bay Area resident shared:

> *I went from barely being able to afford rent to definitely not being able to afford rent... [My landlord] was... extremely wealthy... and he tried to make me feel bad... saying my efforts in organizing against the eviction and trying to prevent anything from happening with my housing was going to be futile... trying to make working class person feel bad for them losing thousands of dollars when I haven't seen thousands of dollars... I work so hard to give 90% of my income to housing... The minimum wage hasn't been raised and nothing else has changed that would make it more possible for anybody to pay more in rent... Housing for felons and people with low credit is almost impossible... That's not something I foresaw when I was convicted...* (N5).

As a disabled and formerly incarcerated person, this narrator shared interconnected struggles of unaffordability, landlord harassment, discrimination, and eviction. In their plight, this narrator revealed how the carceral system locks up and out those already systemically excluded. Such stories exemplify the kinds of important conversations that a CSA for housing justice may facilitate and support.

5 FINDINGS

Here, we share thematic insights that focus on our conversations with participants, as well as on the conversational interactions that participants had with the CSA. Instead of only focusing on the CSA, we explore both aspects to provide a balanced stance on how the digital intervention may fit into and complicate existing practices.

5.1 How Do Collectors Encounter the Storytelling Process with and without a CSA?

This subsection focuses on collectors' existing storytelling practices and how they saw a CSA potentially augmenting them. First, collectors shared how they address positionality and rapport to cultivate empathic relationships via long-form storytelling without the CSA. After that, they discussed opportunities for a CSA to expand their low-resourced storytelling practices as a short-form flexible option with multi-language capabilities that can help reach more narrators.

5.1.1 The importance of addressing positionality and rapport. Grassroots stories can be personal and intimate [43], especially about housing insecurity [48] with the AEMP's model of a "life-history approach to storytelling, focusing on deep neighborhood histories of what is no longer, but also stories of refusal and protest" [77]. Given the vulnerabilities associated with storytelling, collectors described how interviewing narrators can lead to them forming relationships and friendships that transcend the immediate exchange. This relationship-building is contingent upon addressing the implicit power dynamic between the interviewer and the narrator, as well as demonstrating genuine empathy. As one collector/narrator said: "*We don't like to start at the moment of the eviction or... pack a punch for an audience*" (CN-3). To foster meaningful connections, collectors described how they aim to relinquish control over the conversations. For instance, one oral historian emphasized how she tells narrators that they are in the "*driver's seat*," saying: "*You run the show. This is your story*" (CN-8). Another collector also described how "*shifting in calling the interviewees narrators*" denotes that it is the interviewee's story—the interviewer is there to offer emotional support and guidance, but not to control the narrative (C3). One collector/narrator further described how she "*sort of equalizes the power dynamic*" by letting narrators choose what questions they answer and then asking follow up questions based on what they bring up themselves, explaining: "*You're there in their headspace... You're there going 'Woah what's that?'... Can you take me there? ... They're leading you, but like a little child, you're also like 'But I'm not quite done... I saw something really interesting in there'*" (CN-8). These ways of conversing for as long as narrators desire (in some cases up to two hours) encapsulate how collectors attentively listen and cultivate non-transactional relationships.

In caring for narrators, collectors also shared how they offer support beyond storytelling. Many shared how if narrators' stories suggest that they may benefit from social services or resources, then they inquire about their needs at the end as to not interrupt storytelling. If they are unsure how to best advise, then they offer to investigate and follow up after. One collector/narrator shared an example of how she closes interviews in this manner by telling them that they are not alone and explaining: "'*The relationship between a tenant and landlord—it's a really difficult one and there's a huge power and balance... You're part of that system... That's the big picture, but then let's figure out... what's going on with you and how we can provide resources for you*'" (CN-7). This end to the conversation allows for not only helping to educate tenants, but also caring for them on interpersonal levels. With these heartfelt empathic concerns, collectors mentioned that they aim to sustain the relationship with narrators; not to just "*extract a story and then [say] 'Bye, thank you for your input' and then never [tell them] about the project again*" (CN-8). In cultivating human relations, collectors support narrators as not just storytellers, but also as residents, friends, and fellow human beings: a form of mutual aid.

5.1.2 Expanding story documentation: accommodating multiple formats and increased access. Given low resources and in-kind labor, many participants observed that the CSA may help expand storytelling practices. When describing their current methods, collectors often described feeling overworked amid resource constraints. As one collector/narrator said, "*It's very easy to burn out and to overextend yourself... Our work would be much easier if we had a larger group... Numbers and also, of course, resources*" (CN-2). Other collectors similarly spoke to how initiating and coordinating storytelling can be "*tedious*" and "*disheartening*" (C1). One collector said, "*We could be a lot better about how we reach tenants... It's really difficult to coordinate that again when we're all burnt out, when we're all volunteers... We're all so burnt out that we can't even have the conversation about the outreach*" (C2). In light of low-resources, an expert oral historian further spoke to how relying on and training volunteers poses difficulty: "*Volunteer interviewers—they are going to screw up. They're going to say weird things. They're going to not ask follow up questions. They're going to ask leading questions... Even really well-trained interviewers are going to make all kinds of mistakes*" (CN-5). With this benchmark comparison, collectors perceived a CSA as potentially capable of collecting stories even imperfectly and providing a way for some narrators to self-initiate storytelling without scheduling hurdles or back-and-forth coordination difficulties.

Upon exploring the CSA prototype, participants noted opportunities for it to increase narrator access. One promising opportunity was for a CSA to provide multilingual support beyond collectors' capabilities. Some participants connected this concern with a framework of "*language justice*" (C4, CN-7). They welcomed a multilingual CSA to reach Non-English speaking narrators who may otherwise have a more difficult time gaining linguistic access to storytelling.

Along these lines of access, participants also perceived the CSA's ability to operate at any time as a way to reach more narrators and therefore build capacity. For example, one collector described the CSA as "*trying to bolster the work that we're already doing*" (C2). Another collector also voiced opportunity for it to benefit organizations without storytelling offerings such as similarly short-staffed tenant unions that she heard have "*hardly anyone there*" to document inbound stories (C1). A participant with oral history expertise also suggested that a CSA may help chip away at the exclusionary foundation of documentary work by providing an alternative option for narrators who may not be comfortable or able to tell their stories to another person in a long-form interview (CN-8). Sharing this view, another collector/narrator with expertise in housing rights filmmaking, organizing, oral history, and archiving said, "*So many people just are scrolling on the Internet... looking for help... This is just going to catch stories and people's experiences in a way that wasn't possible before*" (CN-7). By extending possibilities, the CSA's potential to fill "*gaps*" in community archives by catching otherwise unaccounted for perspectives particularly excited the archivists (CN-3, CN-7, CN-8). With these benefits, collectors perceived the CSA as a promising intervention because "*it's just right there, where people are already communicating*" and "*it just seems way more lively*" than tools without conversation (CN-5). As a lively, flexible offering, another narrator said: "*There's no limit to the amount of people this could reach whereas there would be with a human interviewer... Anyone who wants to would have the opportunity to tell their story at any time that works with their schedule*" (N1). Thus, participants identified opportunities for a CSA to offer storytelling independent of time zone and eliminate the coordination friction, which can make some interested narrators drop off. Collectors mostly saw the CSA as a way to reach more narrators.

In understanding existing storytelling practices and opportunities for a CSA to augment them, we learn that there are certain areas where a CSA may be able to fill in capability gaps related to availability, flexibility, language, and low-resources. However, we also find that there are crucial aspects of collectors' roles: cultivating place-based relations tied to positionality, connecting on human-to-human levels, and sustaining relationships beyond story exchanges. Thus, a CSA may extend reach, but also raise questions around how narrators perceive limitations relative to another person.

5.2 How do Narrators Encounter the Storytelling Process with and without a CSA?

While some narrators expressed preference for a human interviewer, others preferred the CSA relative to a stranger. In general, narrators perceived a CSA as offering therapeutic storytelling experiences in two key ways. The first way was through its capacities to facilitate cathartic conversations with reflective prompts, affirmations, and guided support. The second way was through its non-human substrate that made some narrators feel more at ease in sharing vulnerable stories by alleviating their social anxiety, fear, shame, and costs of time that are tied to storytelling with another person.

5.2.1 Facilitating affirmative and supportive storytelling: prompting, catharsis, and reflection. Narrators broadly experienced storytelling with the CSA as affirmative and supportive. Before introducing the CSA, we briefly explored alternative tools with them. When shown the user-generated content tool, one collector/narrator said "*I'd want to be prompted by questions rather than just recording something on my own*;" then, when shown the CSA, added, "*This is the type of prompting that I would be looking for that wouldn't necessarily have to be a human*" (CN-6). This suggests that natural language may offer benefits unlike tools without conversational interaction. Others also connected with the CSA as it expressed affirmations like "Right on" and "Speak truth to power" as utterances between questions that were intended to resonate with them. Even one narrator who was most critical of the CSA said: "*It's funny, you saw I laughed... It's like a funny cheerleader, but using organizing language... It's cute*" (N2). Another narrator also appreciated how the CSA replied with supportive "*opinions*" (e.g., "That's beautiful") (N5). By the CSA integrating affirmation, humor, and dialect with prompting, participants saw it as presenting benefits that tools without conversational interaction cannot.

For some, the CSA supported cathartic conversations as well. One narrator said: "*The questions it was asking, and the way it was responding overall gave a very clear and positive experience like opportunity to discuss these things... definitely made me just feel heard and more empowered... like my voice was being heard and responded to*" (N1). This sentiment also surfaced with another narrator who viewed the CSA as "*powerful and empowering*" because of the "*autonomy that you feel being the one clicking through and choosing how to engage*" (N4). This ability to drive the story echoed collectors' concerns for voice and agency, while creating space for intimate reflection. This same narrator added:

> *It did feel good to speak out and just to actually verbally express what I just shared... Being able to say it and not feel like I'm talking to myself is helpful... A really big part of the fabric of the way that I navigate things like thinking about housing, housing insecurity, gentrification, all those things, I'm constantly thinking about... It is a huge part of my life to be navigating those... Having another outlet for it other than agonizing over it in my own brain and just making excuses for it... It feels good to be able to have that catharsis* (N4).

In having to continually think about housing precarity, narrators such as this one valued the opportunity to vent that the CSA offers.

Along these lines, consider another participant who seemed to view the CSA as a therapeutic tool to support reflection:

> *In sharing their story I think it's not just about them... If they are having stressful or traumatizing experiences, reflecting on those experiences, I think are important steps to healing... It's almost like they hear themselves... You want them to internalize that and... reflect on that and so that they can feel the sense of injustice... So that*

> *can motivate them into action... The reflective piece [of the CSA] is really great* (CN-5).

Several participants emphasized this importance of listening to one's inner dialogue and taking steps toward healing through reflection. As an example of reflecting on desired change, one narrator shared the following with the CSA:

> *A lot of people, at least in the working class, don't realize how close to being homeless they really are... The most positive thing that I've seen so far is a shift in focus to mutual aid instead of this hustle culture... I want to see people keep that up because I feel like oftentimes when tragedy strikes like George Floyd or the Covid crisis, people rally together, but then as soon as those things fade, they fade...* (N5).

This reflection shows how reciprocity and communal connections can feel ephemeral as they fade away without a sense of collective awareness. The CSA, however, may be able to gather messages to motivate change by facilitating reflection (as prior work on CAs has found in other contexts unrelated to storytelling [58, 60]). In this context of housing stories, participants identified opportunities for a CSA to carve out this digital space for having cathartic conversation, as well as reflecting on experiences via therapeutic storytelling to support healing and build community around story sharing.

5.2.2 Alleviating storytelling burdens of narrators: anxiety, fear, shame, and time expenditure. Given the intimate and sensitive nature of housing stories, some narrators described how the CSA alleviated storytelling burdens of anxiety, fear, shame, and time expenditure. After exploring the CSA, one narrator said, "*I didn't have stage fright from talking to a human*" (N3). This narrator perceived the CSA as non-judgmental, confirming prior work on machine stereotypes [118]. As another participant emphasized, telling a story to another person makes "*some things really sayable and some things really unsayable*" (CN-5). Yet machine stereotypes that some had about the CSA seemed to make them feel more willing, open, and free to tell their stories without having to face another person; this affirms prior work on how a CA can alleviate self-disclosure burdens in general conversation (not storytelling) [92]. Participants viewing the CSA as non-judgmental suggests that it may collect more authentic stories. For instance, one narrator said that he wanted to share his story, but would not necessarily feel comfortable telling it to a stranger in fear of judgment. He explained that a CSA made him feel more comfortable sharing because he has "*enough social anxiety*" that a human interviewer could "*impair*" his experience. He said: "*I would choose a robot over a random human*," explaining:

> *Just signing up to be interviewed by someone that I would feel way less comfortable with... because... humans are going to have their own judgments and thoughts about your experience, regardless of what they're expressing to you and so to have that in the back of my mind, I think would be a bit distracting* (N1).

Echoing this narrator's concern for judgment that may hinder vulnerable storytelling, another narrator described how the CSA seemed to offer greater benefits relative to a human interviewer in how it eliminates unsettling forms of nonverbal communication. For instance, after exploring the CSA, this narrator said "*Not seeing somebody's expressions was really helpful like I was able to just continue on with my story without feeling like I had to tend to the other person's reaction*" (N4). Comparing the CSA to a face-to-face interview with another person, this same narrator added:

> *I'd actually be less able to be super vulnerable if I were speaking to a person face-to-face or over zoom with video just because... I'm sensitive to people's reactions... I'm telling... a very vulnerable story and a very traumatic one... I don't ever want to see pity on somebody's face... Seeing very severe expressions or reactions to what I'm saying might make me less able to share...* (N4).

This narrator felt at greater ease in storytelling and processing emotions of housing hardships without having to face judgmental reactions or facial expressions. Meanwhile, another narrator said "*Sometimes people do just want to leave a story somewhere like get it out in some way... I can think of cases where I might be that person... like I might not have the capacity to speak to a human, but this feels better*" (N2). For narrators who feel too overwhelmed or ashamed to tell vulnerable stories face-to-face with another person, a CSA may offer a less constraining option. Another participant attested to this: "*People can be very ashamed sometimes of the situation that they have gotten themselves in*" (CN-6). Other participants shared similar sentiments related to the role of shame and how a CSA may circumvent it. The CSA seemed to offer a medium for narrators to release storytelling burdens tied to confronting another person.

Along with alleviating storytelling burdens of shame, anxiety, and fear, narrators perceived the CSA as offering benefits of "*total anonymity*" (N1) and relatively greater privacy that was desirable given the risks of landlord retaliation. Participants voiced appreciation for how the CSA facilitated storytelling without requiring them to reveal their identities to even a single person in the process. As one participant explained, "*just being face-to-face with someone makes you a little less anonymous*" (CN-6). One narrator who valued this enhanced anonymity explained fearing retaliation, saying: "*What if [the landlord company] tries to kill me... What if that landlord company has a vendetta against me... It's kind of a far-fetched fear, but why not protect myself? I don't gain anything from not being anonymous*" (N3). Voicing a related concern, another narrator noted that the chatbot format presented even greater anonymity than the voice-assistant: "*Maybe I'm feeling a little hesitant to share my story with this robot... but because it's all text based, I know that I have full control*" (N1). Given this preference, a CSA with flexible formats may help accommodate more hesitant narrators.

Narrators also thought that the CSA could offer an abbreviated version of a long-form interview to decrease the cost of narrators' time expended. As one narrator said "*Efficiency is probably my only preference*" in storytelling because "*I don't have too much time*" (N5). While time-constraints was this narrator's main concern, a collector/narrator also viewed a core benefit of the CSA as "*circumnavigating*" time constraints by taking up less time to both coordinate and participate in relative to face-to-face interviews that tend to be at least an hour (CN-8). Given narrators' ongoing struggles and temporal limitations that can make participating in

long-form storytelling unfeasible, a CSA seemed to offer a promising avenue for broadening narrator participation with a short-form, streamlined, and on-the-spot option.

5.3 How Does a CSA Complicate Story Documentation of Housing Insecurity?

While collectors and narrators expressed hope for a CSA to support them, they also relayed fears and value misalignments tied to drawbacks of artificial intelligence, automation, and digitization. First, participants shared negative associations of the CSA that had to do with their prior experiences of encountering conversational agents and automation. Second, participants unraveled issues of machine bias and limited emotional support capacities amid the intense conversations. Together, these complications suggest that a CSA may fall short in offering what human connections and relations can.

5.3.1 Reflecting negative associations of artificial intelligence and automation. "*Can a robot really replace me as the interviewer?*" exclaimed a collector when first shown the CSA, adding: "*I have a little bit of a knee-jerk anti-automation thing... People are losing their jobs because everything's being automated. But, in this situation, it's like the opposite because there's not enough of us*" (C1). While collectors mostly perceived opportunities for a CSA to extend storytelling practices, negative associations of automation such as fear of replacement rang through.

The CSA also triggered negative associations for some based on their prior experiences and knowledge of conversational systems, as well as the actors involved. While some participants shared positive memories of CA interactions, they commonly described them as "*annoying*." Some even shared experiences of feeling deceived by them: "*I hate when the bot pretends to be a person and you can't really tell... You feel tricked or cheated*" (CN-6). One narrator said that he felt like chatbots "*invaded*" his "*virtual space*" by popping up without his consent (N1). Other participants described chatbots as "*useless*" when pushing unhelpful links (C2), and "*dismissive*" as customer service agents; as one participant said: "*There's plenty of AI bots that are just like 'Cool, well it sounds like your question has been answered. Goodbye' and you're like 'No, connect me to a customer service rep*'" (CN-2). This negative sentiment also extended to dysfunctional voice assistants. Referring to Siri, a collector said, "*My mom has an accent so it never understands her*" (C1). This typifies a broader perception that some participants had of the systems as mere failures to "*make life easier*" as advertised (C1).

In context of housing, some participants further shared negative experiences with automated phone systems of their property managers and landlords. One narrator emphasized how he disliked his landlord's use of automation: "*I'll call my corporate landlord and have to dial a number talking to a robot... and to me it's just annoying... Let me just talk to a person and fix my problem*" (N1). Another participant relayed a similarly negative perception of automation associated with landlords: "*If you're a tenant you're already dealing with so much dehumanization... especially if you're using a big property management company, you're used to all this automated s—*" (CN-2). Consequently, some narrators subjected to dehumanizing and bureaucratic systems void of empathic human connection perceived the CSA negatively.

Since we anticipated some of these negative associations, we prepared two different conversational interface designs to probe. The first set of designs was a standard looking chatbot (on right in Fig. 3). The second set was a voice user interface with a more inventive form to disassociate it from the recognizable form of chatbots that were perceived unfavorably; this alternative aesthetic is depicted in Fig. 2 (and on left in Fig. 3). Narrators preferred this more inventive aesthetic that deviated from the "*customer service*" aesthetic of the more traditional form (N2). Several narrators found the familiar chatbot form off-putting because of its negative associations. As one participant said, "*The customer service format would deter me from sharing vulnerable stuff*" (CN-2). When shown the more inventive design, however, this same participant said "*I like that black background format... It just triggers like a blank space... whereas the AI-robot-chatbot triggers a corporate customer service relationship*" (CN-2). Other narrators also said that the traditional chatbot form looked like a "*cable customer service experience*" (N2), criticizing its "*iMessage aesthetic*" (N1). Narrators described wanting the CSA to "*have its own fonts and color scheme*" to disassociate it from the negative associations (N1).

Given the negative associations with the technology itself, trust was a related concern of narrators. When shown the mockup with the invitation to begin storytelling, one narrator first hesitated: "*Why do you want to know... and what are you going to do with that information? I'm not just going to put it out into the ether*" (N3). Having faced inhabitability, this narrator wanted to use the CSA to report a property management company and "*put them on blast because they were so bad*" (N3). However, this initial distrust of the CSA raised concerns. This skepticism extended to other curious, yet cautious narrators. A recurring theme was that they would only trust the tool insofar as it belonged to a trustworthy organization. Another narrator said: "*I don't want the robot to establish trust with me. I want the people to*" (N1). In affiliating the CSA with the AEMP, distrust subsided for narrators. Nonetheless, the CSA's opaque programmatic nature seemed to prompt suspicion, which calls for transparency around the people behind it to sufficiently build trust.

5.3.2 Advancing potential harms of artificial intelligence, automation, and digitization of stories. For narrators, the CSA seemed to render any potential for harmful biases invisible, raising the possibility of over-sharing information. One narrator expressed this observation simply: "*There's not really bias from a robot*" (N3). Considering the differences between their experience using the CSA prototype and interacting with another person, this narrator felt more at ease storytelling with a CSA. One expert oral historian narrator reflected on this differentiation: "*A risk of this technology actually is that people would expose themselves too much and feel like 'Well it's just in my phone—I'm just talking to a robot' and then feel uncomfortable with what they shared*" (CN-5). To mitigate risks of oversharing, this participant suggested that the design allow for revising sharing preferences after storytelling. Furthermore, she cautioned against the limited emotional support, suggesting that a CSA alert narrators ahead of the interview with a notification that is along the lines of: "'*Just a heads up telling your story might be painful. We're not going to be able to provide any support to you because there's nobody here. If you want a more supportive experience, maybe schedule an interview*'" (CN-6). While design interventions

such as these can protect narrators, concealed biases may inflict harm in other ways.

In its material substrate, collectors noted that a CSA brings biases in terms of who it selectively engages. For instance, this intervention may preclude people who do not feel comfortable engaging with a robot. As an older participant said: "*I don't want to talk to a robot... Why would I? That's so odd... I wonder... if this is generational*" (C1). In considering their own discomfort "*generational*," some collectors observed that a CSA may preclude people who do not feel comfortable engaging with a robot. Cautioning against who a CSA "*invites*" to tell their stories, one participant said, "*I would say that my main concern would be that this platform would be more self-selective for the types of users who would actually participate and use it*" (CN-2). Similarly, another participant emphasized how the "*socio-economic divide*" and "*digital divide*" further complicate the intervention. This participant said: "*I've organized in Cincinnati, Baltimore, DC, New Orleans and in the Bay area, so for me, even in places like Cincinnati, I could see this being useful... but in the case of New Orleans due to digital divide and... literacy rates, people's ability to navigate technology is pretty severe*" (CN-4). In terms of who it supports, collectors observed that a CSA may collect a biased set of stories while failing to elevate key voices.

Along with observing potential harms of concealed biases, participants noted that an amorphous CSA may cause harm in its non-human limitations void of physical embodiment. Lacking the physical presence and dexterity of a person, automation presents equity implications related to ableism, ageism, socio-economic status, media literacy, and emotional fortitude. For instance, one narrator enjoyed interacting with the CSA, but still preferred a human interviewer: "*I'm autistic so sometimes I don't get things that are asked if they're not asked a specific way... It would be easier with a human because a human would say 'No, this is what I meant by that question*'" (N5). While pointing out how the CSA exhibits bias toward able-bodied narrators, participants noted that a CSA cannot offer physical emotional support either. As one participant said: "*It's never going to give you a hug*" (CN-5), which affirms prior work on limitations of chatbots in providing mental well-being support [97]. Moreover, oral historians emphasized the import of having a physical witness, attesting to narrators' experiences and making them feel heard on a human-to-human level. One narrator who was most skeptical of the CSA made potential harms of automating human connection and empathy especially clear:

> *If you're somebody who's been in the system who doesn't have a lot of options, it feels kind of like your AI can tell what I'm saying, but is it really helpful?... People who are engaged in systems that continue to oppress them are very adverse… to forms of technology that feel like they're gathering information without a human touch... It's insensitive in that way...* (N2).

Although this narrator wanted a conversational interaction to guide storytelling, they seemed to find an automated system as a negative reflection of a housing system void of human empathy. Observations like these—recognizing potential harms of eliminating the "*human touch*"—reveal what is at stake in a CSA digitizing and automating documentation.

Related to these forms of automation, narrators observed that a CSA may elicit emotions that it is not as equipped as a person to handle. For example, after storytelling with the CSA, one narrator said: "*I haven't shared that story to that extent in a while and it's bringing up a lot for me... I just wonder what that would be like for somebody... having all of these scary intense emotions coming up and then not having an outlet for it afterwards or not having the support around afterwards*" (N4). Such moments raised complications around how a CSA may inflict harm by initiating conversations that it cannot sustain beyond the exchange. This same narrator described the pitfall as "*limited capacity for actual nurturing or care work within this frame*" (N4) of digitization and automation. With these reflections, narrators emphasized the importance of attending to the emotions that a CSA may elicit—potentially cautioning narrators prior to engagement.

6 DISCUSSION

Through a CSA design for documenting housing stories, we heard participants voice a range of values, hopes, and fears around the role that artificial intelligence might play, from concerns around its controversial material to opportunities for expanding means of storytelling. These conversions left us with the impression that many participants felt ambivalence between these two impulses—recognizing real and significant potential benefit to their practices, while remaining skeptical and cautious. Many participants had negative associations, pointing to concerns around the advancement of biases, as well as the lack of accountability, emotional fortitude, and relationship-building capacities. But we also found opportunities for CSAs to expand organizational means of storytelling, increase narrator access, and demonstrate more sophisticated support than tools that do not offer conversation or that "mismatch" [121] existing practices [5]. To follow, we discuss this tension toward the CSA because it persisted across participants and provides valuable insight on design in the context of housing insecurity. We also look to elevate these under-recognized perspectives within the HCI and CSA design space, where optimisms, technical functionalities, and large-scales are often assumed to be laudable.

Beyond the immediate benefits and concerns raised by participants, we observed that the stories narrators told and the reflections that the collectors shared begin to trouble the role and character of documentary methods within HCI contexts—revealing questions of responsibility and care around story documentation, curation, and ethics of expansion as organizations grapple with questions of scale. Below we reflect on these circumstances, focusing first on the shifting situation of documentary methods and then turning to problems of scalability and the potential for adjacent mediation.

6.1 The Shifting Role and Character of Documentary Methods for HCI

Across interviews, collectors emphasized that a CSA cannot (and should not) replace an oral historian or media-maker. By replacement we refer to a sense of equivalence that participants were reluctant to draw between machine-collection and people collecting. A CSA may inadvertently—and harmfully—undermine actions of oral historians. Participants shared perceived differences in engagement with a CSA, noting the importance of long-term, effortful

listening, and relationship-building. Where an oral history interviewer may put in extensive planning and investment (e.g., coming back to narrators several times and building stories from sustained communications across multiple sessions), a CSA suggested one-off and comparatively flexible encounters (e.g., light-weight and spontaneous interactions, even on-the-go). Similarly, whereas an oral history interviewer may bring sensitivity to narrative complexity (e.g., steering stories as they go off-course), a CSA may document a wider range of stories, some veering away from a life history focus.

The CSA notably contrasts with existing documentary methods of the AEMP. One quality that makes an oral history unique is the slow pace that intimate or difficult storytelling entails. As the AEMP writes in their "Field Guide to Oral History Interviewing," facilitating extended moments of silence are "important opportunities for the interviewee to think during the interview, to engage in the process of active meaning-making that we value in an oral history interview" [99, p.302]. An appreciation for pause and silence runs throughout the AEMP process. Pause in conversation can not only make space for reflection, but also set the tone and context for respectful dialogue—allowing conversation to develop at a leisurely pace while putting narrators at ease. Thus, the CSA and oral history activities may serve distinct but complementary needs. Where a CSA might help narrators with limited free time fit storytelling into busy schedules, it may struggle to support reflective interludes that an oral history interview's pacing is designed to support.

For the AEMP, concern for reflection and connection is not limited to the temporal but extends to the interpersonal—how people form mutual empathy and connection. Generative story collection is contingent on comprehending, feeling concern for, and relating to feelings of another person; "shifting to the collective" for narrators to recognize that their experience is not limited to "just them" but extends to others [28]. In the AEMP, story documentation relies on the ability for the interviewer to also share their own stories, positionality, and life-situations. The AEMP's handbook makes this explicit. Under a subsection called "Emotions, Talking About Loss, Being 'With' Your Narrator," they write: "To interview them about these experiences you must be with them in the interview. That is, being able to take their emotions and your emotions seriously... As we try to counter the erasure that happens during evictions and displacements with people's stories, we are also re-inscribing emotions into the process..." [99, p.303]. The AEMP guidelines encourage collectors to also express their own emotions in facilitation, whether as condolences or by sharing their own stories and experiences. Replacing any existing oral history documentation with a CSA could never work or even begin to provide the benefits that an oral historian could to narrators who would prefer to have that human-human interaction. A substitution would undermine tremendous efforts of so many AEMP collective members over time and the organization's values overall.

Looking to other grassroots activities, a CSA risks foreclosing connections and relationships on which community is built. Reflecting on the storytelling sessions with the CSA, narrators eagerly moved beyond life events to share general viewpoints and beliefs. As HCI scholars like Michie [80], Voida, and their colleagues recognize in other contexts, this "bridge-building" work cannot be easily supported by social software [121]. While professionally trained oral historians support grassroots story collection, so do volunteer coordinators who fill the roles of oral historians in organizations (here, in the context of AEMP) without formal training. From this perspective, the relationship between a collector and narrator ("interviewees [becoming] interviewers and vice versa" [72]) works as mutual aid [115]—a form of voluntary reciprocal exchange of resources and services for collective benefit. In potentially displacing collectors, however, our study complicates what it means for an algorithm to eliminate or undermine exchanges of mutual aid. Foreclosing vital forms of relationship-building may not only diverge from an organization's existing methods, but also its core values.

But if a CSA could and should never replace an oral historian, its potential role in a wider ecology of documentary work and oral history requires further consideration. As noted earlier, HCI literatures have engaged oral history traditions in a range of forms. From exploring questions of erasure [107] to the role of digital augmentation [54], they point to potential for expanding whose work counts as a valuable contribution in technology development contexts and rework the kinds of stories the field tells about itself. Our study extends this work by exploring how conversational systems exhibit potential to not only support storytelling with concern for social needs [59] and at-home safety [92], but also accommodate multiple formats and increased access for narrators who may not otherwise feel comfortable or have linguistic access. With precautions, a CSA may extend whose stories are told as a storytelling channel that opens a new pathway. As Murray writes, "We need the process of continuously expanding our means of storytelling, because it allows us to expand our ability to know who we are and to collectively reimagine who we might become" [87, p.284].

6.2 Tensions in Storytelling at Greater Scales

The topic of scale—and its corollary scalability—has long pervaded HCI literature on storytelling. What it means for a CSA to be scalable is tied up in questions of uncertainty and multiplicity—what some call "proliferation" [66, 69]. Rather than reinforce a linear, progress-driven understanding of scale (a contemporary project that serves capitalism), we join recent critiques [56, 66, 69, 120] to emphasize alternative forms of engagement. This emphasis builds on the work of Light and Miskelly [69], and Lampinen and colleagues [66], to cultivate varied alternatives to scaling that consider the forms of committed reciprocity and local engagement for developing "collective agency" [69, p.613] and "shifting to the collective" as Dimond et al. describe [28]. Just as unthinking scalability can overlook unexpected changes and diversity, alternatives to scaling are hard to come by [66]. Under a rubric of scale, expansion of documentary work, whether digital or otherwise, implies seamless growth, without room for adjustment or change. "Progress itself has often been defined by its ability to make projects expand without changing their framing assumptions," anthropologist Anna Tsing reminds [120, p.38]: "scalability banishes meaningful diversity, that is, diversity that might change things."

In our CSA study, participants' reflections outlined tensions and contradictions connected to scale. Both narrators and collectors hoped to expand their capacities for story documentation, sometimes alluding to the possibility of scaling up. But they also expressed concerns for shifting expectations and accommodations around expansion. This concern echoes AEMP conversations, where

organizers are wary of focusing on growth and the quantity of stories at the expense of local relationships and practices. This unease grows in part from related projects like Princeton University's Eviction Lab, where emphasis on speed and comprehensiveness, in the words of D'Ignazio and Klein, [27, p.135] "can't help but... effectively downplay... the work of coalitions, communities, and movements that are—not coincidentally—often led primarily by women and people of color." By undercutting grassroots work, a focus on scaling can perpetuate systemic harms it aims to address. As scholars note [27, 28, 78], many organizations do not want to scale and look skeptically on claims that scaling automatically equals improvement. At an enlarged scale, the CSA's potential to delocalize story collection raises questions for future work around implications of extending digital organizing beyond the bounds of where physical organizing happens on the ground amid local policies. Additionally, organizational capacity to not only handle and process, but also strategically disseminate and attentively listen to a potential influx of stories is an area for future work needed to assess the net efficacy of it existing in this ecosystem. Across work of expansion, including alternative accounts like proliferation, our work offers a concrete example of tensions around the need for caution and exposure. We urge the HCI community to consider what gets lost in CSA reliance and the temptation to scale practices.

6.3 Adjacent Mediation and Responsibility with AI-Supported Story Documentation

Participants further observed challenges of responsibility: tradeoffs between relying on a biased system versus a biased interviewer, navigating safe and secure story sharing, and expanding documentation without human oversight. A CSA asking questions according to an algorithm trained on an incomplete or biased data set might trigger narrators, prove unsupportive, or, worse, reinforce harmful stereotypes that perpetuate existing inequities. The algorithmic form, digital material, and nascency could also deepen systemic differences in access. For example, one participant cautioned against how a CSA may only benefit urban residents with high rates of media literacy and ability to use emerging technologies. Not only may this over-determine the kinds of stories the CSA collects, but it could also shape whose voices get heard.

If generative story collection involves sophisticated understanding lacking in a CSA, working with it must involve grappling with that gap. Just because a CSA offers narrators access in more languages, for example, does not mean the narrative tool would come without translation overhead and bias, perpetuating harmful gender misrepresentations [47] or xenophobic miscommunications [11]. Conversational agents can advance ableism, colonialism, sexism [67], racism, antisemitism, sexism [114], and more in a "new guise" of digitization [94]. Notably, one narrator who identified as autistic expressed concerned about not understanding a CSA without having another person there to clarify questions (N5). Returning to the words of another participant, telling a story to another person makes "*some things really sayable and some things really unsayable*" (CN-5). Meanwhile, machine heuristics [118] can render the systemic harms and biases invisible [18].

Although perhaps replete with the bias of limited experience and positioning, collectors noted that their approach to interviewing involved recognizing and reckoning with embedded power dynamics between themselves and narrators. Their use of the term "*narrator*" (instead of "interviewee"), for example, spoke to a concern for positionality and control, acknowledging that the person telling their story is the driver of their narrative path (a notion captured by one collector's use of the phrase: "*This is your story*" (CN-8). Likewise, with a human interviewer who has developed rapport, a narrator may retract a statement by letting that person know too much information was shared. Storytelling when another person is not there to listen means that the coordination of adjacent in-person or other person-to-person activities (e.g., hosting listening parties) is that much more important to attentively hear what the narrators say in order to do the stories justice [94]. In the words of one participant: "*Just listen to the people*" because "*they will tell you exactly what they need*" (CN-2). Thus, expanding storytelling calls for fostering alternative forms of contact and connection.

In closing, we see opportunity for the HCI community to articulate and enact alternative relationships to existing organizational storytelling and documentary methods: frameworks that clarify the evolving connection between (often stressed) ongoing operations and CSAs (or other algorithmic systems). Rather than offering solutions, or specifying problems for technology to solve, our study emphasizes the multiple complementary needs and historical contingencies embedded in existing documentary work. Attending to these needs involves looking beyond metaphors of amplification, augmentation, or human-in-the-loop automation (concepts that imply intervention and reify the raciality of automation [7]) to place-based relationships of contact and care that require constant reworking and cultivation at local levels. Exploring this role as one of adjacent mediation—inspired by Tina Campt [19] and Tania Pérez Bustos [96], who have each explored relationships of viewing in arts as forms of adjacency—we emphasize that concern for effortful connection, a separate but interrelated support for organizational activities that hinge upon human interaction and engagement.

7 CONCLUSION

In this community-based design study, we explored values, hopes, and fears around engaging a CSA to support housing justice organizations in documenting digital stories of housing insecurity. We interviewed 17 people with highly varied experiences of housing insecurity and roles as narrators, collectors, or collectors/narrators. Our findings suggest community-based CSA design challenges associated with machine biases of artificial intelligence and potential harms of automating and digitizing story collection, including loss of real and meaningful human connection and relationship building. Yet, at the same time, our findings suggest that a CSA presents opportunities to expand the documentary work of social movement organizations by increasing access to storytelling and offering an adjacent experience that can help alleviate storytelling burdens. Although a CSA may enable more narrators to participate in telling otherwise untold stories, building movements and solidarity by way of finding strength in one another, it is also important to not ever abandon "old school" oral history and storytelling practices, which, at the end of the day, cannot be reduced to digital mediation.

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