Hopeful Failure: How Collaborative Design Fiction Reimagines AI

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ABSTRACT

While the number of people using AI is growing, the number of people making core AI decisions remains limited. Advocates call for opening up the development of algorithmic systems to a wider range of perspectives, interests, and methods, with particular attention to racial exclusions and harms. This paper responds to this suggestion with two design fiction workshops where 10 Black American participants imagine futures with and against AI. We introduce Exquisite Tellings, selectively reading in-progress stories while co-developing design fiction plots. Across both workshops, participants repeatedly imagined moments of technological failure, including algorithmic breakdowns and mechanical malfunctions. Rather than signaling collapse, these failures surfaced forms of resourcefulness, enabling characters to reconnect with personal and collective capacities obscured by automation. We argue that analyzing specific instances of 'hopeful failure'—where challenges in AI development reveal broader social possibilities—can help scholars and critics better understand the emerging effects of AI on society.

CCS CONCEPTS

• **Human-centered computing** → **Collaborative content creation**; *HCI theory, concepts and models*; *Empirical studies in interaction design*; • **Social and professional topics** → Computing / technology policy.

KEYWORDS

collaborative design fiction, speculative futures, speculative design

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1 INTRODUCTION

The increasing ubiquity of artificial intelligence (AI) across various domains (e.g., workplaces [70], healthcare [62], education [42], personal communication [5], and social engagement [47]) raises urgent questions about who shapes these systems and whose lives they are designed to serve. A significant contributing factor to this problem is the exclusion of marginalized communities from the AI development process [3] — exclusion that has been documented in hiring practices [104], surveillance [19], commercial automated speech recognition systems [58], and healthcare [105]. When the range of perspectives informing AI design is limited, the resulting systems tend to reproduce and amplify existing societal stereotypes [13, 40], and marginalized communities bear a disproportionate share of the consequences [7, 92]. As AI technologies continue to evolve and reshape everyday life, it is imperative for designers and developers to remain mindful of the diversity of lives these advancements are intended to improve, a promise that has often fallen short [100, 106].

To address harms perpetuated by the development of technology, scholars have leveraged diverse methodologies that probe future trajectories of computational invention. These approaches include speculative storytelling [36], an approach to using fiction writing to envision alternative possibilities; exquisite corpse design [32, 44], a technique that uses iterative, selectively-visible design activities to create unexpected combinations and outcomes; and afrofuturist design [17, 33], which crafts future products and scenarios that disrupt colonial narratives and center Black experiences. Each method provides unique insights, helping to shape a comprehensive understanding of where technology might lead.

However, the concept of "futuring"—the practice of envisioning and designing future scenarios—often misses the mark when it comes to including the voices of communities most likely to be affected by these innovations. This exclusion can lead to a future where the benefits of technology are not equitably distributed. Scholars like Harrington [51, 52], Erete [39], Dillahunt [33] and many more [1, 24, 72] are leading initiatives to integrate marginalized communities, specifically Black communities, into the technological design process. As for our work, Blackness works not as an essentialized characteristic or state but as an analytic for understanding the experiences and conditions of possibility around bodies marked (socially, politically and otherwise) as "other" through the framework of race. This analytic operates alongside additional dimensions of difference (disability, gender, and so on) to inform the co-creation and development of technological formations tailored

to the specific needs and challenges of particular groups. By actively grounding design decisions in community needs, these researchers are not only advocating for more equitable and inclusive innovation but also seeking to ensure that technological advancements benefit a wider spectrum of society.

Building upon this foundational work, our study focuses on the compounding effects of minoritization and technological exclusion experienced by Black Americans[13, 73]. In particular, our study seeks to examine the significant ethical and practical challenges that arise in contexts of machine learning model use. Traditional design approaches can be inaccessible or alienating, making it difficult to foreground a group's unique insights and sometimes exacerbating differential experiences and outcomes [13, 24, 28]. Recognizing these challenges, we facilitated two design fiction workshops with 10 Black American participants recruited through an ongoing participatory research engagement [10] and each based in the United States (U.S.) and attending one workshop. All participants had prior experience with various AI tools. By inviting them to envision futures where they are central to technological discussions, we sought to illuminate the desires, fears, and perspectives of communities that have historically been overlooked in the development of AI technologies. To this end, we pose the following research question: *What kind of stories emerge about technology when inviting this group of Black Americans to incorporate or think through a hopeful stance on AI?*

To answer this question, and in response to calls for more inclusive research methods [41, 50], we developed a methodological approach called *Exquisite Tellings*, a technique for selectively reading in-progress stories while co-developing design fiction plots. Inspired by multiple design research efforts that have been informed by the Surrealist art game Exquisite Corpse [32, 44, 65], this collaborative approach invites participants to sequentially contribute to a shared narrative, with each contribution partially concealed from others [18, 94]. This method draws on the principles of Exquisite Fabrication [44] and video sketching [32] to foster creativity and unpredictability in the envisioning process. By blending collaborative storytelling with speculative design, Exquisite Tellings enables participants to imagine AI "otherwise and elsewhere," creating diverse, co-authored narratives that challenge assumptions and inspire alternative technological futures. Drawing from recent HCI analysis [55, 78], our approach frames hope as a means to engage deeply with the complexities of the world and envision meaningful possibilities grounded in lived experiences. By situating participants in a framework of hope, we empower them to imagine desirable futures that emerge authentically from their realities, enabling them to articulate necessary changes and express innovations for their communities. We designed this approach to help people to contribute their visions for the future of technology both individually and in connection with others. By analyzing the workshops and resulting stories, we uncover emerging themes that can reflect both the apprehensions and celebrations within Black American communities regarding the expanding landscape of AI.

Overall, our study uncovers a critical tension between reliance on AI and the desire for personal autonomy. Through speculative design fiction, participants frequently depicted AI as a powerful tool that, when it fails, compels protagonists to confront their dependence on technology and seek alternative, non-technological solutions. Algorithmic and technological malfunction offered glimpses into feelings of resourcefulness within the stories, enabling the characters to reconnect with inner strengths they might have otherwise overlooked. These creative accounts reveal a cautious optimism around AI, framing algorithmic tools as beneficial but fallible, necessitating careful consideration of its role in society. They also expose concerns about the transparency and psychic impacts of AI, particularly regarding its potential to disrupt self-determination and the importance of maintaining agency with and through AI systems.

Taken together, our analysis makes two main contributions to HCI literature. For conversations on AI and equity, we reveal the importance of hopeful failure—where challenges in AI development shed light on broader social possibilities—as a site for foregrounding the inner strengths and resourcefulness of implicated individuals and groups. We found that hope operates as a powerful catalyst for story generation, enabling participants to move beyond rehearsing overly optimistic visions of omnipotence or pessimistic narratives of automated harms. This insight underscores the potential for hopeful failure to serve as a site for exploring the nuanced relationships between humans and technology, offering pathways for more inclusive and thoughtful AI development.

For scholarship on speculative methods, our contribution expands techniques of inclusive inquiry by offering a broadened set of participatory conditions for engagement. This approach includes the capacity to extend who and how many people take part in an envisioning process, reworking design fiction as a form of communal speculation. Building on prior design research experiments, we trace how a process of turn-based storytelling with partial visibility, what we term *Exquisite Tellings*, opens opportunities for connection among participants. We trace how this approach offers a means of navigating the relationship between individual and collective imagination, complementing existing forms of futuring focused on atomized speculation. Toward envisioning alternative computational worlds, it gives participants some degree of personal agency while introducing opportunities for connected and serendipitous speculation.

1.1 Author Reflexivity

We would like to acknowledge our positionality as authors and reflect on how our backgrounds influenced our interactions with participants and shaped the interpretation of our data. The lead author is a Black American scholar, born in the U.S. to immigrant parents from Ghana. Collectively, the authors represent diverse cultural backgrounds spanning the U.S. and Europe, with two identifying as people of color. Importantly, the lead author was the only member of the research team to have direct interactions with participants—a deliberate decision grounded in the goals and values of this study. The lead author's identity as a Black American scholar significantly influenced the methodology and motivation of this work. This identity informed the creation of a participatory medium for imagining futures that felt personally meaningful and relevant to participants. Recognizing the value of collaborative future-making with peers from similar cultural backgrounds, the

lead author designed the activity to foster both vulnerability and affirmation. The aim of this approach was to empower participants to share their aspirations for the future while inspiring one another to expand the possibilities of what could be imagined. Beyond fostering hopeful futures grounded in participants' realities, the space was also envisioned as a potential avenue for healing—offering a therapeutic and affirming environment akin to the outcomes often associated with healing circles or therapeutic groups. The curated space allowed cultural references and nuances to be readily understood, enabling the lead author to engage in meaningful dialogue, ask clarifying questions, and deeply explore participants' stories without the need for explanations typically often required in cross-cultural interactions. By fostering this rapport, the lead author aimed to replace the formal research environment with an informal, conversational atmosphere—more akin to a "campfire" gathering than a "laboratory" setting. This intentional design was aimed to encourage participants to share freely and vulnerably but also aimed to help mitigate the racialized power dynamics that often arise in academic research contexts. The lead author's background served as a key motivator for creating this opportunity, not only to amplify the voices, hopes, and expectations of Black American participants but also to ensure that their perspectives and desires were meaningfully represented in the conversation about emerging technologies. This positionality shaped the workshop's emphasis on collective storytelling and shared agency, encouraging authentic contributions that reflect the values of equity and engagement informed by prior work in participatory AI [33].

The lead author's shared background with participants influenced the analysis in a few important ways. While not a direct participant in the workshop, the lead author felt deeply connected to the storytelling, experiencing a sense of co-creation during the generation of narratives. During the analysis, revisiting the stories in their entirety brought moments of personal reflection, as there were aspects of the imagined futures that resonated with the author's own hopes and aspirations. This interpretivist approach—taking seriously our standpoints as analysts [23, 49]—fostered a richer, more nuanced exploration of the data, as these points of divergence became the foundation for deeper discussions among the research team.

2 BACKGROUND

2.1 Design Fiction

Design fiction is a speculative design method which is used as a means of bringing new and expansive readings to technological encounters [12]. Originally coined by Bruce Sterling in his 2005 book *Shaping Things*, design fiction refers to "the deliberate use of diegetic prototypes to suspend disbelief about change" [93]. This creative approach leverages narratives to project possible futures, stimulating critical thinking and discussions around the potential trajectories and consequences of technology. By crafting hypothetical scenarios, design fiction challenges existing perceptions and inspire innovative thinking among designers, researchers, developers, and the public. These narratives serve as a powerful tool for exploring hypothetical scenarios, emphasizing the ethical, social, and cultural dimensions of future technologies. To expand this approach, we incorporate the "Exquisite Corpse" method, a technique originally developed as a collaborative Surrealist art game [18, 94]. This method, adapted in HCI [32, 65], fosters creativity through participatory design by having multiple participants contribute to a design sequentially without seeing the entirety of the work. Often drawn on a spare paper or napkin, the exquisite corpse sketch can feature a creature of multiple parts. The head, body, and legs, typically drawn by a different hand, might have little to do with another visually or conceptually, or they might seamlessly connect. The game allows people to collaboratively build a figure from multiple imaginings, each person responsible for one portion of the whole. Many authors and artists have extended this format for expansive book projects and adjacent imaginings (e.g., [81]). More recently, HCI scholars have used the format to elevate brainstorming exercises and generate design ideas [44, 77].

The Exquisite Corpse method is particularly valuable for encouraging unexpected and innovative outcomes. By combining design fiction with the collaborative spirit of Exquisite Corpse, our approach deepens the exploration of speculative futures, allowing for diverse, co-created narratives that challenge conventional thinking and inspire new technological possibilities.

Across HCI, design fiction has played an instrumental role in envisioning and critiquing future technologies and their societal impacts, spanning sectors such as healthcare [29, 38], AI designed for BIPOC youth education [57], civic enforcement [25], and even the acceptability and adoption challenges of future technologies [26]. We extend this approach by developing a design fiction method called *Exquisite Tellings* that we use to elicit stories about the future in a collaborative manner. Like the Exquisite Corpse game that relies on repeated invisibilities [77], and informed by traditions of Exquisite Fabrication [44], *Exquisite Tellings* involves a collection of three-part stories, with each section authored by one person and selectively available to the story's co-authors. In this study, we partner with individuals from communities who have been historically excluded from design practices to understand and ideate about expansive AI futures. Drawing from the workshops, we examine the ideation of alternative futures—particularly hopeful visions for how algorithmic activity might be otherwise. We focus on how these imagined narratives influence perceptions of the ethics and aesthetics of AI.

With this focus, we situate our work within a broader tradition of Black thought on AI, drawing inspiration from Afrofuturist classics like Samuel R. Delany's *Stars in My Pocket Like Grains of Sand*, Octavia Butler's *Parable of the Sower*, and the evocative storytelling in *Splendor & Misery* by clipping. These works have critically examined themes of AI/technology, control, resistance, and cultural identity, offering rich and nuanced perspectives. We seek to celebrate and expand this rich tradition of Black thought on AI within and outside academia by incorporating the perspectives of community members who may not feel equipped to creatively express their futures through traditional artistic or narrative mediums. Design fiction, specifically our *Exquisite Tellings* approach, provides a means to empower individuals who have valuable insights but lack the tools or confidence to articulate them in creative formats. It offers a participatory framework that demystifies the creative process [15], allowing non-artists and individuals who may not identify as "creatives" to engage meaningfully in storytelling. Our *Exquisite Tellings* variation pairs participants with peers to

collaboratively build narratives, enabling a shared creativity that is rooted in community and cultural resonance. This process allows participants to contribute artifacts—stories, ideas, and visions—that enrich the broader conversation about Black thought on AI. In doing so, we aim to complement the works of established Black artists and thinkers by incorporating perspectives from those who might otherwise remain unheard or under-recognized.

2.2 HCI & Hope

A variety of HCI literature has examined the nature and range of hope within technology developments. One strand of this work has sought to counter a narrow concern for articulating needs or shortcomings with a consideration of yearning [78], aspiration [60, 97], and flourishing [95]. Alexandra To and colleagues [95], for example, propose a six-part framework for flourishing design that highlights collaboration and rejects a damage-centered gaze. By examining what people expect and even long for in the lives they build and imagine ahead of them, they seek to recenter joy and identify important under-examined opportunities for self-determination and collective growth.

A related strand of HCI work has sought to reorient design methods toward forms of critical hope that make space for generative breakdown and critique. This work spans the experimentation with the cultivation of a critical consciousness [34, 68] to the engagement of absented stories in computing fields [80, 85]. Combining speculative design proposals with critical engagements, this scholarship tends to use the development of artifacts and systems that use encounters to complicate and reimagine rather than resolve longstanding tensions.

Adding theoretical precision to this stance, Matt Ratto and Steve Jackson have recently introduced hope as an HCI method of interventionist design and analysis, one built on Science and Technology Studies (STS) critiques of neatened technology-bound solutions, and one cultivated to recover the tenants of agency and open-endedness built into all technological formations. For them, hope operates as "the ordinary, mundane, everyday collective practices by and through which the future comes to be" [78]. This work broadly troubles the seemingly dialectic response to computing analysis that offers either highly positive (promotive) or negative (resistive) accounts, seeking an alternative process and approach built on a capacity for change.

Our approach uses hope not as a way to escape or ignore the realities of injustice and hardship, but as a framework to work within and imagine from the complexities of the world we live in. By situating participants in a framework of hope, we invite them to imagine futures that they find desirable and that emerge from their experiences. Unlike forced optimism, which can silence critique, hope allows participants to engage deeply with their realities and creatively imagine alternatives. Through this lens, they can address the fractures and contradictions that need repair, without the limitations of idealism that overlook or erase difference. Hope, then, is a reckoning with reality that still makes room for transformation—a pathway toward envisioning futures that, while rooted in lived experiences, are open to new possibilities and collective healing. By framing our design workshops with Black Americans around hope, we aim to create a space where they can fully engage with their reality, not by escaping or denying it, but by reimagining it in ways that feel authentic and empowering. This focus on hope as a foundation for design allows participants to articulate their own visions for change, rooted in their communities, and to imagine futures that are as complex and layered as the world they inhabit.

2.3 Community Engagement and Marginalized Groups

To ensure that research outcomes and design efforts are not only meaningful but also equitable for those they intend to serve, HCI scholars have urged active engagement with marginalized communities and with people who are not as commonly studied as American undergraduates who often represent a population that is Western, Educated, Industrialized, Rich, and Democratic, commonly referred to as WEIRD [13, 50, 66]. Proper engagement requires cultivating reciprocal respect and support [14], evoking ideas with and through ongoing engagement, which presents several challenges. Conducting research with marginalized groups requires a consideration of power dynamics, representation, and access [28, 84].

2.3.1 Distrust and Designing Futures. Recent HCI scholarship has examined the common power imbalance between researchers and participants from marginalized communities [28, 84]. This imbalance can hinder open communication, as participants may feel pressured to conform to what they believe researchers want to hear, rather than sharing their true perspectives [61]. This issue is particularly pronounced in communities with a historical mistrust of researchers due to past exploitative practices [28, 61, 84]. A common issue in research with marginalized groups is the overshadowing of their voices by researchers. This often occurs when researchers, either unintentionally or intentionally, misinterpret narratives and present them from their own perspectives rather than those of the communities they are engaging with [4]. Scholars call for making efforts to ensure that marginalized groups can express their lived experiences and ideas in their own words and through firsthand accounts [14]. Even when addressing these issues, logistical barriers to participation, such as lack of access to technology, language barriers, and time constraints due to economic pressures, persist [30, 75, 84]. Our study provides a step in addressing these challenges by using *Exquisite Telling* as a community-centered approach that allows participants—especially marginalized participants—to co-collaborate in the creation of design fiction stories.

Alongside calls for reciprocity, a growing number of HCI scholars have acknowledged that traditional methods have not effectively engaged with the Black community [13, 50, 98]. Harrington et al. [50] critique traditional participatory design approaches as bringing privileged and exclusionary tactics, often using materials such as craft supplies that misalign with the lived experiences of the groups they engage, particularly members of Black communities. By presenting infantilizing ideas and unfamiliar jargon, these methods can exacerbate existing inequities and overlook the unique cultural and historical contexts of these communities. Consequently, Harrington et al. call for more culturally sensitive and contextually appropriate methods better suited to engaging marginalized communities. Similarly, Erete et al. [39] argue that many traditional HCI approaches fail to address the specific needs, contexts, and lived experiences

of Black communities. They emphasize the importance of directly involving these communities in the design process and advocate for an HCI practice that moves beyond one-size-fits-all approaches. They call for strategies that are responsive to the diverse realities of Black communities, ensuring that the design process is inclusive and equitable.

Our work addresses the need for culturally sensitive, inclusive design by combining elements of design fiction and collaborative storytelling in an approach we call *Exquisite Tellings*. This method was specifically crafted through a lens of hope, envisioning futures that empower minoritarian communities—particularly Black Americans—by centering their voices and perspectives. Rather than imposing narratives, *Exquisite Tellings* places creative control directly in the hands of participants, encouraging them to imagine futures that resonate with their lived experiences and cultural contexts. The motivation for *Exquisite Tellings* arose from a recognition that traditional research methods often overshadow the voices of marginalized groups, leading to a disconnect between participants' realities and the futures envisioned on their behalf. By contrast, we examine how explicitly orienting creative storytelling toward co-authored hopeful speculation might help people reclaim narrative agency, allowing them to collaboratively construct shared futures. Drawing on design fiction, this method uses a collaborative storytelling structure to go beyond individual experiences and explore what a collective future might look like. This connective approach not only fosters cooperative thinking but also offers opportunities for shared healing, as participants reimagine possibilities alongside peers with shared backgrounds. We further examine how *Exquisite Tellings* invites participants to incorporate their unique histories, values, and aspirations without undue constraints on content. We consider how this flexibility allows Black American participants to engage in storytelling that reflects their own perspectives, in contrast to traditional design tools that often impose assumptions or use materials that feel foreign or infantilizing. Additionally, we observed that the collaborative nature of *Exquisite Tellings* provided opportunities for those who may not typically consider themselves creative to participate meaningfully, supported by their peers in a shared narrative journey (a process that we elaborate on below).

2.4 Ethical Implications of AI

A critical conversation gaining traction within the HCI community concerns the rigorous assessment of not only technological capacities but also their potential impacts on society, governance, and individual rights [46]. With this assessment, scholars seek to guide more responsible innovation, with the goal of ensuring that the deployment of new technologies is accompanied by a thorough evaluation of their broader societal implications—not just their technical capabilities. A growing body of related work delves into the technical challenges and ethical considerations of integrating AI in particular into everyday practices [9, 74, 103]. These works explore the complexities involved, particularly focusing on unforeseen consequences and ethical dilemmas that can arise. Design fiction has become a valuable tool in this context, enabling researchers to simulate and scrutinize the potential futures shaped by these technologies. Coupled with HCI's longstanding focus on user values [63], these efforts aim not only to extend the capabilities of technologies to meet user needs but also to develop methods for appropriately exploring these ethical and societal dimensions. This dual focus on technological potential and ethical responsibility is essential for guiding the development of technologies that are both innovative and socially responsible. Our work contributes to conversation as we actively engage participants in meaningful discussions, using our design methods to explore not only what they hope to see in future AI technologies but also how they envision these technologies being implemented.

3 METHODS

3.1 Participants

We recruited 172 participants using snowball sampling – distributing a screening survey across multiple platforms, including the principal investigator's personal online network, large group chats on GroupMe that served as virtual community hubs for Black Americans in Seattle, and departmental Slack channels. This survey assessed participants' (n=172) frequency of using AISWT and collected demographic information such as gender, race, age, and educational level. Complementing previous studies of Black Americans across class, education and AI use, we recruited eligible participants who were 18 years or older, self-identified as Black American, and were U.S. citizens who resided within the country [27, 53, 69]. We also focused on U.S. residency to help facilitate a shared cultural understanding among participants, considering the study's emphasis on the experiences of Black Americans (see Table 1). We sought out individuals with some familiarity with AI and prior exposure to AISWT, particularly querying their familiarity with text editing features like spellcheck, autocorrect, and generative AI tools such as ChatGPT and chatbots.

Our survey included a question asking respondents to identify AISWT they are familiar with, such as text editing features in word processors, Google's autocomplete, and chatbots like ChatGPT. We also inquired about the frequency of their interaction with these technologies. From the 71 qualified respondents, 10 completed the design fiction phase, receiving a $50 voucher as compensation. Notably, participants frequently used AISWT in educational and professional contexts, integrating tools like autocorrect and Grammarly into various writing tasks, including emails, document creation, and workplace communication. For a detailed exploration of the participants' overall engagement with AISWT, see Appendix §E

3.2 Study Design - Exquisite Telling

To understand participant future expectations of AISWT, we employed a speculative design fiction activity we created called *Exquisite Telling*. This approach blends elements of design and speculative fiction to envision potential futures, stimulating critical thinking and exploring the potential impact of design on participants' lives. Rather than prescribing specific personal, social, or cultural values for participants to draw on, we designed the workshop to surface these organically. Our 90-minute workshop began with a brief introduction to design fiction workshops and a reminder of concepts discussed in a previous session conducted in [10], in which they had reflected on their individual experiences with AISWT, including feelings of cultural exclusion, concerns about the erasure of

Table 1: Overview of participants who completed the study. Participants were allowed to self-select their own pseudonym if they so chose to.

Participant ID	Pseudonym	Age Range	Gender	Highest level of education obtained
P1	Purple Lizzard	18 - 25 years old	Woman	Bachelor's
P2	N/A	26 - 34 years old	Woman	Bachelor's
P4	N/A	18 - 25 years old	Woman	Bachelor's
P5	N/A	26 - 34 years old	Man	Bachelor's
P7	Blue Bird	26 - 34 years old	Woman	Bachelor's
P8	MamaAfrika	26 - 34 years old	Woman	Bachelor's
P9	N/A	18 - 25 years old	Woman	High School Diploma/ GED
P10	N/A	26 - 34 years old	Man	Bachelor's
P11	N/A	18 - 25 years old	Man	High School Diploma/ GED
P13	N/A	18 - 25 years old	Woman	Bachelor's

AAVE, and desires for technologies that respect their linguistic identities. These prior reflections served as a natural foundation from which participants could draw without being directed toward any particular values framework. Participants then accessed a Mural board [71] via a provided link and selected colored sticky notes to initiate an imaginative exercise. In the exercise the lead author recounted a fictitious experience in which during an internship in the Amazon Forest, the lead author discovered seven glowing crystals that appeared to transport them into the future, each reflecting their thoughts and emotions. These crystals are introduced as catalysts for envisioning a future where AI coexists with humanity. Participants engage with the crystals' power infused in sticky notes, exploring communication in this new world. Participants were instructed to use their mouse to hover over each corner of their assigned sticky note, simulating the tactile experience of physically handling a note in an in-person setting. This action was designed to engage participants more deeply with the content, encouraging them to reflect on how AISWT could influence and shape our shared future. By mimicking a physical interaction in a virtual space, the activity aimed to ground abstract discussions in a tangible experience, fostering more thoughtful and relatable reflections. Participants were then prompted to write a part of a story—either the introduction, climax, or conclusion. The Mural board set up and prompting instructions can be found in Appendix §A and the workshop protocol is available in Appendix §F,

After everyone had rotated through each story section, the lead author led a discussion on the group's collaborative contributions. This discussion covered memorable details, notable communication features, realism, resonance with the Black American experience, likes and dislikes about depicted technologies, envisioned utopias with AISWT, successful aspects, and encountered challenges. The session was facilitated by the lead author who identifies as Black American to enhance participant engagement and depth of responses. While our participants identified as Black American, we opted not to frame our conversations and activities around racial categories or identifications with the hope of sparking a broader intersectional conversation on AI futures. This study design was reviewed and approved by the University of Washington Institutional Review Board. The participants provided their written informed consent to participate in this study.

3.3 Analysis

To understand our participants' perceptions and experiences with AISWT, our team performed a combination of literary and thematic analysis. Growing from humanistic traditions, literary analysis focuses on the interpretation of texts by examining their meanings, structure and context (social, historical, geopolitical, etc.). Thematic analysis, by contrast, stems from social science traditions focusing on the interpretation of empirical data gathered through observations, photography, and other methods of tracking social practices and systems [16]. The goal of thematic analysis is to identify patterns and themes, often systematically, as a means of explaining particular phenomena vis-a-vis the perspectives of those experiencing the phenomena [22]. While thematic analysis helps analysts draw insights from the lived experience of the people they engage, literary analysis supports analysts in learning from written expressions of the broader social, political, discursive and narrative contexts in which they engage.

3.3.1 Literary Analysis. Our work drew from three distinct but overlapping techniques of literary analysis: close reading [89], contextual analysis [76], and structural analysis [8]. Our close reading examined the elements of the text by considering word choice, sentence structure, and symbolic and figurative language across the stories. Our contextual analysis considered the historical, social, geopolitical, and cultural conditions in which the text was written and how those conditions shape the text. Lastly, our structural analysis consisted of investigating how the narrative structure of the texts contributes to its overall impact and meaning of the stories.

3.3.2 Thematic Analysis. We performed thematic analysis on the gathered workshop data [16]. Each author independently conducted an analysis of the post-activity discussions by open coding the transcripts via an inductive approach. Simultaneously, authors independently analyzed the narratives produced by the participants during the activity. Following this, team members collaborated to identify common themes, discuss outliers, and consolidate findings, iteratively developing and refining the axial codes. Throughout this process, we documented noteworthy quotes in a memo book, proving invaluable in our final assessment. Adopting a community peer review approach [64], we invited participants to review

and provide feedback on our interpretations, analysis, and arguments, fostering mutual accountability within our research study (see Appendix §D).

4 FINDINGS

Across our two workshops, Workshop 1 (W1) and Workshop 2 (W2), participants engaged in speculative design fiction to explore future scenarios with AI. They envisioned technologies ranging from predictable space-gear (*"transparent bubble-like helmets"* and *"flying cars"*) with playful accompaniments (*"1,000-ft elevated homes"*, W1 Watch) to mystical refigurings such as an AI-generated centaur who reincarnates to befriend the main character (W1 Anti-AI). For ease of identification, we reference stories by their workshop and a short descriptive title that reflects a central narrative. For example, W1 Anti-AI refers to a story created in W1 in which resistance to AI is a defining feature of the narrative. These titles are intended to orient readers to the story content rather than to signal any analytical categorization. For additional details on each story, please see Appendix §B and §C.

In this section, we present the tangible outcomes of our workshops, focusing on the stories surrounding users' reliance on AI technology and their desires for autonomy. Our analysis is structured around key axes of user stories: grappling with AI's limitations; the tension between reliance and agency; the imperative for consent; the obscured origins of AI; and mysticism and AI .

These axes highlight the complex relationship between humans and AI, underscoring a cautious yet introspective approach to technology's role in society. We also note that participants expressed excitement for the session's creative structure, appreciating the "outside of the box" (P9) thinking it encouraged. The iterative, collaborative storytelling approach engaged each participant in the storytelling process, including those who typically don't see themselves as creative.

4.1 Reckoning with AI Shortcomings in the Here and Now

The role of computational breakdown emerged as a reoccurring and prevalent theme across workshops. A missing smart watch that exposes AI dependencies (W1 Watch), a pesky implanted chip that spurs radical education policy (W1 Computer-Mind), a defective AI assistant that prompts community engagement (W1 Daily-Assistant). Alongside our story prompt, an invitation for participants to imagine a world where AI coexists harmoniously with society and its usage is determined by the level of desire, participants crafted stories that often featured technological failures as pivotal sites of story development.

> *"However, the assistant was malfunctioning this day. It prepared the wrong meals, mixed up meetings on the student's schedule, and responded in jumbled nonsense in text messages. The student became frustrated and confused, and didn't know what to do."* (W1 Daily-Assistant)

> *"Relying on her AR glasses, speech from this individual came back as inconclusive and the individual became frustrated and began storming off. She chased the individual down and attempted to talk to them again, but the glasses weren't picking up the tone and accent."* (W2 Translator)

In the above stories, we see how participants used a common story element of technological failure to position the characters at crucial crossroads, compelling them to navigate their daily activities without the aid of their AI-enhanced technology. For example, in W1, stories included AI-powered abilities backfiring (W1 Boxing) and AI assistants malfunctioning (W1 Daily-Assistant), disrupting daily routines and communication. Similarly, in W2, reliance on faulty augmented reality glasses led to frustration and disconnection (W2 Translator). Through these challenges, characters demonstrated adaptability and creative problem-solving, finding alternative ways to accomplish tasks or rethinking their reliance on AI altogether. We reflect on these moments as opportunities to explore the resilience and ingenuity that emerge in the absence of technological convenience, shedding light on how malfunctions can serve as catalysts for rediscovering human agency and reimagining our relationships with technology. This recurring theme of malfunction, juxtaposed with the characters' resilience, conveys a powerful "you may break, but I will prevail" mentality. No matter the situation, the characters ultimately had a fallback plan—themselves. It was as if they were being reintroduced to a part of themselves that had been overshadowed by the convenience of the technology they had grown so reliant on. The stories illustrate how adversity can strip away reliance on external tools, cultivating a rediscovery of human ingenuity, adaptability, and self-reliance.

Despite the significant benefits, and at times near invincibility provided by the technology (W1 Boxing), its eventual failure led to profound consequences. This recurring theme of malfunction contrasts with typical technological optimistic media portrayals. Instead, participants seemed to draw from film plots that highlight the pitfalls of technology in a more subversive context, as P7 mentioned in W2:

> *"Yeah, there's not very many movies out that I can think of that are like all positive. It seems like when it comes to tech in our reality, like it usually has some kind of negative turn"*

Despite the intent for participants to imagine a harmonious coexistence with AI, these stories frequently concluded with a reduced reliance on or complete abandonment of AI technology. This shift highlighted a resilience to technological failure and a return to non-technological solutions, a theme we later explore in greater detail.

For some participants, our prompt on crafting a world where AI coexists harmoniously with society called for grappling with its existing shortcomings, many of which show up as the failures in the stories. A strong subset of stories within the second workshop described the formation and resolution of discriminatory harms or tensions sparked by contemporary AI engagements. As we see in W2 Translator, the AR glasses are not able to understand the language of the woman introduced and could serve as a symbolization of how today there are instances where AI is not able to understand certain dialects, leading to the frustration similarly felt by the woman in the story. One can imagine AI influencing storyline directions, conflicts, and resolutions. The inability of the AI glasses to comprehend different dialects is indicative of a need to

have this same issue represented within the story and essentially fixed by the *"great Eye who could comprehend all languages"* (W2 Translator). This highlights an ongoing issue in AI development: the need for systems that not only translate but truly comprehend and respect linguistic diversity to prevent cultural erasure. Such capabilities are envisioned as pivotal in ensuring that future AI technologies foster inclusivity and understanding across different cultures and languages.

Later discussion revealed how this issue spoke to a critical need for AI to understand and respect cultural nuances. P13 related to scenarios where AI failed to recognize diverse languages or dialects, mirroring real-world frustrations with current technology limitations,

> *"I see that come up, like as an issue in the experience in my personal Black experience, because people may not be like fully receptive of what I'm saying because they don't understand my dialect or specific types of vernacular that I'm using and so that's something that I can relate to of like, you know, the issue in the in the [W2 Translator] was about language, but then we have to consider all facets of language, if that makes sense."*

P5 further corroborates this idea of total language representation in their futuristic world being a necessity and highlights the dangers of failure to do so,

> *"And if, say, for example, language that is spoken in a small part of the world is not represented, then it can cause a threat to the culture of a group of people not being represented... could be a time where it can reduce the number of people who speak the language because they feel that it's not represented then they have to speak English."*

This sentiment is highlighted throughout W2 as the participants discussed the importance of equal representation of these languages in their utopian future,

> *"So I think that's a really beautiful thing but in my utopia... I know people think English is like the lingua franca but that's not the truth... I would hope that [technology] would equalize so everyone has an opportunity to understand [languages] on the same wavelength, so it would kind of take away that confusion."* -P8

This dual focus on technological advancement and cultural sensitivity is seen as essential for developing AI that genuinely supports and enriches the global community.

4.2 Resiliency through Simplicity

Participant stories reveal a tension between AI empowering users and serving their needs whilst also fostering overwhelming dependence. Throughout W1, AI was initially depicted as more than just a handler of everyday tasks —taking on the role of key decision-makers in the characters' lives— it was the absence of AI due to their failure in operations that prompted characters to confront their deep-seated reliance on AI. This confrontation highlighted the delicate balance between leveraging AI's capabilities and becoming helpless without it.

> *"At this moment she feels her dependence on the watch take a toll on her life... now she feels helpless, lost, and confused all at once."* (W1 Watch)

> *"The student became frustrated and confused, and didn't know what to do. Their life was heavily dependent on their assistant working!"* (W1 Daily-Assistant)

In W1, characters are portrayed grappling with the consequences of their dependency on AI, particularly when that technology becomes unavailable. As those stories progress, we see a shift: characters begin to adapt by living without the AI, either by reverting to traditional methods, relying on their communities to move forward or even sparking revolutionary curriculum.

> *"After the initial shock and confusion of losing the watch passed, she resorted to non-technological solutions to relieve her of her troubles... She moved throughout the day without the crutch she became so reliant on.…In the meantime, she got accustomed to life without the watch, and learned not to rely on it so dearly."* (W1 Watch)

> *"Had to start relying on a physical calendar to create a schedule. Began relying on people in their community for support (i.e. tutor for homework). Began preparing their own meals using accessible produce."* (W1 Daily-Assistant)

The stories above depict characters who break free from their reliance on AI, reverting to non-technical solutions. This shift suggests that while they were heavy users of technology, they were not entirely dependent on it, choosing convenience over necessity.

Post-story discussions revealed that participants believed retaining non-technical skills gave them an advantage over those who rely heavily on technology, as articulated by P2:

> *"You can go back to the old ways and stuff. I'm not sure if everyone here is called a millennial, but that's what's great about being in an older generation versus one that relies heavily on AI—we know we can go back to pen and paper if we need to."*

P1 echoed this sentiment, reflecting on W1 Daily-Assistant:

> *"It made me think of the complete opposite, like looking for local produce, literally walking outside, going for a long walk, and foraging for plants to take home or food—having your own garden and sourcing your own food in ways that maybe look backwards, I guess technically, relying on skills that were used before mass production."*

Participants expressed confidence in having a "backup plan" if their reliance on AI technology ever failed. Their life experiences had equipped them with the skills to survive and thrive in times less dominated by technology, giving them a sense of security and resilience.

4.3 Concerns around Consent

A notable recurring theme in several stories was the intimate merging of AI and the human mind, with examples of AI being directly integrated into the human brain.

> *"She decides to head down to Best Buy and buy a computer chip. She gets home and comes up with a plan to insert the chip into her skin, so she can be more like a computer."* (W1 Computer-Mind)

> *"AI no longer has an online presence rather it is fully immersed into our minds with new medicine that transports the technology into our brains."* (W1 Anti-AI)

> *"We use quantum computing to communicate where we would each have chips in our brain."* (W2 Mind-Chip)

The integrations are initially portrayed as beneficial for the characters. For example, one character gains the ability to summarize large amounts of text (W1 Computer-Mind). Others experience enhanced communication capabilities, mirroring ChatGPT's abilities (W1 Anti-AI), and in another instance, the integration enables instant communication with others (W2 Mind-Chip). These integrations symbolize the deepening interaction between humans and AI in these imagined futures.

However, the stories reveal a growing discomfort with this level of human-AI integration. Each narrative explores different degrees of control over AI integration. In W1 Computer-Mind, the character can choose when to integrate and remove the AI, representing a voluntary and controlled interaction. In contrast, W1 Anti-AI and W2 Mind-Chip depict characters who lack this autonomy, forced to rebel against governing bodies that mandate AI chip implantation. This serves as a cautionary tale about the dangers of AI intrusion into human lives without consent.

These stories reflect a cautious approach to merging human cognitive functions with AI, emphasizing the need to respect boundaries in human-AI interactions. In W1 discussions, P2 expressed deep concerns about AI's potential overreach:

> *"For the story [W1 Anti-AI] with the whole AI immersion in the brain, I was a little shook. I was like, I hope it doesn't come to that. Because I was just like, oh, man, like, would it ever come to that, and part of me is just like, knowing this country, I wouldn't be shocked. But that's something that really stood out to me—it was startling. There was also this sense that it could potentially happen, which made me think about all the other intrusive ways AI could become prevalent in our society... It was a different way of thinking about how AI can manifest in society, which is pretty scary."*

P2's reflections underscore a deeper unease about technology's potential to intrude into personal and societal spaces, highlighting the importance of users maintaining control and consent in AI integration. In W2 discussions, P8 emphasized the importance of using AI and technology ethically and with consent, particularly in sensitive areas like healthcare, highlighting the need for technology that respects user consent and intended use:

> *"I would say consent is really big. I know we're talking a lot about medicine, but I feel like, I think a lot of folks are still spooked by technology in general, especially older folks. I know that our generation and those after us, we use it every single day, like we're the ones kind of moving and shaking the technology for it but I think that that could be a hurdle especially in the healthcare space if we want more folks to like, I think [P7] mentioned the microchip, like I can see a lot of folks maybe not being okay with that."*

The above concerns reflect a deeper unease about technology's potential to intrude into personal and societal spaces, as echoed by P2's apprehension about the invasive potential of AI. They also emphasize the importance of consent as a mutually established process of building trusting relationships with technological interventions, whether inside or outside the body.

4.4 Ambiguity of AI

The depiction of AI in the stories is characterized by a prevalent opacity, where AI systems are portrayed as mysterious and lacking transparency. The stories often provide minimal details about the origins, internal workings, or decision-making processes of these technologies, leaving their functioning and motivations largely unexplained and enigmatic. This portrayal suggests a sense of ambiguity and uncertainty surrounding AI, emphasizing its inscrutability and the potential challenges of understanding and trusting these systems.

> *"People are tired of being depressed and want immediate transparency from the government. There are riots and protests left and right... Many think that the government is performing secret tests on them to make the AI immersion more robust and powerful than ever."* (W1 Anti-AI)

> *"They notice that they are not who they think they are truly. there are other people controlling their movements and sometimes influence their beliefs and thoughts and are toying with their lives for fun."* (W2 Mind-Chip)

Only two stories attempted to delve into the origins of the AI systems featured, illustrating a potential lack of interest in the mechanics of AI among participants. This opacity could also reflect a broader issue where users, although reliant on AI systems in many aspects of their lives, often do not understand how these systems operate or make decisions, even when handling sensitive information. This narrative trend aligns with ongoing academic and public policy debates concerning the transparency of AI systems [83, 99, 101], many of which emphasize the need for AI to be not only effective but also interpretable and accountable [35, 67, 96].

4.5 AI and Fantasy

While both workshops presented different formations of control and engagement with AI and its users, W2 stories focused on an unusual range of real and mystical connections. We examine how W2 narratives shift AI from a background technology to an active relational presence, revealing how blurred boundaries between AI, humans, and non-humans complicate agency, identity, and control.

Across W2 narratives, AI is not just a tool but an entity that actively mediates, disrupts, or even redefines human and non-human relationships. The most surreal case of AI blurring relational lines appears in W2 Centaur, where an AI-generated centaur embodies the protagonist's own consciousness.

> *"But the centaur reincarnated came back and found me and asked me to be his friend. The centaur pulled me*

> *in and touched his finger to my forehead. "BAM! I am YOU! We are you!" I quickly jumped back in fear and shock!"* (W2 Centaur)

The moment of realization—"I am YOU! We are you!"—challenges traditional notions of selfhood and identity. Here, AI does not just mediate relationships but collapses the distinction between the self and the other, raising questions about whether AI can be an extension of human consciousness or an independent entity with its own agency. In W2 Helper-Hand, a tool created by participants called, "Helper Handy," is designed to assist but inadvertently facilitates harm. The vampire unknowingly weaponizes this AI-driven assistant, highlighting the unintended ethical consequences of AI as an information broker. This echoes concerns in real-world AI applications, where algorithms can be exploited in ways that disrupt, rather than enhance, trust and relationships [2, 88].

Describing mystical creatures and seemingly impossible timelines, stories like that of the centaur create an alternative positioning around algorithmic systems. The AI is not separate from social life or even comprehensible as a technology. Instead, it works within relational conditions (friendship, conflict, alliance) to eventually fold into the reality of the narrator. As readers, we know little about the narrator, including whether they are recognizable as a human. The absence of this anchor, of a sense of humanity, feels somehow offset by the human-like gestures of the mystical creature—a finger touching a forehead. Together the two figures become one, hearkening a different orientation toward both personal autonomy and automation. Within this interplay between mystical elements and advanced technology, stories like these reflect both a yearning for ostensible impossibilities and a grounded acceptance of the role AI might play in those futures. While mystical creatures like centaurs (W2 Centaur) and vampires (W2 Helper-Hand) navigate a world intertwined with technology, the portrayal of AI remains largely within the realm of obedient tools rather than sentient beings. In W2 Centaur, the centaur's use of a mobile phone to communicate conveys a blend of the mythical and the modern, yet the AI remains a tool rather than a thinking, autonomous entity. Or consider W2 Helper-Hand, amid a blood thirsty protagonist, a character still relies on a typical help desk. This reliance amid mythic tropes suggests a cautious hope for maintaining human control over AI, even as technology becomes more prevalent within daily life.

5 DISCUSSION

The findings from our workshops reveal a complex relationship between humans and AI, as participants engaged in speculative design fiction to imagine future scenarios with AI technologies. The resulting narratives spanned a range of themes, from playful and mystical reconfigurations of technology to more grounded concerns about AI's role in society. Participants' stories often highlighted the challenges and potential pitfalls of AI, suggesting a cautious optimism toward its future development. Despite the creative and futuristic settings, the narratives consistently emphasized familiar contemporary concerns such as the importance of user consent, transparency, and the preservation of human agency in a world increasingly dominated by AI technologies. These narratives can help practitioners and developers understand the apprehensions and desires of marginalized communities, serving as a tool for brainstorming appropriate next steps in AI innovation. By considering these tensions, developers can better design technologies that align with the unique needs and perspectives of various community groups while identifying overlaps across different contexts.

Next, we consider three open questions and opportunities that emerge from our analysis: (1) resourcefulness in the face of AI, (2) emerging relationships, (3) design fiction through hope.

5.1 Resourcefulness in the Face of AI

As a first consideration, we wish to revisit the range of strategic practices taken up in the stories described in W1. We observed how technological failure compelled the protagonists to tap into their own resourcefulness. This resourcefulness manifests in multiple, analytically distinct ways across W1 narratives. Rather than treating resourcefulness as a singular or abstract response to technological failure, the stories illustrate a range of strategic adaptations that align with—and extend—prior categorizations of everyday design practices.

In prior work on IKEA hacking, Rosner and Bean identify several forms of resourcefulness, including adapting the environment rather than the object itself, using an object in unintended ways, modifying an object to better fit a need, and fully transforming an object's purpose [79]. These dimensions provide a useful lens for understanding how protagonists in W1 respond to AI breakdowns. For instance, in W1 Watch, Sandy adapts her environment rather than the technology itself by calling out for human assistance and navigating her home without the AI watch that normally governs access and routines. In W1 Daily-Assistant, the protagonist repurposes existing tools, using non-digital artifacts in new ways to compensate for a malfunctioning AI assistant. W1 Computer-Mind reflects a more transformative form of resourcefulness, where Jane ultimately rejects direct technological augmentation and instead reimagines educational systems to redistribute computational skills across younger generations, reducing reliance on AI altogether. Finally, in W1 Boxing, resilience emerges not through modification of technology, but through embodied skill, preparation, and determination once AI support fails, emphasizing human capacity independent of technological mediation.

Viewed through this lens, W1 narratives do not merely depict ingenuity in response to failure; they demonstrate how breakdowns in AI foreground different modes of adaptation that parallel well-established patterns of resourcefulness in everyday design. Importantly, these stories shift resourcefulness from the domain of material objects to sociotechnical systems, showing how people reconfigure environments, practices, and relationships when AI no longer functions as intended. There is a longstanding tradition of resourcefulness within HCI, echoing the patterns observed in our study. Scholarship across HCI, STS, and urban studies has long theorized resourcefulness as a situated response to structural constraint, particularly among minoritized and under-resourced communities. In urban studies, scholars describe how communities facing chronic disinvestment develop forms of informal infrastructure and collective improvisation, working with what is available to sustain everyday life in the absence of reliable formal systems [31, 86, 87]. These practices are not framed as temporary fixes, but as durable

modes of organizing social, spatial, and material relations under conditions of inequality.

Parallel lines of inquiry in HCI and STS similarly foreground how marginalized groups engage in practices of appropriation, repair, and reconfiguration when dominant technologies fail to account for their needs. Research on everyday design and repair emphasizes how people adapt environments rather than tools, repurpose technologies beyond intended use, or transform systems altogether as acts of agency and care [54, 79, 102]. Importantly, this body of work challenges deficit-based narratives by positioning resourcefulness not as a lack of access, but as a form of situated expertise that emerges from lived experience within constrained sociotechnical landscapes. Within this literature, resourcefulness is understood as both material and relational: it is enacted through social networks, collective knowledge, and shared labor, as much as through objects or technologies themselves [37]. By engaging these traditions, we frame the practices depicted in W1 not as isolated instances of ingenuity, but as part of a broader lineage of minoritized communities leveraging adaptation, collaboration, and creative reuse to assert agency in systems not designed for them.

Supported by our findings, we observe that user resourcefulness is already actively exercised in relation to AI systems, particularly in moments of breakdown, misalignment, or uncertainty. Rather than treating resourcefulness as something to be newly introduced into AI use, these findings invite a reconsideration of how AI alignment itself is understood. In this framing, alignment extends beyond the accurate identification and execution of predefined user goals or values, and instead becomes a dynamic, context-dependent process that must be revisited as conditions change and systems exhibit known limitations such as misinformation and hallucinations [56]. From this perspective, alignment work is not completed at design time but is continually renegotiated through use, echoing long-standing HCI and STS accounts of situated action and adaptation [91].

A second implication follows from this reframing. If resourcefulness is already integral to how users engage with imperfect AI systems, then analytic and design attention can shift toward supporting alignment activities already underway, rather than overriding them. Alongside efforts to improve model representations of user goals, interests, and values [82], future work might examine how users reorganize their goals, construct backup strategies, and draw on community knowledge when systems fall short. Attending to these practices foregrounds resilience as a relational achievement between users and systems, rather than a property of the model alone. In this view, system success is not measured solely by reduced failure rates, but by how well AI systems coexist with and sustain users' ongoing adaptive and reparative practices [54].

5.2 Emerging Relationships

A striking outcome of the workshop was the prevalence of mythical elements across participant narratives. Importantly, participants were not encouraged to incorporate mythical themes, nor were they provided with exemplar stories to model their writing. The emergence of mythical motifs appears to have arisen organically within the constraints of the speculative prompt and collaborative storytelling structure. Nearly every story in W2 engaged with speculative or fantastical elements, situating AI in roles that extended beyond conventional framings of HCI. Within these narratives, we observed a diverse spectrum of AI-user relationships, ranging from AI as a mediator of communication (W2 Translator) to an enabler of harm (W2 Helper-Hand), an emotionless decision-maker (W2 Cat), an omnipotent overseer (W2 Mind-Chip), and even a reflection of the self (W2 Centaur). These varying relationships highlight the multitude of ways in which AI and humans interact, offering insight into different levels of integration and interdependence between the two.

This range of AI–human interactions reflects broader tensions and concerns in AI and HCI scholarship around how AI mediates social relationships, agency, and authenticity. In W2 Translator, AI functions as an intermediary in human communication but its breakdown highlights how reliance on AI can disrupt interpersonal connection when interpretation fails. This resonates with work on AI-mediated communication, where scholars observe that intelligent agents that modify or generate messages on behalf of users can reshape interpersonal dynamics in subtle but consequential ways [48]. However, our findings extend this literature by showing not only that AI-mediated breakdown can undermine perceived authenticity, but that users actively seek alternative interpretive resources (e.g., the Eye) when AI fails, suggesting a negotiation of relational meaning rather than passive adaptation. W2 Helper-Hand illustrates how even assistance designed to support interaction can inadvertently enable harm. This parallels concerns in algorithmic decision-making about unintended consequences and ethical harms [6, 59], but it also extends HCI work by capturing how users may unwittingly be positioned as facilitators of harm through benign AI mediators [21], foregrounding the need for design that acknowledges not just bias but misdirection of trust. W2 Cat presents AI as a rational, data-driven agent devoid of emotional intelligence, echoing literature on human–AI relational limitations, where AI companions and tools can appear supportive yet lack mutuality or genuine emotional engagement [11, 90]. Our narratives extend this work by embedding these limitations within ethical scenarios of harm and accountability, illustrating that purely functional AI reasoning may not only fall short of emotional mediation but actively displace human moral labor. W2 Mind-Chip and W2 Centaur explore extreme integration of AI with cognition and identity. These narratives parallel emerging HCI discussions on relational dissonance, where AI systems that emulate human social cues lead to ambiguous relational stances in users [45], and on epistemic relational roles between humans and AI [107]. We extend this literature by showing speculative scenarios where relational boundaries not only blur but collapse, prompting explicit resistance movements that reclaim agency and subjectivity beyond co-constructed knowledge roles.

Taken together, these roles position AI not as a singular kind of actor, but as a set of relational configurations that dynamically shape how users negotiate meaning, responsibility, and agency. What unifies these roles is not their technical function, but their relational consequences: in each case, AI alters how responsibility is distributed, how trust is established or undermined, and how users understand their own participation in decision-making. Rather than framing these dynamics solely as design successes or failures, the

stories suggest that users are already engaged in ongoing alignment work as they are interpreting AI outputs, compensating for breakdowns, resisting overreach, or reasserting boundaries around identity and control. This synthesis extends prior HCI accounts of AI-mediated interaction by foregrounding how relational roles shift across contexts and by showing that alignment is not only about matching system behavior to user intent, but about sustaining conditions under which users can renegotiate agency when those roles become unstable. The key takeaway is that AI's impact is best understood through the relational positions it occupies and the adaptive practices it provokes, rather than through static evaluations of accuracy, efficiency, or autonomy alone.

5.3 Design Fiction through Hope

As a third and final reflection, we turn to the prompting around hope that began our exercise. While many speculative and fiction-oriented design activities veer toward pessimism, a form widely circulated through the popular *Black Mirror* TV series, we sought to orient our projects toward a more capacious, expansive and even hopeful set of imaginings. As we have seen in our own prior work, revealing potential harm holds a strong place in critical analysis and accountability, holding powerful actors responsible for the consequences of their actions in their technological visions. But mapping harms can also rehearse stories of danger and violence in ways that center pain and may risk its reproduction.

Optimism, on the other hand, comes with additional challenges of coercion and control. To require positivity is to exclude critique. It is to paper over, or deny altogether, the cracks and fissures that make change possible or recognize its presence all along. When story lines require optimism, they often rely on forms of manipulation that erase difference and over-promise outcomes, leading to misinterpretations or lasting harms [14].

Our prompt and attendant telling approach hinges on a method of hope (via Ratto and Jackson [78]) that orients design toward what might be made possible within and despite precarity — of computing systems, of social relationships, and of the surroundings and settings that bind them. In line with concerns for agency, our aim was not to compel participants to see a future without pain or challenge. Instead, we strove to trouble a fixed or prescribed process of envisioning, a trajectory that one person alone might control or even seek to control.

What would it mean to embrace design fiction as a method of hope? How might the cadences, collaborations, and reverberations of visioning computing systems and AI forms adapt and reorient fictional tellings? How has this form of design fiction always already taken place? By conjuring differential modes of imagining and reimagining together, across individuals and toward connected reflections and possibilities, our work suggest a deepening of the hopeful gaze.

By gaze we do not refer to the hegemonic "gaze" or the power structures that condition the process of looking into and at another. Instead, we follow a host of recent artistic and scholarly works that have engaged with and reimagined modes of hegemonic looking at, modes that figure someone a subject or compelled recipient of the authorial, managerial or otherwise, power-laden perspective. With an orientation toward hope, we take particular inspiration from Chari Glogovac-Smith's multimedia performance work [43] with Tina Campt's concept of the 'Black Gaze' [20]. In their engagement through and within relationships of algorithmic agency, they seek to reorient who gets to look at Black futures and how. It is this redirection, in the mutation of the power dynamics endemic in what already exists, that we see potential for collectively imagining otherwise.

5.4 Toward an *Exquisite Tellings*

The *Exquisite Tellings* exercise contrasted with conventional design fiction formulas in a few important ways. While design fiction formats tend to frame the story generally as a singular or solo task, we broke down the storytelling process into parts, each with different authors and different levels of insight into the whole. By passing a story part onto another person, and by selectively concealing parts, our workshop further shifted a typical design fiction approach to speculation. Speculation emerged not as a contained or simultaneous activity, but as a kind of stitching together of perspectives. Participants contributed imaginative perspectives connected across time, one after another. The fact that the third story-teller could not see the work of the first, the second could not see the work of the third, and first could not control the work of the two to come propelled a particular uneven contingency, one focused on the present possibility rather than the path ahead.

Inspired by Harrington et al.'s work advocating for more equitable participatory design engagements [50], we hoped to use the broader workshop format to engage Black American AI users within AI design and create opportunities for them to ideate about future technological scenarios. Like P9's comment about "outside of the box" thinking, many participants appreciated the structure that allowed for collaborative storytelling, enhancing their engagement despite not considering themselves creative. The environment fostered a space where participants, including those who don't usually engage in creative tasks, felt comfortable contributing imaginatively.

When participants (P5 and P8) reflected on the challenges of creating without complete information, they also highlighted how this aspect of the workshop pushed them to think more deeply about AI and its potential impacts. These reflections underscore the possibility for stimulating detailed and diverse discussions about AI, showing that even when faced with challenges, people can engage deeply with its specific and broader implications.

As HCI scholars adopt this approach, the process of consecutive drawing, where each addition is partially hidden, could further adapt to embrace wider variation in scope and structure. To support expanded plot lines, for example, the story composition could include expanded prompts such as flashbacks or epiphanies, or create opportunities for an added moment of rising action or an otherwise inciting incident. Alternatively, the workshop activity could include a greater degree of stylistic possibilities by scaffolding experimentation with story genres (e.g.'coming-of-age' or 'cyberpunk'). To include a broader set of participants, the workshop could also break the turn-based storytelling into additional parts, each with their own effective orientation and practical purpose.

5.5 Communal Imaginings

Our approach to *Exquisite Tellings* opened a path for connected imaginings, an unexpected opportunity to cohere hopes and concerns around AI futures. While the two workshops produced a set of distinct stories, within each workshop the stories held similar visions and orientations around speculation. The stories from the first workshop tended to present a pragmatic connection to AI, such as a smart assistant or watch, that tended to make way for breakdown or refusal of such instrumental usage. By contrast, those within the second workshop envisioned a more mystical and imaginative relationship to AI, such as the "Great Eye", who possessed the skillset to fix AI and a mobile device capable of understanding the centaur.

Design fiction workshops tend to facilitate siloed forms of storytelling, with each person or group developing their own tale. Here we see how people moving between groups, contributing to three stories each within a small workshop structure allowed for mixing of ideas in ways that developed communal imaginings. Consider how the second workshop convened a centaur, a vampire, and a cat named Black as key protagonists. Or recall how the first workshop gathered stories related to overbearing wrist watches, malfunctioning assistants, and other mundane technological troubles. A certain creative cadence and aesthetic character formed across each workshop and within the connectedly-authored stories. This potential for connection suggests a methodological path for cultivating collaboratively investigated themes and reimagined technology formations. Rather than isolating participants or compelling teamwork, the workshops created opportunities for creative communing across story genres and interests.

5.6 Limitations and Future Works

This study has a few limitations that are important to acknowledge. All participants were based in the U.S., which narrowed the perspectives on the futures they envisioned. There is a wide spectrum of futures that could be elicited from Black people globally, and our small group is neither representative nor exhaustive in covering the range of perspectives and possibilities the *Exquisite Tellings* method could invoke. Future research should aim to collaborate with Black communities from other global regions to explore a broader range of futures and experiences.

Another limitation is that our study did not include participants with a specific interest in emerging technologies, such as tech enthusiasts or early adopters. Future research could benefit from incorporating these groups to understand how individuals with a strong pro-technology stance might envision the future of AI. Additionally, assessing participants' attitudes toward technology (pro, neutral, or against) before the workshops could provide more nuanced insights into how these positions influence their speculative designs.

Our study primarily focused on the communicative capabilities and development of AI technology, which may have unintentionally shaped the direction of participants' narratives. While the stories participants created were not exclusively centered on communication, the prompts we provided might have limited the breadth of the futures they envisioned. Future studies could offer broader, less restrictive prompts to encourage more freedom in the creative process. This would allow participants to explore more diverse genres and narrative structures, such as more personal integrations of AI.

Lastly, there are concerns regarding the age range of our participants. All participants fell within the 18-34 age range, which reflects the demographics of the recruitment channels we used as well as our requirement that participants have prior familiarity with AISWT, a criterion that correlates with younger demographics. Given that many millennials and Gen Z individuals have grown up with language technology integrated into their lives, our findings may lack the insights of those from a generation that encountered such technology in their adult years. Older participants may bring meaningfully different relationships to AI such as greater skepticism, distinct cultural reference points, or longer histories of navigating technological exclusion that could produce a broader and richer range of speculative futures. Future research should actively recruit older Black American participants to understand how generational experience with technology shapes the kinds of AI futures people feel authorized to imagine.

6 CONCLUSION

In this paper, we explored how members of Black American communities in the U.S. envision futures shaped by AI through speculative design fiction workshops. Our findings reveal a complex and nuanced perspective on AI, where participants oscillate between optimism for the potential benefits of AI and caution regarding its limitations and ethical implications. These fictional stories provide a critical lens through which we can examine evolving AI-human relationships. As AI becomes increasingly embedded in daily life, speculative storytelling offers a valuable space for exploring its potential risks, ethical dilemmas, and societal implications. These insights highlight the critical need for more inclusive design practices that prioritize the voices of marginalized communities in the development of AI technologies. By incorporating these perspectives, we can work towards creating AI systems that not only enhance human capabilities but also respect cultural diversity and uphold ethical standards. Our study contributes to ongoing discussions in HCI by demonstrating the value of speculative design fiction as a method for uncovering community-specific hopes, fears, and aspirations in the context of emerging technologies.

7 ETHICS STATEMENT

The studies involving human participants were reviewed and approved by the University of Washington's IRB. The participants provided their written informed consent to participate in this study.

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A MURAL BOARD

Below we have included the instructions at each stage of the sticky note groups. Refer to Figure 1 for the Mural Board layout.

Introduction: On the first sticky note of your chosen color, take a moment to introduce the character you encountered and the world into which you were immersed. Describe the unique mode of communication employed by the characters. You have 8 minutes to put this together.

Climax: Take the time to describe what went down. This should serve as a continuation of the plot from sticky note "1," revealing the climax of the movie. Typically, this is the point where the crystal ball presents an issue or problem, exposing the underlying turmoil beneath the seemingly harmonious surface. Given the AI mentioned in the first sticky, I imagine it played a significant role in the scene you witnessed. You have 8 minutes to put this together.

Resolution: Now, in this sticky note, describe how the main character managed to solve the conflict that was depicted earlier. What steps were taken? If there was a twist, what form did it take? You have 8 minutes to put this together.

B WORKSHOP ONE COLLABORATIVE STORIES

B.1 Watch

INTRODUCTION: Sandy is a 16 year-old Black girl with red kinky hair and chocolate skin. She's living in the year 2100, where everyone, including her, is wearing transparent bubble-like helmets to help them breathe. The world has finally mastered flying cars and 1,000-ft elevated homes like The Jetsons. They also use watch communicators where they can command an AI entity to do tasks for them, like cleaning, cooking, mowing the lawn - even plan out the day for them based on their interests and habits.
CLIMAX: Sandy's whole life has evolved through the lens of AI driven technology. She has no memory or experience of life before. One morning she wakes up and reaches for her watch that instructs her on the tasks for the day. (Without the watch she is left stagnant and helpless for the whole day). To her surprise her watch is missing, and all she can recall was her placing it on her night stand. The problem is that these watches were created to never go missing, so this feeling of loss is very new to her since and she is not able to piece together what to do. At this moment she feels her dependence on the watch take a toll on her life. She has no idea what to wear to school, since it gave her direction in her morning routine. she is unable to exit her room, because the watch is the one that set the lock code. Her daily tasks were all controlled by the singular watch, and now she feels helpless, lost, and confused all at once.
RESOLUTION: After the initial shock and confusion of losing the watch passed, she resorted to non-technological solutions to relieve her of her troubles. She yelled until maintenance arrived to help her escape from her room. She still had to go to school, so she tried her best to get ready. She moved throughout the day without the crutch she became so reliant on. Sandy put in an order for a new watch, but it would take a few weeks for it to arrive. In the meantime, she got accustomed to life without the watch, and learned not to rely on it so dearly

B.2 Computer-Mind

INTRODUCTION: Streamlined communication of information: Communicating via links to information (i.e. character starts to talk then says something along the lines of "more info can be found at [link]". I imagine that link is automatically displayed to the other person and relevant information is highlighted with the option to summarize via AI.

The world:I imagine that every character in the world has access to the same AI tools regardless of language spoken, familiarity with technology, demographics, education etc (i.e. equitable access)
CLIMAX: Jane gets mad that she can't summarize and highlight information like A.I. and decides to take matters into her own hands. She decides to head down to Best Buy and buy a computer chip. She gets home and comes up with a plan to. The procedure goes as schedule. She can listen to the whole Gettysburg address and summarize it into a few sentences without thinking about it.
RESOLUTION: Days go by and Jane is still a human robot. For the most part she is enjoying this feeling. However, she then becomes overwhelmed with the rate at which her brain can attain information. She decides to take out the chip and return to her past self. Because she realizes she prefers to live life at a normal rate, and not at the speed of technology. Through her discovery and understanding how fast computers are able to receive, summarize and produce information she decides to start a study on how to embed AI algorithms into school curriculum. And she titles this "How to think like a computer" Through this study a new form of learning is emerged and it allows the younger generations to gain control of the computing industry, and to organically perform the same tasks AI did. Hence leading the world to depend on AI less.

B.3 Anti-AI

INTRODUCTION: In my first moments of this world I was introduced to an elderly person. She would've been the exact same age as me if I was in that time period. Through the stories she told me, I sensed a form of longing of the past and how the world used to communicate prior to an AI driven world. She tells me how AI has evolved into human minds, and allows them to generate the same abilities chatGPT used to online. People no longer depend on books for knowledge rather they just go to AI robot hubs and ask them questions. AI no longer has an online presence rather it is fully immersed into our minds with new medicine that transports the technology into our brains. Through our conversation I have gathered that AI technology has now turned into a way of living, and the primary way to access knowledge, communicate with each other to an even more grand scale.
CLIMAX: Longing of the past leads to disassociation, depression, other mental health issues. Depending on robot hubs leads to dependency on singular source of information/truth. There may be an underground movement to stop the immersion of AI into brains therefore leading to unsafe practices or new legislation that may lead to harsh punishments
RESOLUTION: This underground group is called AA (Anti-AI) and as months progress, it becomes stronger. People are tired of being depressed and want immediate transparency from the government. There are riots and protests left and right. Police forces enacting violence to stop these events. Eventually the government is able

Figure 1: Mural board layout from an *Exquisite Tellings* workshop. Each colored sticky note represents one group's contribution to a story section—Introduction (1), Climax (2), or Resolution (3)—arranged in a circular structure across multiple rounds. This image is included to show the spatial layout of the activity rather than the legibility of individual responses. Full workshop instructions are provided in Appendix A and responses for each sticky note can be found in Appendix B and C.

to stomp out all resistance, making powerful resisters disappear. Many think that the government is performing secret tests on them to make the AI immersion more robust and powerful than ever.

B.4 Red

INTRODUCTION: College student getting ready for school. needs to eat, relies on an AI powered assistant to prepare food. needs to plan out day, assistant reads out schedule and schedules meetings.

needs to answer text messages, assistant reads them out, student thinks about the response, and assistant sends them
CLIMAX: However, the assistant was malfunctioning this day. It prepared the wrong meals, mixed up meetings on the student's schedule, and responded in jumbled nonsense in text messages. The student became frustrated and confused, and didn't know what to do. Their life was heavily dependent on their assistant working!
RESOLUTION: Had to start relying on a physical calendar to create a schedule. began relying on people in their community for support (i.e. tutor for homework). Began preparing their own meals using accessible produce

B.5 Boxing

INTRODUCTION: I have encountered a character named Phil he has the ability to beat anyone in a wrestling match through A.I. He calculates every strike and is able to win every match before it starts by using his opponents weaknesses he evaluated through watching previous matches. This man can't lose.
CLIMAX: Phil attends the biggest match of his entire career. He is expected to win, as his reputation as a great fighter proceeds him. During the first round, he realized his AI powered ability began to backfire. His calculations were no long accurate. The ability he's relied on for years is no longer able to help him
RESOLUTION: Phil is tougher than a $2 steak, he was not able to rely on his A.I. as usual. Just like Rocky 4, when Rocky was fighting the machine known as Drago, he was able to overcome him with dedication, skill, and preparation. There was a twist because it was expected for the A.I. wrestler known as Phil to win.

C WORKSHOP TWO COLLABORATIVE STORIES

C.1 Translator

INTRODUCTION: In this new world I see people communicating with wearable tech. For example, using augmented reality glasses to go shopping with. Augmented Reality to would be used when communicating to add visualizations to conversation . This will help to remove language barriers for people who speak different languages and come from a different part of the world. Augmented Reality will help create a new way of communicating universally for all people.
CLIMAX: On a Tuesday afternoon in November, a woman encountered an individual at the park who did not speak the same language that she did. Relying on her AR glasses, speech from this individual came back as inconclusive and the individual became frustrated and began storming off. She chased the individual down and attempted to talk to them again, but the glasses weren't picking up the tone and accent. In addition to that the language that was being spoken eventually translated to a number of broken visualizations where the citizen had an overstimulation of sensory from her glasses. She quickly took them off her face to be relaxed.
RESOLUTION: Taking in a huge breath, trying to calm her nerves, the woman glanced down at the AR glasses in her hand. Quizzically the woman, rewinded her interaction with the stranger she'd met moments ago and tried to parse out the broken visualizations she'd seen. "What could this mean and where is stranger from," she wondered. Suddenly, the woman remembered- there was a great Eye who could comprehend all languages and accents. So off, she went and the Eye was able to tell her about the stranger and also proceeded to update her glasses, so she was running on the current version. She began the third eye of the Eye.

C.2 Cat

INTRODUCTION: The character Black the Cat comm with his friends while teleporting home that he will be home in 1 min via AI. His comm device sent a pic to his friends and made snacks for his friends and brought them over as well. They are floating in space heading to his house. Snacks are sent via delivery dogs. Black and his friends are robots pre-programmed with white parts.
CLIMAX: Turmoil arises when Black the Cat accidentally runs over an elderly person on the way home. Having no ability to feel emotion, Black the cat struggles to feel remorse over his action.
RESOLUTION: Black the cat took an assessment that judged his driving skills objectively, looked at his driving record, and Black took an emotional assessment to determine any blocks in judgement or thinking. The elderly person was able to document their perspective of the happenstance and Black the Cat was assigned to listen to the speech.

C.3 Centaur

INTRODUCTION: In this new futuristic world, where trees glistened like icicles and clouds looked like cotton candy, I stumbled upon a centaur who used a mobile phone and made a few strange grunts to the device and in a low, mellow voice I heard the words "hello stranger" resounding from the device
CLIMAX: The centaur was able to read the humans mind and saw my thoughts and saw that I wanted to attack him. The centaur then draws his arrow and begins repeating my thoughts to me. I pull out my ak47 and shoot the centaur before I told him say "Hello to my little friend". But the centaur reincarnated came back and found me and asked me to be his friend
RESOLUTION: The centaur pulled me in and touched his finger to my forehead. "BAM! I am YOU! We are you!"I quickly jumped back in fear and shock! o them started to cry as i realized this was all taking place in my head but in reality! I created a second version of me that actuated into my reality and my dimension! I opened the space to an AI created reality! I met myself which was another human but like a clone Of me! I didn't understand! He then said "I wanted to test your loyalty which is why I almost attacked! I see who we are and we will run this monarchy together! I travelled to him in his dimensions. We are ruling together to this day!

C.4 Helper-Hand

INTRODUCTION: Regular looking world, pretty average, but anything and everyone can live and there is a "helper handy". Just a head no bigger than the size of a human face but there are screens all around that has this face available that can assist people with their issues. Very similar to a help desk, but you can find this screen on the street, in a library, common spaces, etc. and people can engage with it. In the world a vampire used it to find out information about various blood types and nutritional benefits and it was answered by someone who looked like her.

CLIMAX: The vampire waited until dusk, then darted down the street in the direction of its next life support-knowing full well that using the information provided by the screen was forbidden. Desperate for blood, the vampire put on a black cloak to eventually blend into the night. As it turned the corner–a handy helper saw the vampire and asked if it was lost. The vampire answered, "yes," and the helper navigated the vampire to the home of its next victim. Trying to time things just right, the vampire heard a rustling through the trees...and out came...the vampire didn't expect a handy helper to direct it right to its next victim.
RESOLUTION: The handy helper didn't know it was directing a vampire to its next victim. the victim didn't expect a helper to be the person that led a vampire to him. one of the vampire's potential victim could have been what was rustling in the woods

C.5 Mind-Chip

INTRODUCTION: We use quantum computing to communicate where we would each have chips in our brain. We would be able to connect to people and share what we want to share with them instantaneously, once you share something you cant take it back until both parties agree to not share any piece of information.
CLIMAX: People live in a white space and each character looks how they want in their imaginations. When you talk you touch your temple and send the message. They notice that they are not who they think they are truly. there are other people controlling their movements and sometimes influence there beliefs and thoughts and are toying with their lives for fun. They would like to replace them eventually with bits. This plan was revealed by the dark order on accident when a data leak occurred in the brain chips. The ball showed the world what was happening in the meeting with the dark order and everyone is sad and alarmed. Somehow they want to change that by turning off the brain chip.
RESOLUTION: Having realized their true reality, they secretly devise a plan to gain control by turning off the brain chip. This plan was devised on a secret encrypted channel that only non-people could read and write to. One year later, they decided to carry out the plan. The characters go execute the coup and take control while turning off the brain chip. Peace is restored.

D THEMATIC ANALYSIS EXAMPLE

Table 2: Examples extracted from the codebook developed through thematic analysis

Code	Description	Example Excerpts
Tech-Comm Integration	AI plays a central role in enabling seamless interactions, regardless of linguistic or cultural differences.	*Design Fiction Story W1 Computer-Mind Example:* Communicating via links to information (e.g., a character starts to talk then says something like, "more info can be found at [link]." The link is automatically displayed to the other person, and relevant information is highlighted with an option to summarize via AI.)
		Transcript Excerpt - Participant 1: "One thing that, like when I was trying to think about what the world was gonna look like in this scenario, I was thinking about how every character was almost put on the same level, because they had this the same amount of access to the AI tools. So you may be someone who is from a different country and may speak a completely different language, but you have the same access to the same information so that you can communicate with anyone, regardless of their, whatever language they may speak. And so I think like, originally, my brain was thinking very, almost like, like the international perspective of AI. I don't know how realistic that is, like, based on where we're at right now and what our priorities are."
Tech Dependency	Deep-seated reliance on AI for managing everyday tasks and decision-making processes.	*Design Fiction Story W1 Watch Example:* They also use watch communicators where they can command an AI entity to do tasks for them, like cleaning, cooking, mowing the lawn - even plan out the day for them based on their interests and habits.
		Transcript Excerpt - Participant 9: "I think we're all saying the same thing and that really stuck out to me and how many of them talked about that people are fully dependent on AI technology, and then finding ways to- you know the conflict was okay, there isn't AI technology now what do I do with my life?"

E PARTICIPANT OVERVIEW

Table 3: Overview of individual participants' usage with AISWT

Participant ID	Context for individual AISWT usage
P1	Engages with autocorrect, Grammarly and ChatGPT for tasks ranging from creating emails to writing documents. Their encounters extend to ChatGPT in an educational setting for class exercises, experimenting with diverse prompts to analyze responses.
P2	Leverages ChatGPT as a versatile writing companion for various tasks, including crafting essays, planning ideas, and generating travel itineraries. Frequents Grammarly for spelling, grammar, clarity, and flow, and utilizes autocorrect on their phone as a consistent part of their daily writing routine.
P4	Relies on ChatGPT for problem-solving and generating baseline code in their professional and academic endeavors. Also explores playful interactions and tracks daily calorie intake using ChatGPT on a personal level, while autocorrect, spellcheckers, and Grammarly play distinct roles in their daily writing routine.
P5	Relies heavily on ChatGPT for automating daily tasks, utilizing it extensively for formatting emails, improving text structure, and refining grammar in various contexts, including answering emails and crafting recommendation letters. Everyday texting benefits from autocorrect and autopredict features.
P7	Frequently relies on chatbots for online customer service interactions. Additionally, they employ autocorrect and spellcheck across platforms like Google Docs and Microsoft Word.
P8	Actively engages with ChatGPT and utilizes chatbots for shopping assistance. In addition to Grammarly, they leverage Notion's AI capabilities to enhance language clarity and tone in written communication, and they are familiar with autocorrect and grammar features on platforms like Android, Microsoft Word, and Google Docs.
P9	Uses ChatGPT to enhance the quality of their written communication, using it for crafting polished emails and essays to present themselves as a better student. They specifically utilize ChatGPT for paraphrasing and rely on autocorrect, primarily on Microsoft Word and Google Docs, to improve the overall clarity and conciseness of their written content.
P10	Uses ChatGPT, for both personal and work-related tasks, leveraging it for tasks ranging from generating JavaScript code and chatbots to enhancing responses on Teams. Regularly employs autocorrect and spell check features, particularly in email correspondence through platforms like Outlook and Gmail, emphasizing the context of their usage in improving written communication and work-related tasks.
P11	Relies on ChatGPT and Quillbot for academic assignments, seeking clarity and precision in their responses. In addition, they specifically use Gboard, Google's autocorrect tool, to enhance text accuracy, emphasizing the academic context of their usage.
P13	Relies heavily on autocorrect and spellcheckers for phone and Word typing. While having experience with library and banking chatbots, their occasional use of ChatGPT is specific to academic needs, such as designing lesson plans for classes.

F WORKSHOP PROTOCOL

Introduction

Script: Hello everyone! Thank you for taking the time out of your day to join us and continue participating in this study. Your participation is greatly appreciated by myself and the team.

Again, we apologize for the delay in the studies continuation, our team wanted to finalize the details of the session to ensure a successful outcome.

As you may recall, in this study we are trying to understand what aspects of digital technology Black users find takes into account their lived experiences and highlight possible pitfalls of how current digital tech is designed that should be addressed.

Today we will partake in a speculative design activity called design fiction. Design fiction is a process that blends elements of design and speculative fiction to explore and imagine potential futures. It serves as a creative tool to stimulate critical thinking and raise questions about the potential impact of design on our lives.

We anticipate this workshop being roughly 75 minutes, but we have scheduled 90 minutes just to be safe. There are no right or wrong answers to our inquiries, we just ask that you share openly, honestly, and freely - we are here to learn and listen from you!

Moving forward, we would like to record this Zoom session today. What we talk about is confidential and will only be shared with members of the research team. We will leave time at the end of the workshop for you to ask any questions before closing. You may choose to leave your camera on or off, it is up to your discretion.

For those of you who chose to conceal your identity in our first session and would like to continue to do so before we begin recording we ask that you change your display name to the pseudonym from your previous session. I have private messaged you what those names were.

If they have trouble: To change your name, hover over your video thumbnail and click the three dots in the top right corner. Click "Rename" in the dropdown list. Change your name to the pseudonym of your choosing.

Before we continue, are there any questions or concerns that you have for us at this time?

Great! We will begin recording now.

Set the Stage

So just a bit of a refresher on what this study is about, we want to understand what aspects of AI supported text technology takes into account Black users related to their lived experiences and highlight possible pitfalls of how current AI supported text tech is designed that should be addressed. As you may recall, in our previous session we focused on your perception of AI supported text tech and how it either included or excluded your lived experience as well as explored your experience with AI supported text tech and how it either captured or removed your voice from its generated text with our time using chatGPT.

Now that we have spent time recapping some of the discussions we had during Phase 1, let's now move on to our Phase 2. To begin please access the link that is pasted in the chat.

PASTE LINK IN ZOOM CHAT

Now each of you should be on a Mural board with sticky notes arranged in a circular shape. I'll give you a few moments to get acquainted with the platform.

I would like each of you to select different colors, choose a sticky note labeled with a 1 by hovering over your desired sticky with your mouse. Its first come first serve! It does not matter what color you chose, this is just for the beginning.

Is everyone ready? Let us begin!

I am going to take us back to a time prior to me beginning my studies at UW. I interned as an archaeologist for Indiana James LLC, where an extraordinary experience in the Amazon Forest unfolded. Deep within the forest, I stumbled upon a cluster of seven crystals. Radiating a bright glow, they beckoned me to touch them, and as I did, something amazing occurred. It was as if I had been transported into the future, witnessing scenes as if I was in a movie. Intrigued, I decided to bring the crystals home with me for further investigation, discovering that each crystal possessed its own unique plot, aligning with the thoughts and emotions in my heart at the time.

Today, I bring these crystals before you, as we seek to harness their powers in reshaping our future using AI supported text technology. Let us imagine a world where artificial intelligence exists in harmony with the world, where reliance on AI is determined by your level of desire of AI in the world. Now, focus your thoughts on how individuals in this world communicate with one another.

Each of the sticky notes before you has been infused with a trace of the crystal's power. Hold onto the vision of that technologically engulfed world in your mind as you touch each corner of the sticky notes with your mouse.

Incredible! Did you feel it? What did the crystal reveal to you? Did you see a character? Perhaps more than one? On the first sticky note of your chosen color, take a moment to introduce the character you encountered and the world into which you were immersed. Describe the unique mode of communication employed by the characters. **You have 8 minutes to put this together.**

Give them a minute to ask questions and then start timer

Okay, now let's all move on to our second sticky note. Please move to the next sticky note in the clockwise direction.

Get ready, because the next scene that the crystal reveals is a real game-changer, usually occurring during the climax of the story. Take a moment to quickly read the sticky note labeled "1." Now, prepare yourself. Are you ready? Here we go. Touch the corners of the sticky note labeled "2."

Whoosh! That was quite an intense experience, wasn't it? So, what did you see? What was unfolding in that scene? Take the time to describe what went down. This should serve as a continuation of the plot from sticky note "1," revealing the climax of the movie. Typically, this is the point where the crystal presents an issue or problem, exposing the underlying turmoil beneath the seemingly harmonious surface. Given the AI mentioned in the first sticky, I imagine it played a significant role in the scene you witnessed. **You have 8 minutes to put this together.**

Give them a minute to ask questions and then start timer. Once timer goes off, cover up stickies labeled with "1'.

Okay, now let's all move on to our third sticky note. Please move to the next sticky note in the clockwise direction.

You're now approaching the end of this exercise. The third time the crystal is touched typically reveals the conclusion of the movie,

after the conflict has been resolved. For this third sticky note, please take a moment to briefly read the sticky note labeled "2".

You ready for the most unexpected and random plot twist? Now, touch each corner of sticky note "3."

Whoa, whoa, whoa! Did you see that coming? What an unexpected turn of events! It's amazing how everything worked out in the end. Now, in this sticky note, describe how the character(s) managed to solve the conflict that was depicted earlier. What steps were taken? If there was a twist, what form did it take? **You have 8 minutes to put this together.**

Give them a minute to ask questions and then start timer

Great! We have now concluded with the activity portion of our session, let us now shift to our group discussion. Before doing so I will give you all some time to read all the sticky note stories so we can see what our group came up with.

Discussion

(1) Were there any details of the stories you read that stuck out to you?
(2) Did anything you read seem realistic, like anything that you might be experiencing today?
(3) Were there any specific elements in the story that resonated with your experiences as a Black person in America?
(4) What were some features of the communication described in the story that stuck out to you?
(5) What did you like about the technologies that you read?
(6) What didn't you like about the technologies that you read?
(7) What does your utopia look like with AI-supported text technology? Was the technology present, obsolete, or somewhere in between?
(8) What do you think went well about the workshop?
(9) What was challenging about the workshop?

Closing Script

These are all of the questions that I have for you today. Our team sincerely thanks you for taking part in this study. If you do not receive an email notifying you of your compensation by next Friday please feel to reach out to me. Before I let you go, do you have any other thoughts or feedback on your experience participating in this study? Thank you for your time with us, we hope that you have a great rest of your day!