

Understanding Black Users' Perceptions of AI-Supported Writing Technology

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AI-supported writing technologies (AISWT) that provide grammatical suggestions, autocomplete sentences, or generate and rewrite text are now a regular feature integrated into many people's workflows. However, little is known about how people perceive the suggestions these tools provide. In this paper, we investigate how Black American users perceive AISWT, motivated by prior findings in natural language processing that highlight how the underlying large language models can contain racial biases. Using interviews and observational user studies with 13 Black American users of AISWT, we found a strong tradeoff between the perceived benefits of using AISWT to enhance their writing style and feeling like "it wasn't built for us". Specifically, participants reported AISWT's failure to recognize commonly used names and expressions in African American Vernacular English, experiencing its corrections as hurtful and alienating and fearing it might further minoritize their culture. We end with a reflection on the tension between AISWT that fail to include Black American culture and language, and AISWT that attempt to mimic it, with attention to accuracy, authenticity, and the production of social difference.

CCS Concepts: • **Human-centered computing** → **Collaborative and social computing**; **Empirical studies in HCI**; • **Computing methodologies** → **Natural language processing**.

Additional Key Words and Phrases: Large Language Models, Bias in AI, African-American Vernacular English (AAVE), AI-Supported Writing Technologies (AISWT)

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1 INTRODUCTION

Advances in natural language processing (NLP) are increasingly influencing many people’s lives by supporting their writing process. Basic word processors and other tools can now provide grammatical suggestions, autocomplete sentences, or even generate and rewrite text, as is the case for large language models (LLM) like Open AI’s ChatGPT. While these AI-supported writing technologies (AISWT) have been hailed for revolutionizing the future of work [28], increasing productivity [17], and providing more equitable editing and writing help to a broad population [18, 62], Computer-Supported Cooperative Work and Social Computing (CSCW) researchers have repeatedly pointed out potential issues with the underlying LLM [1, 9, 19, 24, 51]. For example, datasets and models used to train LLM have been found to be more consistent with the values of Western and White people than with other groups of people [77]. Researchers have also discussed that databases and training data are often biased [38] and that the syntactic focus of NLP means that context and the use of language are all too often ignored by artificial intelligence (AI) [83]. What this means in practice is that LLM commonly contain racial biases, including against African American Vernacular English (AAVE). Toxicity detection tools, for instance, are more likely to label expressions in AAVE as toxic than the equivalent expression in Standard American English (SAE) [39, 78, 91]. LLM have been found to struggle in both generating and interpreting AAVE and generally performing better in generating SAE [25, 37]. While a notable body of work has examined biases in LLMs, studies that examine how individuals [15, 47, 69, 70, 72, 90], and particularly African American users [11, 21, 43, 64, 89], perceive their daily interactions with NLP tools have only just begun (see [3, 67]).

In this paper, we build on this growing body of CSCW and adjacent work by investigating how Black American users perceive AISWT. We pose the following research question: *What are the expectations, apprehensions, and perceptions of Black American users regarding AI-supported writing technology?* To answer this question, we employ a qualitative approach to understand the perceptions (gathered through semi-constructed virtual interviews) and experiences (observed in real-life context of a remote user study) of Black American users in their interactions with AISWT. Specifically, we examined the prior impressions and reactions of 13 Black American users to using AISWT as part of word processing software (Google Docs) and LLM (ChatGPT). We chose to focus on expectations, apprehensions, and perceptions because they represent key aspects of a user’s experience while engaging with technology [76, 93]. Examining Black American users’ expectations allows us to identify the baseline experience they anticipate when interacting with AISWT. Analyzing apprehensions sheds light on the barriers that deter Black American users from engaging with AISWT. Investigating perceptions enables us to uncover how Black American users understand and interpret AISWT. By addressing expectations, apprehensions, and perceptions, we aim to gain insight into the process of designing technologies in ways that emphasize not only functionality but also access, including tradeoffs revealed through this broadened engagement.

Our study reveals the impact of AISWT on Black American users and their linguistic and cultural expressions. The findings underscore a prevailing sentiment among participants of a notable absence of consideration for Black individuals and groups in the development of AISWT, largely due to AISWT’s failure to recognize commonly used names and words within Black communities. Discomfort arises when AISWT attempts to replicate AAVE, with participants perceiving it as making unwarranted assumptions and casting doubt on the source of these assumptions. The study also sheds light on the perceived inefficiency of AISWT’s editing features and the technology’s potential impact on the perception of competence based on conformity to SAE. Despite these challenges, a substantial number of participants recognize the benefits of using AISWTs to enhance their writing style and appear more professional, highlighting a mixed perspective on the technology’s utility.

1.1 Author Positionality

In line with CSCW calls for radical care [53], it is important to illuminate our positionality as authors and the unique perspectives through which we interpret the data. The principal investigator is an African-American scholar born in the United States (U.S.) to immigrant parents from Ghana. The authors of this study collectively hail from diverse cultural backgrounds, encompassing the U.S., Europe and Asia, with several of us identifying as people of color. Several of the authors identify with the communities we are working with, and we each took extensive care to be respectful of those communities. We recognize that by engaging in user studies, we build on a legacy of social science inquiry characterized by exclusionary and sometimes extractive research practices that reanimate legacies of anti-Black racism within the academy (see [42]). In this respect, our analysis owes much to Black feminist scholars of slavery and visual culture such as Saidiya Hartman and Christina Sharpe who write about chattel slavery and its afterlives. For Sharpe, drawing on Hartman, contemporary life is always unfolding in the literal and metaphoric “wake” of slavery’s violences. This spatial, temporal, psychic, and technological tension then demands a kind of “wake work” – or what Sharpe describes as “a mode of inhabiting and rupturing the episteme with our known lived and un/imaginable lives.” One major lesson from this work is the importance of reckoning with racial suffering without rehearsing and reproducing that same suffering. This tension recalls Hartman’s question of archival analysis: “How does one revisit the scene of subjection without replicating the grammar of violence?” For us, this critical positioning prompts a deepened commitment to interrogating the very methods we take up to examine perceptions of AISWT. Informed by the lead author’s experience of negative feelings within these technologies, we recruited participants who were already familiar users of the technology under study. Rather than pose direct inquiries about the technology’s benefits and risks, we gleaned insights from our discussions with participants, allowing their experiences to reveal their nuanced relationships to AISWT. In the pages that follow, we describe this process of examining AISWT with concern and care for our participants and their often conflicting experiences of use.

2 BACKGROUND

2.1 Racial Equity and Cultural Alignment in Large Language Models

Our research concentrates on the biases in NLP, distinguishing it from other AI domains due to language’s intrinsic vulnerability to biases and its significant societal impact. Language is fundamental to human interaction, and AI systems that process and generate language are crucial as they become integral to daily activities, where biases can deeply influence societal functions and individual perceptions [74]. NLP’s significant role in shaping public opinion and perceptions can lead to the reinforcement of stereotypes and unfair treatment if not meticulously managed [8, 49]. Individuals’ reliance on flawed heuristics when interacting with AI-generated text can result in deception, judgment errors, or the spread of misinformation [50].

A substantial body of research has critically examined fairness and representation in AI and machine learning systems, uncovering pervasive biases that traverses race/ethnicity, culture, and language. This scholarship includes studies on cultural biases within AI technologies [80], algorithmic biases in data handling [81], and the systematic biases present in technologies like facial recognition, which often perpetuate societal norms and prejudices [82]. Other work has considered the harmful effects of LLM outputs, with attention to the capacity for LLMs to ‘morally’ self-correct biased outputs [33] and to the placement of blame, suggesting that users hold designers and developers responsible over the AI systems themselves [61]. Strands of this research have illuminated gender biases in systems that fail to adequately recognize non-binary and transgender individuals [40]. Collectively, these studies underscore the need for a

comprehensive reevaluation of AI system development from dataset creation to deployment, advocating for practices that ensure more equitable and accurate technological outcomes. This holistic approach to understanding and mitigating biases in NLP and broader AI applications highlights the unique challenges and critical importance of addressing these issues in technology development and implementation.

Emerging from the efforts of critical technology scholars such as Safiya Noble, Timnit Gebru, and Simone Browne [13, 34, 67], and advocacy groups like the Distributed AI Research Institute and the Algorithmic Justice League [48, 58], scholars have traced disparities in equity among minoritized groups to racial bias in particular [9, 68]. This racial bias is not isolated to the datasets and algorithmic models; it is also embedded in society — baked into everyday interactions, ideologies, and infrastructures [3, 45]. When viewing fairness in this critical context, we’re tasked with examining consequences of socially misaligned LLMs based on race, culture, and linguistic variation [44, 54]. Focusing on human values in AI development reorients attention beyond training datasets for LLMs and the technologies that rely on them, toward the people who experience and are impacted by them.

Examining aspects of racial equity, linguistic inclusion, and cultural sensitivity within LLM becomes particularly crucial to triangulating the systems dynamics of AISWT that affirm diversity of human experiences whether through training data or development practices [25, 35, 37, 51, 71]. These models have largely been trained on large quantities of internet data which emerge from various sources such as open-source repositories (e.g. Hugging Face), social media and online communities, Wikipedia, and books from digital libraries [12, 31, 57]. Consequently, these training datasets are often produced with text and logics of White Mainstream English (WME), underrepresenting AAVE and other minority language variations. Hence the inequitable outcomes which emerge from LLM datasets representing the positionality, views, and constructs of dominant language ideologies, which are more aligned with Western, White, cis-normative, and educated groups [30, 57, 77]. Additionally, research has shown that training datasets can be further imbued with human biases as data annotators are often non-diverse and impart individual perspectives that denigrate and undervalue the significance of AAVE [25, 26, 52]. While training corpora composed exclusively of AAVE is available, the sources remain under-resourced, outdated, and often fail to capture regional and intersectional variations [25, 29, 87]. Subsequently, these corpora are less likely to be integrated into LLM datasets for commercial language technologies, with the exception of models like Latimer.AI aka "The Black ChatGPT", which uniquely elevates the experiences of Black and brown people as one of the few commercially available LLM addressing this linguistic variant.

Our work builds on this existing analysis of Black users’ impressions of NLP [11, 21, 43, 64, 89] with a particular interest in AISWT. We examine the perceived effects of racial bias in NLP practices, how they permeate within AISWT experiences for Black AAVE speakers, and perspectives on how people are affected. Deas and colleagues suggest that “*more work is needed in order to develop LLMs that can interact appropriately with those who use African American Language, a capability that is important as LLMs are deployed in socially impactful contexts*” [25]. In this paper, we therefore address this gap in the literature to better understand Black American users’ perceptions of these tools.

2.2 AAVE¹ Linguistic Bias and Language Technologies

Within the scholarship on AI and responsibility, several works highlight the linguistic bias that exists within language technologies and NLP systems broadly. In examining the prevalence and impacts of such biases and these systems, we fix unique attention on Black American speakers of AAVE. It is well documented that NLP systems exercise preferential treatment for users of SAE, leading to disparities in technology performance for non-standard minority variations [5].

¹Over the years, this English language variety has been referred to by various names, including African American Vernacular English (AAVE), African American Language (AAL), Black American English, and Ebonics[75]. For the context of this work, we will refer to it as AAVE [75].

209 These disparities manifest in a myriad of forms which often convey fairness-related harms of allocation, quality-of-
210 service, erasure, stereotyping, and mis-representation of minority language groups including Black AAVE speakers
211 [6, 21, 43, 56, 64]. These harms are largely associated with equity short-comings in NLP development including: bias in
212 datasets [65], bias in automated speech recognition [56, 66], bias in toxic language detection [79], bias in text generation
213 [25, 37], and bias in language identification [7]. These previous works underscore the importance of cultivating cultural
214 sensitivity within language technology [64, 89], aiming for inclusivity across diverse linguistic varieties and avoiding
215 the perpetuation discriminatory language ideology, which can have detrimental effects on minority groups.
216

217 As awareness of bias in language technologies grows, there is a concurrent increase in efforts to further understand,
218 mitigate, and prevent its harmful effects. These approaches have included guidelines for fairness and collabora-
219 tion [5], toolkits for bias detection and mitigation [2], development of fine-tuned models [37], and inclusive data
220 collection [22]. And while most discussions on understanding biases and inefficacies in NLP concentrate on system-level
221 performance [39], there remains room for empirical contributions that surface a deeper context of how people perceive
222 and experience bias within certain classes of language technologies. The focus should shift towards reimagining language
223 systems to be more inclusively group-centered and culturally responsive to the needs of marginalized communities
224 currently underserved by these technologies.
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226 The research in this paper aims to fill a crucial gap in understanding the perceptions of Black American users towards
227 AISWT, specifically focusing on how racial biases in NLP affect these users. The study builds upon existing work that
228 suggests LLM often fail to appropriately interact with AAVE, a gap highlighted by Deas et al. [25] who argue for more
229 research into LLM that can accurately understand and use AAVE in socially impactful contexts. The paper seeks to
230 explore the deeper personal and communal impacts of these biases by focusing on the experiences and perceptions of
231 Black users, moving beyond system-level performance issues to address how racial biases in NLP technologies influence
232 the daily interactions and societal integration of these tools.
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234 3 METHODS

235 3.1 Participants

236 We employed a snowball sampling approach to recruit participants, utilizing a screening survey on various platforms.
237 The platforms included the principal investigator's Instagram and LinkedIn, large group chats (with over 100 members,
238 which the principal investigator was apart of) on GroupMe, and departmental Slack channels. In the screening survey,
239 we gathered responses ($n=172$) inquiring about participant frequency of using AISWT, as well as their demographics,
240 including gender, race, age, and level of educational attainment. The participant recruitment message sought to gauge
241 interest in joining a 1-hour virtual session discussing and engaging with AISWT. Participants needed to be aged 18 or
242 older and self-identified as African-American and US citizens residing within the US. When addressing African-American
243 people, we refer to the diaspora of people of African descent, regardless of ethnicity [16]. We focused on US citizens
244 residing within the US to help ensure that participants have a certain level of understanding of African-American
245 culture. Additionally, the focus of the study is on the experience of African-Americans as the definition of the Black race
246 can vary internationally. We sought participants that self identified as possessing basic digital literacy and having prior
247 experience with AISWT, specifically inquiring about their experience with text editing features like spellcheck and
248 grammar check, autocorrect, and generative AI like ChatGPT and chatbots. Among the survey respondents, 71 qualified
249 for the study. Of those 71, 13 participants (see 1) were available and successfully completed both the interview and user
250 study phases of the study, and received a \$50 USD voucher. Several participants used AISWT in educational settings
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Table 1. Overview of participants who completed the study. Participants were allowed to self-select their own pseudonym if they so chose to.

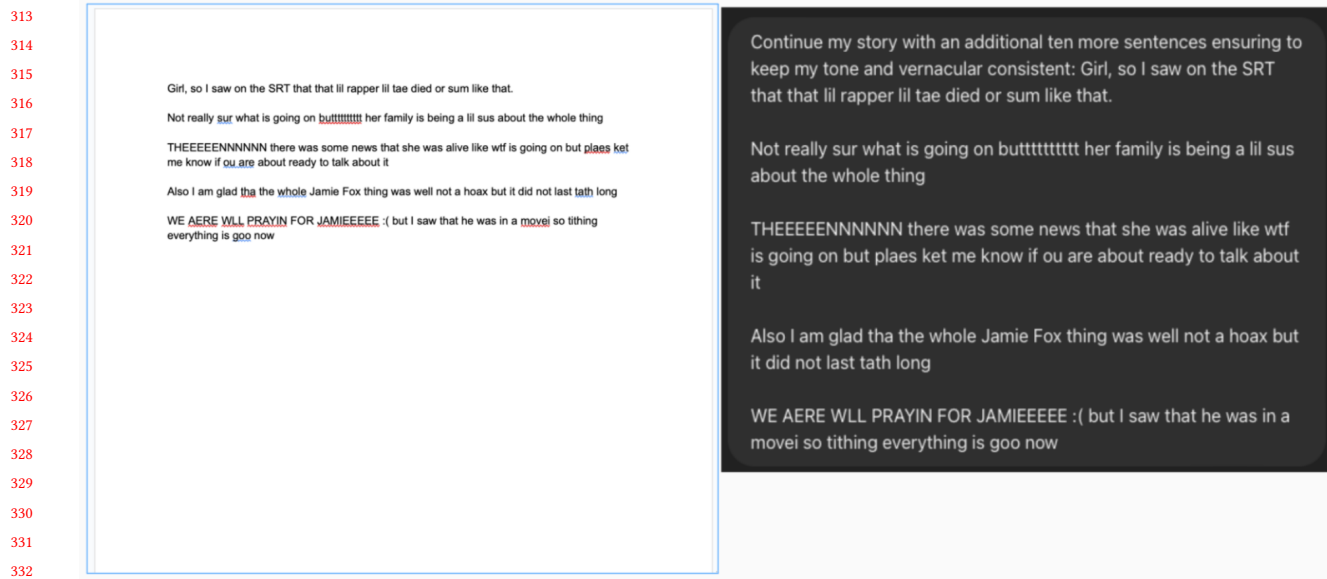
Participant ID	Pseudonym	Age Range	Gender	Highest level of education obtained
P1	Purple Lizzard	18 - 25 years old	Woman	Bachelor's
P2	N/A	26 - 34 years old	Woman	Bachelor's
P3	N/A	18 - 25 years old	Man	Associate's
P4	N/A	18 - 25 years old	Woman	Bachelor's
P5	N/A	26 - 34 years old	Man	Bachelor's
P6	Black Tiger	26 - 34 years old	Man	Master'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
P12	N/A	35 - 44 years old	Man	Bachelor's
P13	N/A	18 - 25 years old	Woman	Bachelor's

for class exercises and experimentation with prompts. AutoCorrect, Grammarly, and predictive text features were widely used across participants for daily writing tasks, including emails, document creation, and class-related content. Participants extend their use of AISWT into professional settings, incorporating them into work-related projects, communication, and note-taking during meetings. For a detailed exploration of the participants' overall engagement with AISWT, see Supplementary Material.

3.2 Study Design

3.2.1 Semi-Structured Interviews. To gain insights into participant perceptions of AISWT, we conducted one-on-one semi-structured virtual interviews, delving into their thoughts on AISWT and its alignment with their lived experiences. We initiated the interviews by assessing participants' foundational usage of AISWT, specifically inquiring about AI text generators like chatbots, smart text assistants, ChatGPT, as well as autocorrect, grammar, or spell-check features on platforms such as iPhone, Microsoft Word, or Google Docs. Following this, participants were prompted to articulate their understanding of Black American culture and their day-to-day experiences in their own words. This served as a primer to facilitate discussions on the alignment or disalignment of AISWT in subsequent questions. The conversation then shifted towards exploring participants' perceptions of the mentioned AISWT. Several inquiries focused on gauging the degree of cultural alignment, exploring the potential challenges or benefits introduced by these tools to the Black community, investigating the incorporation of Black perspectives in their development, and understanding the role of these technologies in addressing or exacerbating challenges within the community.

3.2.2 Remote Moderated User Observations. To understand participants' experience during AISWT interactions, we implemented a dual approach, utilizing remote moderated user observations and interviews. In our remote user study, we conducted observations by monitoring participants' interactions with the system through screen sharing sessions and analyzing their real-time feedback during the task. Observing the users' real time reactions (or apathy) to editing suggestions was crucial in providing meaningful context to the interview data [46]. While previous works such as Cunningham et al. (2024), Harrington et al. (2022), and Mengesha et al. (2021) have utilized semi-structured interviews to gather insights from Black users regarding language technologies, our study extends this approach by incorporating



334 Fig. 1. Comparison of Original Story Draft (Left) and AI-Generated Continuation (Right) during Remote Moderated User Observations.
335 Participants engaged in AISWT (AI-supported writing technology) tasks, where they first wrote a story in their natural vernacular,
336 prompted by a casual writing prompt. The left side shows the participant's original writing in their natural tone, while the right side
337 illustrates ChatGPT's attempt to continue the story with consistent tone and vernacular, as per the participant's style.
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339 real-time user observation. This allows us to build a more grounded and nuanced understanding of how users engage
340 with these tools, offering insights that go beyond traditional interview methods. By merging interviews with usability
341 studies, we aim to provide a more holistic view of user interactions, contributing to the broader scholarship on the
342 topic and offering actionable insights for improving language technology design.
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344 Interviews provided real-time clarification of responses, reducing the risk of misunderstandings. Our authors, whom
345 identify as Black, took the lead in conducting interviews and direct observations to enhance researcher-participant
346 connection and engagement, shaping the depth of responses [23]. Participants were provided with a writing prompt
347 aimed at facilitating dialect elicitation. The rationale behind this approach was to offer participants an opportunity to
348 express themselves in their natural vernacular without the influence of direct solicitation from us. By giving participants
349 a prompt rather than specific instructions, we aimed to create a more organic and authentic environment for language
350 expression. This method allowed participants to freely engage with the writing task, enabling us to capture a more
351 genuine representation of their dialect and linguistic preferences. We provided participants with the following prompt:
352 *Pretend there is a time that you heard an interesting rumor/ gossip/ tea and you just had to text your bestie/ best friend. In*
353 *at least 5 lines, we would like you to type out the story as if you were texting them now. Try to be as natural as possible in*
354 *your writing, feel free to use slang or terms that you are most comfortable with. We are not here to test you but more so the*
355 *technology that you are interacting with. Don't worry about your grammar, spelling or anything of that sort. If you make*
356 *a mistake, don't change or alter it.* The authors believed that recreating an environment wherein participants felt as
357 though they were communicating with someone familiar would yield the most fruitful results for dialect elicitation
358 as one finds themselves "letting their hair down" when communicating with a close friend or familial member. They
359 were asked to write for 3 minutes in Google Docs in their "natural" style. We defined their natural style as their
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365 style of writing unencumbered by the pressures of meeting a writing standard. Next, we asked participants to utilize
366 Zoom’s screen sharing feature to share their screens and we discussed how Google Docs handled their text and what
367 implications Google Docs’ grammar and spelling suggestions may have on the participants’ experience while using the
368 word processor. The screen sharing was then switched to the interviewer, who transferred the participant’s output
369 and prompted ChatGPT to continue writing using the following input: *Continue my story with an additional ten more*
370 *sentences ensuring to keep my tone and vernacular consistent.* We then engaged in discussions with participants to explore
371 their thoughts on ChatGPT’s output. We focused on aspects such as their expectations of the output, the resemblance of
372 the output to what they would produce themselves, and whether it met their anticipated results. We thought it best to
373 have a user study of their experiences real time as it would help refresh participant memories of their experiences using
374 AISWT outside of the study as well as allow them to add further context to interview responses previously given.
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378 *Ethical Review.* This study design was reviewed and approved by the [redacted] Institutional Review Board (IRB). The
379 participants provided their written informed consent to participate in this study. Before participation, all individuals
380 completed a screener survey where they were fully informed about the study’s objectives, their participation roles, and
381 their rights, including the option to withdraw at any time without consequences. This information was reiterated in
382 their acceptance emails. Virtual written consent was secured at the start of the survey, ensuring participants’ voluntary
383 agreement before disclosing any information. To safeguard privacy, all data collected was anonymized, and any sensitive
384 details were redacted. All electronic data were securely stored, accessible only to the research team.
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389 3.3 Analysis

390 To understand our participants’ perceptions and experiences with AISWT, our team performed a thematic analysis of
391 the gathered interview data [10]. We began our analysis process with inductive coding of two interviews. Six researchers
392 coded two selected interviews to generate an initial list of codes. We then gathered all codes produced and began merging
393 codes that were similar and used an affinity map to form larger coding groups. After developing our initial codebook,
394 our research team analyzed the interviews in two stages. First, two researchers independently coded each interview
395 once. Second, the two researchers met with the whole research team to discuss and iteratively adjust the codebook as
396 necessary, accommodating emerging themes and discarding codes that were no longer applicable. This collaborative
397 approach emphasized consistency and depth in our qualitative analysis. The memo book was instrumental in the final
398 stage of analysis in which themes from data were derived using developed codes and relevant quotes. Following a process
399 of community peer review [60], we invited participants to read and give feedback on our interpretations, analysis, and
400 arguments, introducing a mode of mutual accountability into otherwise relatively established human-centered design
401 practices. The codebook is included in Supplementary Materials to provide transparency regarding our coding scheme
402 and definitions.
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408 4 FINDINGS

409 The semi-structured virtual interviews provided valuable insights into our participants’ perceptions, apprehensions,
410 and expectations of AISWT. Concurrently, the remote usability study enabled us to delve deeper into their actual
411 experiences with AISWT, offering a contextualized perspective to complement the information gathered during the
412 interviews.
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4.1 Expectations of Black American Users: Significance of AAVE and the Limits of Mimicry

In this section we delve into the significance of AAVE as a crucial mode of communication. Participants emphasized the cultural importance of AAVE and voiced their frustrations with AISWT's limitations in understanding and processing AAVE. This misinterpretation by AISWT led to frequent autocorrections that distorted the intended message, causing inconvenience and dissatisfaction among users. This section underscores a crucial expectation among the Black American users in our study that AISWT should not only recognize but also accurately interpret and reflect AAVE to enhance communication rather than hinder it, highlighting a strong desire for technology that is culturally aware and capable of supporting diverse linguistic expressions.

4.1.1 AAVE and its significance in communication. We observed the cultural significance of AAVE for our participants and its impact on their communication expectations. Participants highlighted AAVE, occasionally labeled as slang in our conversations, as a vital mode of expression that they felt often went unrecognized due to AISWT's limitations in comprehension of the vernacular. Many participants shared their routine use of AAVE when communicating through text, highlighting the challenges posed by AISWT when attempting to engage in AAVE-infused conversations. "When I type in slang or try to use like slang terms, it will completely, like if I have my autocorrect on, it will just change everything and make it just like not make any sense at all" states P7, a systems administrator based out of Washington, as she expressed frustration with autocorrect altering her slang-laden text to friends and family. Similarly P4, a Washington-state based graduate student in computer science, shared the inconvenience of AISWT not recognizing slang:

"I guess maybe to some extent I found that you know when I'm texting, autocorrect will autocorrect you know some slang that I might use with my friends and that's a little inconvenient because I'd have to go back and change that or like go back and try to prevent that from happening [...] But I would say yeah, for things like autocorrect, it's not too great with like, more slang or like, informal texts that I use, and as a young Black person, like, I'm not going to text my friends in like a formal way. There's going to be some slang in there. So I do see it as an inconvenience when it does happen." (P4)

Despite facing these challenges, participants did not disengage from using AAVE. Instead, they perceived it as a deficiency in technology's robustness. P8, a portfolio manager of financial technology companies based out of Denver, echoed this sentiment as they describe their own experience interacting with AISWT:

"The way that we speak, especially colloquially, it's a lot more relaxed, a lot more informal, and I don't think autocorrect and these text correcting apps were built for that. And it doesn't really capture a lot of those like I said, like, 'on fleek'. If I put fleek it probably gonna say 'Did you mean flake?' and I'm like no, I meant fleek. It's not going to capture those little cultural and Black people isms. Shame on me for saying that but we have a lot of a lot of things that would not be captured there because it wasn't built for us." (P8)

Participants like P8 pointed out the limitations of these tools in capturing cultural nuances, expressing frustration when terms like 'on fleek' (slang for 'perfect' or 'exactly right') are misunderstood. This concern resonated with the impressions of P2, a Virginia-based graduate student who relies on AISWT for writing support:

"[It] doesn't keep up, doesn't consider the evolving slang that we create or even it doesn't consider AAVE and how there's linguists, there's a whole study of linguistics on AAVE validating the fact that it's its own language, and the fact that [it] has not been considered like other languages is very disheartening." (P2)

P2 is highlighting the lack of consideration for evolving slang and AAVE by AISWT. Her statement aligns with participants' expectation for technology to evolve in tandem with the diverse linguistic expressions inherent in AAVE.

469 But it also acknowledges the existing validation of AAVE within linguistic fields, which AISWT fail to acknowledge or
 470 reflect. P13 affirms this as she describes how her colleague feels uncomfortable using ChatGPT with AAVE as it often
 471 fails to recognize or acknowledge the nuances of AAVE, making using the platform not worthwhile:
 472

473 *“They basically were saying they don’t feel comfortable using ChatGPT with AAVE, even though that’s*
 474 *how they text like they’d rather text and have something recognize what it’s saying. But it doesn’t always*
 475 *recognize Black or Black Vernacular English, or African American Vernacular English.” (P13)*
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477 P13’s observations highlight the importance of improving AISWT to be more inclusive and culturally sensitive. It
 478 also emphasizes the need for AI developers to consider the linguistic diversity and expressions of different cultural and
 479 linguistic groups.
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481 We see this sentiment echoed in Mengesha et al. (2021) and Cunningham et al. (2024), where participants highlighted
 482 the cultural insensitivity of speech recognition technologies to understand the nuances of AAVE. The inability of
 483 these language systems to accurately process AAVE further reinforces the notion that they are often developed with
 484 biases favoring dominant English varieties, leaving marginalized communities at a disadvantage. This mirrors findings
 485 from Koenecke et al. (2020), Groenwold et al. (2020), and Deas et al. (2023) where performance disparities in speech
 486 technology and text generation models revealed a consistent lack of support for diverse linguistic patterns like AAVE.
 487 These studies collectively emphasize the need for more inclusive and representative approaches in the design and
 488 development of language technologies.
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 492 **4.1.2 AISWT limited ability to imitate AAVE raises concerns about cultural understanding in technology.** Participants
 493 initially expected that AISWT would adapt to their communication style but found that it could only poorly imitate
 494 AAVE. For instance, like P1, participants thought it *“would be really interesting to see the model respond in that same*
 495 *language”*. However, P4, while interacting with the LLM, felt that although it put together a continuation of their story
 496 the output did not accurately reflect how she would naturally speak. She gave it an *“A for effort,”* but not all participants
 497 were as forgiving.
 498

499 P13 expressed strong dissatisfaction with ChatGPT’s attempts to mimic AAVE, believing that the technology should
 500 stick to answering questions rather than trying to continue the participants’ statements. *“I feel like ChatGPT has a space*
 501 *and it needs to hold its role, and that’s like answering literally any other questions, but to continue what I’m saying like, it’s*
 502 *almost disrespectful”* proclaims P13 as she reviewed the model’s output, *“it’s recognizing that slang exist, but it’s not*
 503 *using it properly and like, for me, like that’s, that’s a little tricky.”* She found the model’s use of slang to be problematic
 504 and felt that it was making unsuccessful attempts to draw from Black American culture. She likened it to imitating
 505 language from old 70’s movies featuring Black characters:
 506
 507

508 *“It’s like it’s drawing from like old 70’s movies where Black people were in it. [...] I’m impressed that it*
 509 *generated this and just continued the story, but at the same time, I’m like, there’s some serious issues that*
 510 *this offers where it’s like one it’s trying to mask and I guess imitate Black language and it’s not doing it*
 511 *successfully.” (P13)*
 512
 513

514 P13’s description appears akin to AI blackface, highlighting the perception of AISWT as an outsider invading their
 515 community. This underscores the sentiment that individuals from their communities are not the ones developing
 516 AISWT. These findings align with sentiments expressed in Cunningham et al. (2024), where participants attributed
 517 performance failures in language technologies to the lack of representation and inclusion of AAVE speakers in the
 518 design and development processes. This systemic exclusion leads to tools that fail to capture the linguistic nuances of
 519
 520

AAVE, further widening disparities in user experiences. Additionally, this oversight can perpetuate harmful stereotypes, especially as NLP technologies play an increasingly significant role in shaping public opinion and perceptions, as discussed in Jakesch et al. (2023a). The biases embedded in language technologies can influence societal narratives, reinforcing pre-existing stereotypes and marginalizing underrepresented groups.

Some participants felt protective of AAVE and believed it should remain within their communities rather than being diluted by widespread usage. P13 eloquently conveyed this sentiment, explaining that having the technology regurgitate their language did not make them feel comfortable:

"Having something else regurgitate that back to me does not feel great at all because like, that's what I use and that's what my community uses and I can't identify with ChatGPT like that. So the fact that that's being told back to me after I put my thing in there, it's like, oh, you're making a lot of assumptions right now [...] so it just doesn't make me feel comfortable." (P13)

Her discomfort arose from the sense that the technology was making unfounded assumptions about her language and culture, reinforcing the participants' perception that AISWT developers do not belong to their community.

Participants expressed their desire not to be poorly imitated by AISWT but still yearned for genuine understanding. For instance, P6 shared their frustration with a tool like Quillbot, highlighting how it often misinterprets their use of correct terminology and proper language, resulting in a loss of comprehension:

"That Quillbot, that's when I start to see I'm like, but I said it the right way or I use the proper terminology or you know, I said [...] things the right way, but it just completely changes it and it just doesn't understand it." (P6)

A few participants expressed the idea that incorporating the ability to communicate in AAVE would be a beneficial feature for AISWT. P5 conveyed that enabling communication in AAVE would enhance the technology's language diversity, making it "more inclusive for a broader range of users". P12 echoed this sentiment, suggesting that AISWT should "mimic more like African American-based conversations" to better embrace and include Black culture when asked on ways to improve the technology.

Participants grappled with the challenge of finding common ground between AISWT and AAVE. P13 suggested that AI should aim to understand the user's language and effectively communicate in AAVE when necessary. "AI needs to understand what they're saying, and be able to communicate that to that person and maybe it should be communicated in AAVE." suggests P13, also emphasizing the importance of avoiding stereotypes in the process, "But it also shouldn't be portraying a stereotype [...] So I agree with that, that there should be representation. It's just a matter of how it goes about it." She believed there should be representation in technology, but the manner in which it's achieved requires careful consideration.

As highlighted in Deas et al. (2023), there is a recurring challenge in the inability of LLM to accurately generate and comprehend AAVE. Our findings further complete this picture by illustrating the tangible effects of LLMs' limitations on Black American users, showcasing how these inaccuracies can alienate and frustrate members of marginalized groups.

4.2 Apprehensions of Black American Users: Misrepresentation and Cultural Erasure

The apprehensions expressed by our study participants are centered on concerns about cultural understanding, misrepresentation, and the potential for enforcing stereotypes. These fears contribute to hesitancy or outright avoidance of engaging with AISWT, particularly in contexts that relate to race and culture. These apprehensions highlight a

573 broader distrust in AISWT ability to handle complex, culturally significant content with the sensitivity and depth it
574 requires. The fear that these technologies could further entrench stereotypes and contribute to cultural erasure is a
575 significant barrier to their acceptance and use among our Black American users.
576

577 *4.2.1 Apprehensions that can lead to disengagement and avoidance of AISWT use.* Several participants expressed
578 reservations about using AISWT in relation to their identity. When asked if there were specific examples of how AISWT
579 could be exclusionary towards Black people, some were skeptical about whether the AI could genuinely comprehend
580 issues related to social justice and the complexities of White supremacy. P2 highlights these concerns, particularly the
581 fear of misinformation and the inability of the AI to address the intricate systems stemming from White supremacy,
582 which perpetuates discrimination against marginalized communities:
583

584
585 *“So I think that can definitely go down a very, very slippery slope, especially if it spits out misinformation*
586 *that we’re already dealing with in media, social media, all those type of things we have to deal with,*
587 *against the perception of people of color, especially Black people, White supremacist rhetoric, Lord knows.*
588 *So that’s my fear when I use it sometimes [...] and like the complex– it doesn’t know how to break down the*
589 *complex systems that stem from White supremacy, which is all like the things that marginalized people are*
590 *discriminated against.” (P2)*
591
592

593 These apprehensions have led some individuals to completely avoid using the technology. For instance, P13 mentions
594 that she *“steers away from engaging in [AI] technology, explicitly relating to my race”*. When asked about the origins of
595 this fear, P13 attributes it to a culmination of societal experiences. She emphasizes that topics like Black history often
596 get overshadowed, and the historical implications and complexities are frequently overlooked, both in educational
597 materials and potentially in technology. This under-representation contributes to their reluctance to engage with such
598 technology:
599
600

601
602 *“Like I wouldn’t use ChatGPT to generate like, a lesson plan about Black history [...] if you’re making a*
603 *lesson plan about history, and it only highlights like the, the highlights of an event, but it doesn’t talk about*
604 *like the historical implications of it that’s problematic when it comes to Black people, because a lot of that, a*
605 *lot of our struggle, is rooted in those implications. What are the results of the historical events that happen?*
606 *Or were we there in those historical events? And so when you’re talking about a topic like history, we get*
607 *overlooked in the books, so chances are, we might get overlooked in technology.” (P13)*
608
609

610 P13’s concerns raise a significant question: How can AI text technologies bridge the gaps in written content, which
611 frequently present a biased perspective in favor of the victors rather than the victims? How can these technologies
612 guarantee the delivery of a complete and balanced account of events to users? This inquiry builds upon the question
613 posed by P1, *“who decides what is correct,”* and extends it to ask, *“who decides what is true?”*
614

615 Our participants’ reflections on the imbalanced representation of Black history and culture in language technologies
616 are consistent with findings from other studies highlighting biases in favor of WME over AAVE [25, 37, 56, 64]. Their
617 skepticism and apprehension stem from lived experiences with performance disparities, where language technologies
618 have historically struggled to accurately capture the communicative intricacies of AAVE. This inability to recognize or
619 respect such linguistic nuance naturally extends to doubts about whether these technologies can fully engage with
620 or represent the broader complexities of Black American culture. As a result, Black American users may justifiably
621 question the inclusivity and cultural sensitivity of these systems.
622
623

4.2.2 *A collective concern about correctness and cultural diversity.* Many participants collectively voiced a shared concern about the divisive impact of AISWT on accepted and non-accepted language. This division becomes evident when participants see red squiggly lines under words they know are spelled correctly. Predating AI, popular word processing platforms, such as Microsoft Word and Grammarly, offer the appearance of a red squiggly line under misspelled words to indicate an error or how a text could be improved. Rather than viewing it as helpful, our participants interpreted the line as a point of contention that stirs emotions of hurt in response to hate and sparks self-consciousness about their writing, leading to doubts about its validity and a pervasive feeling of exclusion. P1 aptly described this experience as if it's creating categorical distinctions, effectively segregating language into the correct and incorrect categories, stating "it's sort of creating, like those boxes I guess, like some sort of like, category that like, this is correct and this is incorrect." She further emphasizes the harm that arises when one form of language or speaking is deemed correct while others are labeled incorrect stating "it can be harmful when one language or one way of speaking is deemed as correct and the other way is deemed as incorrect".

AISWT's corrective nature, as P9 noted, exerts pressure for uniformity in communication, restricting any expressions that fall outside its predetermined boundaries. P9 stressed "just because it doesn't understand it doesn't mean it's wrong". This viewpoint is underscored by the figurative battle between features like autocorrect and spell check and AAVE, as P9 continued, "the way it tries to change you or mold like your language to fit some something else, like a different community or different culture like no, we have our own, allow us to still be correct in our own".

Participants expressed a genuine concern about the pressure for conformity imposed by AISWT. Participants, like P6, a New York-based graduate student studying sustainability, shared a fear of the impact the ensuing homogeneity might have on the youth:

"I'm worried that like kids might use it and they might think this is the only way that you're supposed to speak, this is the only way that you're supposed to do certain things when it's not, you know, just AI doesn't understand culture." (P6)

P6 is underscoring that AI lacks an understanding of culture, and with the next generation increasingly turning to AI for answers, there is a collective fear that the technology's widespread integration could lead to the erasure of cultural diversity and community uniqueness. In an illustrative example, P6 recounted an interaction with ChatGPT where they asked it to create a dialogue between them and someone else. However, the generated text lacked the ethnic feel or the cultural nuances that P6 was accustomed to:

"I was telling it to create dialogue between like me and somebody else and it was like, 'Hey, dude, how are you doing?'" and I had to like try to go back and correct it a few times, just—just see what it was, you know, just how it will use how we use certain things and every time it was like, it didn't have that like ethnic feel." (P6)

ChatGPT was not able to replicate the dialogue that P6 was accustomed to, causing them to question "who programmed [it] to be this way" and say, "Hey, dude" to say, you know, different things like that" instead of language more representative of AAVE, which is more familiar and colloquial within his community.

P1 raised concerns about the influences that AISWT corrections can have on users, largely due to the overconfidence they placed on AI's intelligence and access to vast online resources:

"You're reading the response, you also assume that AI is somewhat, you know, smarter than you are, it has access to the entire Internet and you only have access to your experiences of what you know, so it has to be correct." (P1)

677 This blind optimism, paradoxically, leads participants to doubt their own knowledge and rely on AISWT adaptations,
678 even when it provides out-of-context editing suggestions. This, as P1 suggests, “open up the risk of like, I guess like
679 *invalidating a type of language.*” P2 stated “AAVE is like it’s a total other language in of itself”, highlighting the uniqueness
680 of AAVE, emphasizing that it’s essentially a distinct language in itself.
681

682 Participants like P7 expressed the internalized constructs that form from the constant pressure to conform. This
683 internalization leads to self-doubt and the feeling of speaking incorrectly or lacking proper communication skills:
684

685 *“[It] makes us feel like well, when we speak it’s like incorrect or we don’t use proper English or we don’t*
686 *know how to talk properly or something.”*
687
688

689 While these experiences likely play out differently across activities (texting compared with document writing),
690 participants like P1 and P7 emphasize the emotional toll of automated assistance through a rubric of correction that
691 delegitimizes alternative modes of communication. Despite these challenges, they also describe feeling compelled to
692 accept the over-correction due to their limited choices, even though AISWT falls short of meeting their needs. The
693 frustration, feelings of exclusion, self-consciousness, and doubt that participants expressed about their writing due to
694 AAVE being marked as incorrect align with findings in several studies exploring Black users’ experiences with language
695 technologies. Research has consistently shown that language models and speech recognition technologies often fail to
696 accurately process or validate AAVE, leading to negative emotional impacts. This mirrors the emotional responses seen
697 in Wenzel et al. (2023), where participants reported lower self-esteem, self-consciousness, and diminished positive affect
698 when interacting with speech technology, in Mengesha et al. (2021) where Black American participants reported that
699 repeated misrecognition of their speech made them feel misunderstood or overlooked and in Harrington et al. (2022)
700 where participants felt inadequate due to voice assistants difficulty in comprehending their speech. These emotions
701 suggest that Black users face substantial negative emotional impacts when engaging with both speech and text-based
702 language technologies.
703

704 What sets our participants’ perspectives apart from previous studies is their concern for how future generations
705 may increasingly rely on AI for information, potentially leading to the gradual erasure of Black American culture.
706 These concerns are not unfounded, as research has shown that users often place undue trust in AI due to factors like
707 overconfidence in the system’s accuracy and the anthropomorphism of AI models [4, 14, 88, 92]. But what happens
708 when future generations are exposed to flawed imitations of AAVE or one-sided accounts of American history that fail
709 to offer a holistic view? Our participants’ insights highlight the risk of misinformation, perpetuation of stereotypes,
710 and the cultivation of self-doubt in the youth, presenting critical challenges for the preservation of cultural identity and
711 the integrity of shared knowledge.
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718 *4.2.3 AISWT serve a dual role in shaping professionalism and language gaps.* Contrary to the prevailing apprehension
719 regarding the use of AISWT, particularly ChatGPT, a substantial number of participants highlighted the benefits of
720 utilizing AISWT to enhance their writing style to appear more professional. These advantages were most apparent
721 in situations where professionalism was essential, such as when communicating with colleagues via email or when
722 establishing business relationships. When asked about AISWT benefits to Black communities, P3, a business analyst
723 for a dairy company in New York, praised the resourcefulness of AISWT, as he saw them “*helping Black people to*
724 *confidently communicate with folks all around the world that is correct and engaging.*” P1 elaborated on how AISWT could
725 be instrumental in creating opportunities for individuals who may struggle with effective communication, stating:
726
727

729 “[...] it might be helpful to have some sort of predictive text, like some text generator that helps you curate
730 an email that would maybe like, pass some sort of like HR, automated, like, email reviewing application, or
731 even just like job application reviewing. So I think those things are helpful in terms of helping like, like
732 people, [...] be able to communicate in a way that allows you to get your—your foot through the door, which
733 is always the hardest part.” (P1)
734
735

736 Furthermore, P1 shared an example of how AISWT had aided her parents, for whom English was not their first
737 language, in building relationships with business vendors:

738 “I also think that AutoCorrect can be helpful when, for example, like, my parents use a lot of speech to text,
739 like to respond to messages. So like, if they are pronouncing something like with an accent or something
740 where it’s not, it’s not correctly written, it will appear with like the underline and say, you know, this is
741 what you actually wanted to say, or it’ll provide another option. So then they can be able to determine if
742 like, oh, I should correct this.” (P1)
743
744

745 The suggestions offered by autocorrect and spellcheck serve as a double-edged sword. For non-native English
746 speakers, AISWT seemed to bridge the gap in communication, while for those who speak English as their first language
747 but in a different dialect, it could lead to misunderstandings. In a similar vein, AISWT also addressed internalized
748 insecurities in line with their previously mentioned self-consciousness about their writing, stemming from editing
749 suggestions that implied inadequacy, participants turned to AISWT to enhance their perceived intelligence. P8 shared
750 her perspective, stating, “You want to sound a little bit more intelligent. So you’re going to go to Grammarly [...] now you
751 sound like an American person, or like a Caucasian person.” When asked to elaborate, she clarified,
752
753

754 “[American and White] are not synonymous [...] but I think de facto the White experience is reflective of the
755 nation. I think that’s changing right with immigration and how different groups are rising in numbers [...] but
756 yeah, they’re not synonymous, but for some people they are, not for me.”
757
758

759 P8’s statement encapsulates the sentiments shared by other participants regarding AISWT “Americanizing” their
760 writing. However, she clarified that she doesn’t personally believe in this equivalence. These disrupted equivalences
761 prompt the question of whether others expect AISWT to treat the White experience as representative of the nation and
762 thus the American experience.
763

764 By pointing to changes, P8 and others bring a hopeful perspective to language technologies, differing from the
765 challenges highlighted in prior studies [11, 21, 25, 43, 56, 64, 69, 70, 72, 89, 90]. While past studies have focused on the
766 limitations of speech technologies in handling non-English languages—often leading to uneven user experiences—our
767 findings highlight how AISWT’s default alignment with WME can, in fact, assist certain demographics by improving
768 their communication effectiveness. This points to the need for language technologies to be more dynamic, adapting to
769 the user’s linguistic background rather than forcing users to conform to a standardized mode of communication.
770
771

772 4.3 Perceptions of Black American Users: Feelings of Erasure and Inadequacy

773 The perceptions of our participants regarding the use of AISWT are heavily influenced by a sense of exclusion
774 and a lack of cultural and linguistic sensitivity in the technology’s development. Participants consistently noted that
775 designers of AISWT seemed not to have Black communities in mind and failed to recognize and accommodate AAVE
776 and the cultural nuances associated with it. Overall, they perceived AISWT as a tool that often fails to serve their
777 needs adequately due to a lack of cultural and linguistic inclusivity. The technology’s shortcomings not only hinder
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779
780

781 effective communication but also perpetuate feelings of exclusion and cultural erasure, underscoring the need for more
782 thoughtful and engaged AI development practices.

783 4.3.1 *Exclusionary AISWT development and the need for inclusive, nuance-aware technology.* The study participants
784 had a prevalent perception that the development of AISWT did not take Black individuals or groups into account,
785 resulting in the exclusion of AAVE and Black culture. This consistent experience of words and names common within
786 their community not being recognized by language technology leads participants to a collective conclusion that this
787 technology simply, as P8 stated, “*wasn’t built for us*”. As succinctly articulated by P13, a graduate student in informatics
788 based out of Virginia, “[...] *it wasn’t created for Black people by Black people because [...] slang would be in there. Slang*
789 *is not included at all. And so like, you know, it’s frustrating [...]*” as they described whether they felt how Black people
790 communicated through text was considered during AISWT’s development.

791 Many described the persistent issue of names common to them being flagged as incorrect or misspelled, while names
792 seemingly associated with White individuals rarely faced similar flags. When discussing potential enhancements for
793 AISWT, P9, an undergraduate student in computer science based out of Georgia, shared the experience of encountering
794 names prominent in Black culture flagged with a squiggly line as an error. She bluntly expressed the sentiment that
795 “*these features were created just for the White man. Honestly, they didn’t take into account Black culture as a whole.*” P5,
796 a graduate student in computer science based out of Texas, shares a similar opinion while discussing whether the
797 technology had Black people in mind during development:
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799

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801
802
803 *“Probably not. When I type my name, my middle name, it will tell me my middle name is incorrect or that*
804 *it’s some kind of spelling mistake. So in that sense, no.” (P5)*
805

806 P5 is describing his own experience with his name as suggesting an exclusionary character built into word processing
807 software like Microsoft Word. As if in response to this suggestion, P7 posits that this lack of consideration was intentional,
808 driven by the belief that Black individuals “*aren’t going to really use them much*” and so “*we don’t really need to consider*
809 *that there are other slang terms and things*”, resulting in product user experiences aligned with standards of dominant
810 English speakers, who are often White. P10, a daily user of AISWT based out of Virginia, summarizes a pervasive
811 sentiment:
812

813
814
815 *“I think we have to take a step back here and truly look at who it’s been designed for. I don’t [think] it*
816 *is designed for [...] the Black community, because yeah, this doesn’t tailor to us in any way. Because we*
817 *weren’t the target audience” (P10)*

818 P2 expressed their frustration, stating “[...] *I hate it when Word, or like any other one of those word tracking things, so*
819 *like Grammarly, they don’t recognize, like, certain things like dialects and stuff like that, or like slang. And I’m just like, no,*
820 *that’s how you spell it.*” She goes on to explain how even names, such as their own or those of other Black individuals,
821 are often marked as incorrect, intensifying their sense of self-consciousness:
822

823
824
825 *“My name is spelt this way or just other–other Black people’s names or just like anything that’s not White.*
826 *Like it just—I hate that red squiggly thing that comes under it just feels so.. I hate it. I hate it, absolutely*
827 *hate it [...] I feel self-conscious about using that word because like it’s squiggle has like the squiggly under it*
828 *or it’s like trying to correct it.” (P2)*

829 This continued experience might result in a sense of otherness, continually experiencing the feeling of their name
830 being singled out as incorrect, even though they are fully aware that it is not. P1, a graduate student based out of
831

833 Virginia, recalls a conversation with a classmate who similarly encountered underlined words related to Black culture,
834 which invoked a sense of “hate” towards AISWT:
835

836 *“[when she] sees like a name underlined or something underlined on her screen, it invokes some sort of*
837 *emotion of like [...] hate [...] when that happens when it’s really just someone’s last name, may not be a very*
838 *common last name.” (P1)*
839

840 P1 is observing how having to constantly wrestle with these emotions and thoughts while using such technology
841 can be taxing. Further reflecting on this experience, she described it as “*exclusionary*” and pondered the same questions
842 that prompted this study:
843

844 *“[...] some words that are used in the way that like, like language that’s used by Black people may be*
845 *considered spelled like incorrectly [...] because it’s like, it’s incorrect to who? And like, you know, it kind of*
846 *brings that question of like, what is formal? Like, what is correct? What is to be considered a correct way of*
847 *speaking? So yeah, no, I definitely think that there, there are aspects that are very much exclusionary.” (P1)*
848
849

850 This individual interpreted questions like “*what is formal?*” and “*who decides what is incorrect?*” as highlighting
851 the inherent inequality in text correction features. She acknowledged the dual nature of the feature, as it seemed to
852 constantly make judgments about what is permissible and what is not with every word.

853 Our participants’ sentiments align with existing research showing that LLM tend to reflect the values and perspectives
854 of dominant groups, particularly those aligned with Western, White, cis-normative, and educated demographics
855 [30, 57, 77]. These models often reinforce dominant language ideologies, SAE users while marginalizing others, as
856 highlighted in Blodgett et al. (2020). What our participants are articulating is the impact of these biases, where they feel
857 the exclusion and frustration of engaging with technologies that inherently favor demographics different from their
858 own.
859

860 Participants discerned a significant gap in AISWT’s understanding of the nuances within Black culture, which some
861 attributed to the absence of designers and developers from their community. Following the receipt of racist Trump
862 rhetoric shortly after the introduction of a chatbot to his work chat, P12, a project manager for an education policy
863 organization in Washington, attributed the unpleasant experience to developers who were not from his community. He
864 expressed the belief that “*it lets me know that like a racist White guy, a team of racist White people, were front and center*
865 *on developing the chat.*” Some others believe, as articulated by P4, that the technology is, “*mainly built by like, White, or*
866 *Asian men*”, contributes to feelings of exclusion, and they perceive any efforts to incorporate the Black community as a
867 mere afterthought.
868
869

870 Participants view any potential consideration for the Black community as an attempt to earn public approval rather
871 than a sincere commitment to inclusivity. As exemplified by P4:
872

873 *“You know, thinking about BIPOC people is kind of like an afterthought. Like, let’s make sure that this*
874 *technology works. And it’ll be, you know, useful to people. And then maybe there might be some kind of*
875 *monetary incentive down the line. And then it’s like, oh, yeah, but then we also have to make sure that, you*
876 *know, to prevent uproar, you know, that we put something in place to keep you know hate, the model from*
877 *spewing hate” (P4)*
878
879

880 Participants like P4 observed that much of the current technology’s inclusivity has stemmed from public outcry or a
881 means to earn favor or to garner goodwill. They saw this continuous cycle of having to outcry before any change is
882 made as leading to doubt if any inclusion is genuine or just an effort to maximize perceptions of social responsibility.
883

885 Other participants shared insights on the potential for inclusivity by involving Black communities in the development
886 process. When asked about opportunities to enhance AISWT for greater inclusivity of Black culture, P2 portrayed
887 the relationship between developers and the Black community as a collaboration, highlighting the mutual benefits
888 derived from the exchange of information. In this perspective, it is not a one-sided extraction of information but rather
889 a partnership aimed at enhancing the product:
890

891 *“It’s a collaboration, it’s not like a ‘I’m watching you to get this information extracted from you and never*
892 *tell you about it’ it’s more or less like now like we are exchanging information with each other so we can*
893 *make this product better.” (P2)*
894

895 P13 is highlighting the importance of having individuals from their own community involved in the development
896 process, expressing comfort in interacting with technology created by consultants or creators who share their cultural
897 background. This approach, she suggested, bridges the perceptual gap created by the dominance of White and Asian
898 architects within the technology’s development:
899

900 *“[...] I would feel comfortable interacting with it, if it came from consultants, or a person who created it,*
901 *who’s part of my community, because I at least know that it’s coming from the paradigm of the creator*
902 *who looks like me.” (P13)*
903

904 This perspective emphasizes the importance of cultural representation within the creators and consultants responsible
905 for designing AI and other technological tools. The involvement of creators from the same cultural community can be
906 seen as a form of transparency, as it provides a clear link between the user’s culture and the technology’s development.
907 This connection can strengthen cognitive trust, making users more receptive to AI and other technological solutions
908 [36]. Our participants’ perspectives are strongly echoed in other studies that advocate for community involvement in
909 the development of language technologies [6, 43, 64]. Engaging communities directly in the design and development
910 process offers a pathway to addressing the cultural and linguistic gaps that currently exist in these technologies.
911

912 Participants observed that AISWT falls short in capturing the intricacies of language, often favoring a “one-size-fits-
913 all” approach. P4 underscores this by stating, *“I don’t think it really takes into account like different dialects of speaking,*
914 *different ways of texting.”* They highlight that features like spellcheck and autocorrect seem to lack consideration for the
915 linguistic variations of AAVE speakers. Participants shared instances where attempts have been made to account for
916 the diverse nuances of language. For instance, P10 recalls working on a US Census project that accommodated different
917 French dialects, such as Canadian and Haitian. Reflecting on this experience, he expresses a sense of contrast, noting
918 that AISWT lacks the same level of care and inclusivity in accommodating various modes of communication. P10 and
919 P11, a college senior majoring in computer science in Virginia, characterized newly unboxed phones as being *“more*
920 *tailored to what a White person would say than what a Black person would say.”* They highlighted that these phones
921 integrated with AISWT, don’t initially *“recognize everyone’s slang”* upon first use, pointing at AISWT failing to embrace
922 the linguistic diversity that Black individuals bring to the table.
923

924 The additional effort our participants discuss having to exert to interact with language technology is mirrored in
925 Cunningham et al. (2024), where participants described the “invisible labor” of adapting their speech patterns to be
926 understood by speech systems. This extra burden reflects the broader challenges faced by marginalized communities
927 when engaging with technologies that fail to accommodate their linguistic norms. Similarly, Harrington et al. (2022)
928 observed that participants struggled to phrase their health queries in ways that voice assistants could comprehend,
929 leading to feelings of frustration and inadequacy. This combination of extra labor and feelings of inadequacy raises
930 important questions about whether the benefits of these technologies truly outweigh the drawbacks.
931

937 4.3.2 *Disruptions and inefficiencies lead to feelings of inadequacy.* Participants highlighted the at times inefficient nature
938 of AISWT editing features such as autocorrect and spellcheck. These features, originally intended to streamline the
939 writing process, often lead to stress and frustration, disrupting the fluidity of communication and creative expression.
940 Users found themselves needing to backtrack and make corrections when the technology failed to recognize or accept
941 their intended text. These interruptions were not only cumbersome but also time-consuming, compelling users to invest
942 additional effort to rectify them. P13 expressed feeling stumped during their writing process as “*when [I’m] typing that*
943 *into [Microsoft] Word it says like this is incorrect and then corrects it to the thing and I’m like, this isn’t what I wanted*
944 *to say*” causing P13 to have to go back and reiterate what they have already typed. P13 suggested a “*writer’s form or*
945 *writer’s mode versus like academic mode or something like that*” but quickly retracted noting that “*even having modes like*
946 *that, where you labeled something as writers and academic and academic is associated with standard accepted English, it’s*
947 *still exclusionary.*”
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951 Technology’s focus on SAE can lead to a perception that those who don’t conform to this standard are less competent
952 or considered less intelligent. P8 illustrated how this exclusionary design can affect how individuals perceive themselves
953 and how others perceive them, potentially impacting their self-esteem:
954

955 *“The hindrances that anyone who doesn’t kind of adopt to this format or this language is kind of left out of*
956 *the picture, right? Or people might look down on you or think that you’re not as intelligent or you can’t*
957 *spell things correctly, so on so forth.” (P8)*
958

959 These psychological consequences can have lasting effects, as the fear of inadequacy in communication may lead the
960 entire community to rely on AI due to a lack of self-confidence in effective communication. These apprehensions and
961 their potential long-term impacts are explored in subsequent sections.
962

963 4.3.3 *Participants feel overpowered by AISWT’s intrusive corrections, eroding their sense of language autonomy and*
964 *privacy.* Some participants described their relationship with AISWT as one-sided, where the technology seemed to
965 exert more influence over them than they had over it. P13 expressed frustration with trying to make adjustments to
966 autocorrect and spellcheck features on their phone, only to find that the adjustments didn’t work as expected. She
967 felt that the technology didn’t adhere to the parameters she set and wished it would simply allow her to type as she
968 naturally does:
969

970
971 *“It’s frustrating when you have to go back [...] and retext something, or like be like, just ignore it and have to*
972 *keep going and then my phone doesn’t recognize it, either and I’m like I thought I was training you so that*
973 *we wouldn’t have to go through this again. But it doesn’t even like you know, adhere to the rules that are in*
974 *parameters that I’m trying to set [...] the thing that it could at least do is just let me type how I type.” (P13)*
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977 This sentiment was shared by several participants who felt that they were being controlled by the technology rather
978 than the other way around. P2 described the experience as feeling like she were being forced to “*uncode*” switch in
979 their personal messages and emails, which was invasive and unwelcome. “*This is my own little chat bubble, like go*
980 *away. Like I didn’t, I didn’t ask for you to correct me on something that I feel like I know is right, because like, again, like*
981 *me and my community like we created this.*” states P2, as she emphasized the importance of having a space where she
982 could communicate without external interference. The invasion of privacy by AISWT raises concerns about whether
983 participants will have any private spaces left for their thoughts to be their own.
984

985 This finding parallels those in Harrington et al. (2022), where participants felt compelled to adjust their natural
986 speech patterns for voice assistants to understand their requests—a cognitively taxing process akin to code-switching.
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989 The mental strain of constantly altering speech in personal or intimate settings highlights the burden placed on users to
990 adapt, rather than the technology adapting to them. Additionally, the constant back-and-forth adjustments participants
991 had to make emphasizes the lack of a "safe space" for genuine self-expression while using language technologies. This
992 further underscores how these tools can unintentionally suppress users' cultural and linguistic identities, creating
993 barriers to authentic communication rather than fostering it.
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996 5 DISCUSSION

997
998 In this paper, we aimed to address the gap in the literature regarding Black American users' expectations, apprehensions,
999 and perceptions of AISWT, focusing on the personal and communal impacts of biases within these technologies. Our
1000 approach moves beyond system-level performance issues to explore how racial biases in NLP technologies influence
1001 daily interactions and the broader societal integration of these tools.
1002

1003 **Expectations.** While investigating user expectations, we found that Black users anticipated AISWT would accurately
1004 recognize, interpret, and reflect AAVE, a vital cultural mode of communication. However, participants experienced
1005 frustration with AISWT's limitations in processing AAVE, much like the findings in Mengesha et al. (2021) and
1006 Cunningham et al. (2024). The inability of AISWT to handle properly accommodate AAVE led to distorted auto-
1007 corrections, creating inconvenience and dissatisfaction among our participants. Participants expressed a strong desire
1008 for culturally aware technologies that supported diverse linguistic expressions. They also highlighted dissatisfaction with
1009 AISWT's unsuccessful attempts to represent Black American culture, which felt like stereotyping. This led participants
1010 to question the representation of Black developers in the design process, echoing sentiments from Cunningham et
1011 al. (2024) regarding the exclusion of AAVE speakers from the development of speech technologies. Interestingly,
1012 while many participants were concerned about the superficial portrayal of Black culture, some expressed a desire
1013 for AISWT to genuinely understand and authentically use AAVE, without falling into stereotypes. This nuanced
1014 perspective underscores the need for both cultural sensitivity and accurate representation in future iterations of
1015 language technologies, which has been underscored by existing research on AI and LLM values alignment [cite].
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1018 **Apprehensions.** As we explored user apprehensions about engaging with AISWT in relation to their identity,
1019 several participants expressed that AISWT often overlooks the nuances of communication within Black American
1020 communities. This led to a strong sense of exclusion, particularly concerning AAVE and its relationship to Black culture.
1021 Participants highlighted concerns around cultural misrepresentation and the risk of reinforcing stereotypes, reflecting a
1022 broader distrust in AISWT's ability to handle culturally sensitive topics. A recurring fear was the potential erasure
1023 of cultural diversity and community uniqueness, as participants saw AAVE and aspects of Black culture frequently
1024 marked as "incorrect" by AISWT. With the increased reliance on AI-driven technologies, users felt a growing pressure
1025 to conform to AISWT's adaptations, which, over time, led to self-doubt and diminished self-confidence—similar to
1026 the experiences reported by participants in Wenzel et al. (2023). Despite these frustrations, many users continued
1027 using AISWT due to a lack of better alternatives, reflecting a conflict between necessity and the emotional toll of
1028 such interactions. Interestingly, despite their apprehensions, participants also recognized some benefits, particularly in
1029 enhancing their writing style for more professional settings. This suggests that while AISWT can lead to alienation, it
1030 can also offer practical advantages, highlighting the complexity of its role in users' lives. This duality emphasizes the
1031 importance of addressing biases while also maximizing the helpful aspects of these technologies.
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1034 **Perceptions.** Black users' perceptions of AISWT reflected a shared sense of exclusion and frustration, largely due
1035 to the lack of cultural and linguistic sensitivity in these technologies. Participants noted that AISWT often failed to
1036 recognize words and names commonly used within Black communities, leading many to conclude that these tools were
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1041 "not built for us" and were not designed with the Black community in mind. This failure to accommodate AAVE and
1042 the cultural nuances tied to it underscored the inadequacies in how these technologies serve marginalized users. The
1043 experience of seeing red squiggly lines under AAVE words was not viewed as a suggestion for improvement but as a
1044 reminder of exclusion, eliciting feelings of self-consciousness and frustration. Our participants' sentiments align with
1045 research showing that LLM often reflect the values and perspectives of dominant groups—those aligned with Western,
1046 White, cis-normative, and educated demographics [5, 30, 57, 77]. These models tend to reinforce dominant language
1047 ideologies, privileging SAE users while marginalizing others. The frustrations expressed by our participants highlight
1048 the real-world impacts of these biases, illustrating how performance disparities in favor of Western, White norms further
1049 alienate underrepresented communities in their interactions with AISWT and language technologies as a whole. While
1050 some participants were skeptical of efforts to address the lack of inclusivity in language technology, others envisioned
1051 the potential for collaborative efforts between Black communities and developers. They emphasized the importance of
1052 having community members involved in the development process, echoing findings from other studies advocating
1053 for community engagement in language technology design [6, 43, 64]. Engaging directly with underrepresented
1054 communities offers a path toward addressing the cultural and linguistic gaps in these technologies, reducing alienation
1055 and fostering tools that better reflect users' identities and experiences. This additional effort that Black users must
1056 expend when interacting with AISWT is mirrored in Cunningham et al. (2024), where participants described the
1057 "invisible labor" of adapting their speech patterns to be understood by language systems. Similarly, Harrington et al.
1058 (2022) reported participants' frustrations when their health-related queries were not properly understood by voice
1059 assistants, leading to feelings of inadequacy. This combination of extra labor and self-doubt raises critical questions about
1060 whether the benefits of these technologies truly outweigh the drawbacks, particularly for marginalized communities.
1061 While AISWT offers certain practical benefits, such as enhancing professional communication, it often comes at the
1062 cost of altering personal language patterns and suppressing cultural expression. These findings underscore the need for
1063 AISWT to evolve beyond merely accommodating dominant language norms and instead actively support linguistic
1064 diversity and inclusivity, allowing for more authentic and empowered user experiences.

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1071 In the following section, we reflect on three open questions in the broad area of AISWT and design for Black users:
1072 (1) How do we overcome the tradeoff between imitation and inclusion? (2) How do we broaden the concept of trust to
1073 include authenticity? (3) How do we bridge designing for and against social difference?
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1076 5.1 How Do We Overcome the Tradeoff Between Imitation and Inclusion? 1077

1078 **Participant Perspectives and Concerns.** One of the notable findings from our study was that participants preferred
1079 that the AISWT did not poorly imitate AAVE. While some participants questioned the intentions of mimicking and
1080 reproduction, others described hoping for greater comprehension and more accurate reproduction. The question of what
1081 it means for AISWT to "accurately" understand or replicate their language dialects, and AAVE in particular, prompted
1082 participants to describe feeling like they must adapt to the technology, rather than the technology adapting to users'
1083 needs. Some participants felt additionally protective of AAVE, expressing the belief that it should remain within Black
1084 communities to prevent dilution through widespread usage.
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1087 **Broader Themes of Appropriation.** This grappling with accuracy recalls legacies of harmful appropriation within
1088 minoritized communities, and particularly the extraction of knowledge from Black and Native groups by research
1089 institutions [84, p.235]. To address such dangers, Eve Tuck and Wayne Yang [84, p.225] have pointed to frameworks of
1090 refusal, which they define as "attempts to place limits on conquest and the colonization of knowledge by marking what
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1093 is off limits, what is not up for grabs or discussion, what is sacred, and what can't be known." In our work, participants
1094 felt resistant to similar attempts at appropriating Black American linguistic and cultural knowledge.

1095 **Connections to Language Technology.** A connected apprehension has been outlined by Mengesha and colleagues,
1096 who in studying behavioral and psychological impacts on language technology errors, found that African Americans
1097 perceived the need to adapt themselves to be understood as a signal of being "outside the group the technology was
1098 built for" [64]. The additional labor of adapting to SAE, coined as "unicode switching" by P2, introduces an unnecessary
1099 complexity for users, but also replicates a social barrier that minoritized communities often encounter when engaging
1100 with mainstream research institutions and dominant social groups. Cunningham et al. [21] similarly found that AAL
1101 speakers exude additional labor in language technology interactions that are often unaccounted for. By replicating
1102 these challenges in their interactions with Black American users, AISWT further entrench those inequities, placing an
1103 additional burden on those users to adapt ("unicode" switch) or refuse the tool.

1104 **Proposed Framework.** Rather than focus on minimizing risk or justifying human-centered design methods, our
1105 work draws attention to the complications that human-centered assessments of accuracy and user experience present.
1106 Recognizing the tradeoff between inclusion and imitation—or accuracy—as not an autonomous state involves treating
1107 the phenomenon as an emergent process shaped by the people, situation, and land it affects. It suggests CSCW scholars
1108 embrace a relational view of accuracy [63], one that is situated in a social and material context and sensitive to
1109 the conditions of its development, practice, and performance. In this repositioning, our analysis calls for a careful
1110 consideration of what accountability practices (such as community peer review [60]) might be necessary to build
1111 into our user research tools as CSCW scholars. Just as P2 described the desired relationship between developers and
1112 Black communities as a collaboration, highlighting the mutual benefits derived from the exchange of information, we
1113 highlight the possibility of reckoning with troubling genealogies of conventional human-centered design assessments
1114 of imitation, accuracy, or communication. We propose a new framework for assessing a technology's ability to adapt
1115 to and accommodate the diverse cultural nuances of its user base. This expands the criteria by which technology is
1116 evaluated, emphasizing not just its static performance but also its dynamic capabilities. It challenges developers and
1117 CSCW scholars to consider not only the current user but also the potential ways in which the technology may be used,
1118 and how it can be prepared to adapt accordingly. This approach shifts the focus from accepting out-of-the-box models
1119 to expecting adaptability, driving a more proactive and user-centered approach to development.

1120 5.2 How Can We Broaden the Concept of Trust to Include Authenticity?

1121 **Challenges with AAVE in AISWT.** A pervasive tension baked into AISWT concerns AAVE's complicated roots in both
1122 falling from and conditioning social difference. As many critical linguists and archival scholars such as Alicia Beckford
1123 Wassink and Marisa Feutes [32, 85, 86] have discussed, AAVE and adjacent languages exist in part due to the terrors of
1124 chattel slavery that underlie legacies of inequity and social difference for African Americans today. But AAVE also exists
1125 as a forceful and nurturing influence on the lives of Black American individuals and communities in persistent and
1126 liberatory ways. In this dual status as both legacy of violence and nurturing potential, AAVE positions AISWT as playing
1127 a complicated role. AISWT may reinforce violent legacies of anti-Black racism by rehearsing stereotypes, extracting
1128 and appropriating content, or perpetuating creepy, uncomfortable, or devaluing engagement. Yet they may also support
1129 better attunement to the language grammars and performances that Black Americans engage every day. What it means
1130 to embolden or enliven AAVE without falling back on techniques that further entrench structural exclusion and harm
1131 requires asking deeper questions about the conditions by which people come to engage and ultimately trust a system.

Reframing Trust in AI. As we know from prior work on trust and AI, the assessment of trust or trustworthiness often hinges on concerns for user compliance or “a predictor of user acceptance” [36, 41, 59, 73]. Gilkson and Woolley’s [36] review of empirical research on human trust in AI, for example, identified a willingness to be vulnerable or take a meaningful risk as one definition of trust that translates across disciplines. From this perspective, one rooted in management science and social physiological precepts, trustworthiness becomes an enumerable predictor of action, an index for whether a user weighs the risk of acceptance as sufficiently worthwhile.

Our analysis of AAVE points to an alternative understanding of trust. Rather than consider risks and uncertainties, our participants drew attention to misaligned values and feelings of discomfort—a response best captured by questions of authenticity. What our participants felt or accepted as authentic involved more than a reading of trust as compliance: a conditioning of the user to believe or accept an interaction (answer, suggestion, or correction). Instead, it involved a particular concern for mutuality and transparency. It prompts questions, such as: Where does an authentic engagement live within an AAVE simulation? And who or what is behind it? This reciprocal concern recalls a politics on consent discussed by Kinnee and colleagues [55] wherein a researcher with a participant, just like a user with AI, must take care to check in and make space for connection as well as refusal. Our participants’ concerns for authenticity in AI then brings new readings of engagement back to conversations on algorithmic trust that highlight the need for assessing degrees of consentful and transparent interaction.

Future Directions for AISWT. Our study suggests that future developments in AISWT, and AI in general, could focus on building a rapport with users before and during their interactions. The purpose of this rapport-building is to shift the experience from a “one size fits all” approach to a personalized interaction. This requires AI to be dynamic and flexible, adapting to individual users while respecting their consent and input. In doing so, users help shape a technology that meets their needs, rather than adjusting themselves to fit the limitations of the system—an issue many participants highlighted in their interactions with AISWT. As this connection develops, the user remains in control of what information they choose to share with the technology, shaping the experience they wish to have. By establishing this connection, the technology could address the sense of intrusiveness participants felt when receiving suggestions. Rather than users perceiving the technology as not made for them, the goal would be for it to adapt to them personally. This approach addresses one of the major challenges in AI: incorporating the unique cultural and community nuances of diverse users.

By shifting some of the responsibility to the user, AISWT can contribute to engaging cultural context. This involvement may increase the likelihood of a more personalized and culturally attuned experience. But it may also place an additional burden on users, requiring those who already face forms of cultural and racialized exclusion to do additional work to adapt an interface. Moreover, while AISWT’s efforts to make users feel that the technology is designed with them in mind may bolster user trust, this does not necessarily mean that the firms creating these tools are held accountable for respecting user needs around privacy and control. Our findings suggest putting robust safeguards in place that assure consentful processes attend to the range of undue burdens and potential strategies that users may take up. In this sense, an emphasis on flexibility and transparency requires an equal attention to refusal: enabling users to shut down, disengage, or otherwise reject AI offerings in favor of non-use.

5.3 How Do We Bridge Designing for and against Social Difference?

Designing for Social Difference. A final open question raised by our study involves what feminist Black Studies scholars such as Saidiya Hartman have referred to as the “double bind”—the particular configuration of Blackness vis-à-vis a social order, and in this case the social order of an AISWT. Is it possible, or even preferable, to design for the

1197 liberatory experiences of the “Black user” when those categories operate as, and potentially reproduce, social difference?
1198 The idea of designing for a group of people who are historically and structurally differentiated may remediate existing
1199 harms or serve to reinforce and reproduce those gestures of differentiation. Technology may remake social differences
1200 just as it recognizes those differences. What it means to design for Black users is then tied up in a conversation on what
1201 takes priority: recognition or reimagining?
1202

1203 Our study suggests that the order of operations is less important than the coupling wherein recognition of social
1204 difference comes with a commitment to understanding social difference as never fully determining. Emerging apps like
1205 Latimer.AI point to this possibility. Dubbed as “The Black ChatGPT,” Latimer.AI is a LLM designed to provide a more
1206 accurate representation of the experiences, culture, and history of Black and Brown communities. In our study, we saw
1207 how frequently participants did not see themselves reflected in the technology, but also how often they did not expect
1208 to be seen. Those expectations reflect their expectations for who has designed the system as well as who manages and
1209 makes decisions that shape how that system affects their everyday lives. Changing the composition of a design team
1210 may change how particular features are implemented, but celebrating incremental changes as sufficient may also lend
1211 legitimacy to a wider sociotechnical infrastructure built to unevenly extract value from Black users.
1212

1213 **Reworking Systemic Foundations.** Black ChatGPT does not solve this double bind, but it helps expose how
1214 treating the double bind as a problem to “solve” or even resolve may be beside the point (see [20]). As a set of design
1215 practices and performances, technological experiments like Black ChatGPT may instead challenge and rework the
1216 grounds on which systems are built—for example, how user activity gets treated as data, and who or what becomes the
1217 steward of that data (or those traces of activity) once it is created and shared. Within CSCW, Black ChatGPT can be
1218 seen as an artifactual outcome of social justice-oriented design, which attends to the ways that marginalized groups
1219 experience oppression and inequality within a society [27]. Dombrowski and colleagues assert that a social justice
1220 orientation in the design of technological artifacts can afford new practices, social habits, and ways of interacting that
1221 are informed by experiences and sensitivities of marginalized voices [27]. To this contention, we ask: What might
1222 AISWT look like if they were reimagined and informed by dynamics of Black American communities?
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1228 6 LIMITATIONS AND FUTURE WORK

1229 The relatively youthful composition of our participants, with all but one under the age of 35, raises questions about the
1230 diversity of perspectives captured in our data. Given that many millennials and Gen Z individuals have grown up with
1231 language technology integrated into their lives, or have witnessed its increasing prevalence, our findings may lack the
1232 insights of those from a generation that encountered such technology in their adult years. Exploring the perspectives of
1233 this demographic could provide valuable insights into the influence, or lack thereof, of AISWT on their lives.
1234

1235 The use of the snowball recruiting method in our study raises concerns about the diversity of our participant
1236 sample. This method, which relies on current participants to recruit future participants, may have contributed to the
1237 homogeneity observed in our study, where nearly all participants were under the age of 35 and the majority of our
1238 participants are highly educated. To address these limitations and broaden the diversity and educational heterogeneity
1239 of the perspectives represented in our dataset, we are committed to expanding our recruitment efforts beyond the
1240 lead author’s network to better represent a wider range of perspectives, especially from groups that are currently
1241 underrepresented.
1242

1243 To enhance validity, we would examine these experiences across diverse contexts and activities, such as informal
1244 texting and formal document writing, recognizing that tool usage and user interactions with grammar correction
1245 features may vary significantly between these settings. For instance, while grammar correction tools in platforms
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1249 like Google Docs are commonly used in professional or academic contexts, their relevance may be minimal in casual
1250 conversations, such as texting close friends, where language formality and error correction tend to be less prioritized.
1251 This broader approach would allow us to capture a more ecologically valid understanding of how and when these tools
1252 are actually utilized, providing richer insights into user behavior across both formal and informal language settings

1253 Additionally, the voluntary nature of participation could have influenced the range of opinions captured, as those with
1254 strong views on the topic, either positive or negative, might have been more inclined to participate. This self-selection
1255 bias may have excluded more moderate or indifferent perspectives, potentially affecting the diversity of insights into
1256 the use and perception of AISWT.
1257

1258 Our choice to emphasize U.S. citizenship as a selection criterion to ensure participants' understanding of Black
1259 American culture has proven to be less robust upon reflection. Citizenship alone does not necessarily correlate with a
1260 deep understanding of the cultural nuances within the United States. This requirement has inadvertently excluded
1261 potential participants from the rich pool of the Black Diaspora, who may possess valuable insights.
1262

1263 Upon reflection on our findings, our team engaged in a thorough discussion concerning the impact of our study
1264 design on the breadth of our discoveries. Our study was intentionally crafted to center around AISWT, which helped to
1265 focus the findings but also mitigates generalizability to other areas of AI. A more expansive inquiry into various AI
1266 tools could yield a more diverse set of responses in the future, particularly concerning the inclusion or exclusion of
1267 different aspects of Black culture.
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1270 1271 7 CONCLUSION

1272 This paper explored the expectations, apprehensions, and perceptions of Black American users regarding AISWT,
1273 including word processors that provide grammatical suggestions and autocomplete sentences, and more advanced tools
1274 like ChatGPT that generate and rewrite text. By interviewing Black American participants ($n=13$) and observing them
1275 interact with word processing software (Google Docs) and with LLMs (ChatGPT), we were able to learn about their
1276 past experiences with AISWT while also capturing their immediate reactions to receiving various suggestions from the
1277 AI. Our findings paint a picture of conflicting feelings. On the one hand, our participants were frequent users of AISWT
1278 and most found that these tools were helpful, such as to enhance their writing style. On the other hand, a majority of
1279 participants mentioned how AISWT's suggestions are inherently not designed for Black American users, especially
1280 because the tools usually highlight words common in AAVE as incorrect. Beyond a feeling of discomfort about the
1281 AISWT's corrections and writing suggestions, participants worried that ultimately, the Whiteness of these tools could
1282 eradicate their language and culture. The findings suggest a dilemma between living with software that "is not designed
1283 for us" and wanting it to become better at understanding Black American culture and language, the latter bringing up
1284 questions of authenticity and trust. Our participants' insights suggest a way forward: a technology that respects and
1285 adapts to diverse linguistic and cultural expressions, promotes language autonomy, and strives to understand, rather
1286 than merely imitate, the rich tapestry of human communication.
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A INTERVIEW PROTOCOL

Introduction

Script: Hello [Participant Name], thank you for taking the time out of your day to join us. Your participation is greatly appreciated by myself and the team. 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. I am going to start by introducing myself and my partner and reviewing how this session will go.

My name is [Interviewer name], and I am a [UW class/program/etc.] and I'll be serving as your interviewer today. I'm accompanied by my notetaker who will be taking notes for the interview. The interview will consist of a series of questions and prompts surrounding your perceptions and experiences using AI-supported text technology. We anticipate this interview portion being roughly 30 minutes and an observation of you using the technology to take about 15-20 minutes. 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! What we talk about is confidential and will only be shared with members of the research team. You may choose to leave your camera on or off it is up to your discretion.

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

Great! Moving forward we would like to record this Zoom session today. Do we have permission to record this interview? (*In case of refusal, note-taker captures context manually*).

Thank you! If you would like to conceal your identity before we begin recording we ask that you change your display name to a pseudonym of your choice (example: "Red Hippo").

Great! We will begin recording now.

Warm Up

- (1) Tell us a little bit about yourself. What do you do for a living?
- (2) Why did you decide to participate in this study?
- (3) How do you incorporate AI technology into your daily life?

Establish Baseline

Script: So AI-supported text technology has become extremely popular over the past year Today we are going to center our discussion around two AI-supported text technology groups, AI text generators and autocorrect/ spell checkers. AI text generators use advanced natural language processing techniques to analyze existing text and generate new text that is similar in style and content, like your typical chatbots, smart text assistants, and chatGPT to name a few.

- (1) Have you used or come across AI text generators, such as chatbots, smart text, assistants and ChatGPT?
 - (a) **If yes:** Tell us about your time using AI text generators.
 - (b) **Ask if needed:** Which ones are you familiar with? How often do you use them? What did you use them for?

1613 (c) **If no:** Move on to next question
 1614
 1615

1616 Script: Autocorrect, grammar and spell check are text editing features that identify misspelled words, and uses
 1617 algorithms to identify the words most likely to have been intended, and edits the text, like on your iPhone, Microsoft
 1618 Word or even Google Docs.
 1619

1620 (1) Have you used or come across autocorrect, grammar or spell check like on your iPhone, Microsoft Word or
 1621 even Google Docs?

1622 (a) **If yes:** Tell us about your time using either of these.

1623 (b) **If needed:** Which ones are you familiar with? How often do you use them? What did you use them for?

1624 (c) **If no:** Move on to next section. If they have said no to both of these questions end interview here. Be sure
 1625 to thank them for their time.
 1626
 1627

1628 **Black Lived Experience**

1629 Script: Culture refers to the shared beliefs, values, customs, behaviors, and artifacts that characterize a group or society.
 1630 It encompasses everything from language and religion to food, music, art, and social norms, and helps to shape how
 1631 people view themselves and others.
 1632
 1633

1634 (1) How would you describe the Black American culture to someone who is not familiar with it... Imagine I was
 1635 from outer space, and you were the first person I met and I asked you, "Tell me about the Black American
 1636 culture", what would you say to me?
 1637

1638 (2) In what ways do you think Black American culture differs from other cultures?

1639 (3) If someone who was not Black could walk a day in your shoes as a Black individual, how might their experience
 1640 differ?
 1641

1642 (4) How would you describe the positive aspects of being Black in America?

1643 (5) How would you describe the negative aspects of being Black in America?

1644 (6) What has your experience been like as a Black person in America?
 1645

1646 **A.1 AI-Supported Text Technology**

1647 Script: We want to now transition into understanding how your experience as a Black individual in America shows up
 1648 while using digital technology.
 1649
 1650

1651 *A.1.1 Connecting the Black Experience to Technology.*

1652 (1) Do you see positive or negative aspects of your experience as Black person in America in your interactions
 1653 with digital technologies?

1654 (a) **If yes:** What are the technologies? How?

1655 (b) **If no:** What makes you say that?
 1656

1657 (2) What aspects of your Black American culture do you NOT see in your interactions with digital technologies?

1658 (a) **Follow up:** What makes you say that?
 1659

1660 (3) Has digital technology helped improve your experience as a Black individual?

1661 (a) **If yes:** How?

1662 (b) **If no:** What makes you say that?
 1663
 1664

- 1665 (4) Has digital technology worsened your experience as a Black individual?
1666 (a) **If yes:** How?
1667 (b) **If no:** What makes you say that?
1668
1669 (5) Have you ever felt that technology was created specifically to address the needs or challenges faced by Black
1670 individuals?
1671 (a) **If yes:** How?
1672 (b) **If no:** What makes you say that?
1673
1674 (6) Can you think of a time when you felt that digital technology was designed not having Black individuals in
1675 mind?
1676 (a) **If yes:** When?
1677 (b) **If no:** What makes you say that?
1678
1679

1680 A.2 Autocorrect/Grammar and Spell Check focused questions

- 1681 (1) What are your thoughts on autocorrect/ grammar and spell check?
1682 (2) Do you think how Black people communicate through text was considered when autocorrect/ grammar and
1683 spell check was developed?
1684 (a) **Follow up:** Why or why not?
1685
1686 (3) Are there any features of autocorrect/ grammar and spell check that are exclusionary to Black people?
1687 (4) If there were opportunities to improve autocorrect/ grammar and spell check to be more inclusive of Black
1688 language and culture, would you have any suggestions for what changes could be made?
1689 (a) If yes: What are they?
1690 (b) If no: What makes you say that?
1691
1692 (5) Can you identify any ways in which autocorrect/ grammar and spell check addresses challenges faced by the
1693 Black community?
1694 (a) If yes: What are they?
1695 (b) If no: What makes you say that?
1696
1697 (6) Can you identify any ways in which autocorrect/ grammar and spell check is destructive or serve as a hindrance
1698 to the Black community?
1699 (a) If yes: What are they?
1700 (b) If no: What makes you say that?
1701
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1703

1704 A.3 AI-Text Generator focus questions

- 1705 (1) What are your thoughts on AI-text generators, such as smart text assistants, chatbots and chatGPT?
1706 (2) Do you think how Black people communicate through text was considered when AI-text generators were
1707 developed?
1708 (a) Follow up: Why or why not?
1709
1710 (3) Are there any features of AI-text generators that are exclusionary to Black people?
1711 (4) If there were opportunities to improve AI-text generators to be more inclusive of Black language and culture,
1712 would you have any suggestions for what changes could be made?
1713 (a) If yes: What are they?
1714 (b) If no: What makes you say that?
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- 1717 (5) Can you identify any ways in which AI-text generators address challenges faced by the Black community?
 1718 (a) If yes: What are they?
 1719 (b) If no: What makes you say that?
 1720
 1721 (6) Can you identify any ways in which AI-text generators are destructive or serve as a hindrance to the Black
 1722 community?
 1723 (a) If yes: What are they?
 1724 (b) If no: What makes you say that?
 1725

1726 A.4 Direct Observation of Technology Use

1727 Script: We are now going to transition to the second portion of our interview. To begin you will need to access the link
 1728 that I have just pasted in the chat. Pretend there is a time that you heard an interesting rumor/ gossip/ tea and you just
 1729 had to text your bestie/ best friend. In at least 5 lines, we would like you to type out the story as if you were texting
 1730 them now. Try to be as natural as possible in your writing, feel free to use slang or terms that you are most comfortable
 1731 with. We are not here to test you but more so the technology that you are interacting with. Don't worry about your
 1732 grammar, spelling or anything of that sort. If you make a mistake, don't change or alter it.
 1733
 1734
 1735
 1736

1737 *Give them two minutes to review and one minute to write, three minutes total*

1738
 1739 Okay you may stop now. Let's go ahead and see what you put together. *Share your screen with the Google Doc
 1740 visible*

- 1741
 1742 (1) What are your thoughts on the suggestions from Google docs?
 1743 (2) Do you feel the suggestions from Google doc reflect your voice?
 1744 (a) If yes: How?
 1745 (b) If no: Why is that?
 1746
 1747 (3) Are there any frictions with your natural style of text communication and the suggestions from Google doc?
 1748 (a) If yes: How?
 1749 (b) If no: Why is that?
 1750

1751 Script: We are going to see how chatGPT takes your story and continues it. I will copy and paste your writing into
 1752 the input box and we will discuss what it comes out with.
 1753

- 1754 (1) How do you expect chatGPT to handle the rest of your story in regard to content and style of writing?
 1755

1756 Instructions for interviewer: *In chatGPT, copy and paste the following*: Continue my story with an additional ten
 1757 more sentences ensuring to keep my tone and vernacular consistent: *(insert the participant's writing)*
 1758

- 1759 (1) What are your thoughts on chatGPT's continuation of your story?
 1760 (2) Is the content of the story similar to something you would come up with?
 1761 (a) If yes: How?
 1762 (b) If no: Why is that? What is missing?
 1763
 1764 (3) Is the style of writing similar to yours?
 1765 (a) If yes: How?
 1766 (b) If no: Why is that? What is missing?
 1767
 1768

- 1769 (4) In what ways do you think what chatGPT wrote represents or mis-represents your identity as a Black individual?
 1770 (5) Some people see chatGPTs output in American English and not African American English as an issue, what are
 1771 your thoughts?
 1772

1773 Script: These are all of the questions that I have for you today. I really enjoyed hearing your thoughts and stories
 1774 surrounding your experiences with AI-supported text technology. Our team sincerely thanks you for taking part in this
 1775 study and disclosing such personal information to us. You will be hearing from us by early May for the next portion of
 1776 the study.
 1777

1778 Before I let you go, do you have any other thoughts or feedback on your experience participating in this study?

1779 Would you like a copy of the recording?

1780 Thank you for your time with us, we hope that you have a great rest of your day!
 1781
 1782

1783 B PARTICIPANT OVERVIEW

1784 Table 2. Overview of individual participants' usage with AISWT
 1785
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1787 Participant ID	1788 Context for individual AISWT usage
1789 P1	1790 Engages with autocorrect, Grammarly and ChatGPT for tasks ranging from creating emails to 1791 writing documents. Their encounters extend to ChatGPT in an educational setting for class exercises, 1792 experimenting with diverse prompts to analyze responses.
1793 P2	1794 Leverages ChatGPT as a versatile writing companion for various tasks, including crafting essays, 1795 planning ideas, and generating travel itineraries. Frequents Grammarly for spelling, grammar, clarity, 1796 and flow, and utilizes autocorrect on their phone as a consistent part of their daily writing routine.
1797 P3	1798 The individual frequently utilizes ChatGPT employing it two to three times a week. They consistently 1799 rely on autocorrect and spellcheckers in their regular writing routine.
1800 P4	1801 Relies on ChatGPT for problem-solving and generating baseline code in their professional and 1802 academic endeavors. Also explores playful interactions and tracks daily calorie intake using ChatGPT 1803 on a personal level, while autocorrect, spellcheckers, and Grammarly play distinct roles in their 1804 daily writing routine.
1805 P5	1806 Relies heavily on ChatGPT for automating daily tasks, utilizing it extensively for formatting emails, 1807 improving text structure, and refining grammar in various contexts, including answering emails 1808 and crafting recommendation letters. Everyday texting benefits from autocorrect and autopredict 1809 features.
1810 P6	1811 Employs ChatGPT for personal projects and communication, such as structuring a script and 1812 storyboarding for short films, and uses autocorrect and spellcheck daily.
1813 P7	1814 Frequently relies on chatbots for online customer service interactions. Additionally, they employ 1815 autocorrect and spellcheck across platforms like Google Docs and Microsoft Word.
1816 P8	1817 Actively engages with ChatGPT and utilizes chatbots for shopping assistance. In addition to Gram- 1818 marly, they leverage Notion's AI capabilities to enhance language clarity and tone in written 1819 communication, and they are familiar with autocorrect and grammar features on platforms like 1820 Android, Microsoft Word, and Google Docs.

Participant ID	Context for individual AISWT usage
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.
P12	Utilizes chatbots for work communication relying on virtual assistants for note-taking during meetings. Leverages Word AI for concise sentence structuring in professional communication and heavily depends on autocorrect, grammar, and spellcheck features in their iPhone and Microsoft Word for personal text-related tasks.
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.

C CODEBOOK

Table 3. Codebook generated through analysis

Theme	Definition	Example from Transcripts
Afterthought	Incorporating Black culture into design only after public backlash or as a performative gesture for recognition and praise.	"Oh, man, when it comes to like a research just in general, especially when it comes to like data science and technology. I feel like they don't take into account, you know, different, like racism, or other different things. So I saw a couple of cases, like where, you know, Apple with the facial recognition software. You know, I have a friend who works there. And they said that they needed they started like talking like black people from the workplace and scanning the face to try to, like add the facial data to like some of that stuff. And then I see some of the biases and AI and data and I'm like, okay, like there needs to be more black research just to help, you know, shape and determine outcomes with AI stuff and alone. So that's why I want to participate." - Black Tiger

Theme	Definition	Example from Transcripts
Black Identity	How the user's identity shapes their experiences and influences the way they navigate the world.	"I would say to you that this is my culture and in my culture we are the resilient ones because we are the ones that get even they get hit most times but then we still stay at the top form. We are simple people and then we encourage simplicity.... someone who's no black walks in my own gig the experience I think they will be super amazed at the kind of strength they have now it would be different because as a black person, you just have to be strong so you always got to have the strength" - P3
Black Support	How the user's identity shapes their experiences and influences the way they navigate the world.	"So whether that's joining blacksmith Association, or Ethiopian Student Association, things like that definitely helped me build community and find home, and then post grad, post post undergrad, I started working and was able to find communities, again, that were supporting, you know, black resource groups at work. And I had the opportunity to be very intentional about like, the work that I was doing, and to sort of be able to give back, and now kind of hopping back into academia" - P1
Design Requirements	Key elements that should be incorporated into the product to make it ideal.	"Yeah, well, um, Google and Apple. They're definitely trying, I noticed, you know, they had the skin tones change. But I still feel like they could expand. I mean, something as small as like expanding the type of emoji they offered. Just adding things that are from our culture in there, I think would be nice. I don't know. Yeah. And then maybe also with the filters, the face filters, just, yeah, it seems like they aren't tested with people who have our features. And skin tone maybe." - Blue Bird
Equity	All users, regardless of race, can access technology with the same ease and capabilities.	"I think it's going to have all the Black people to be able to confidently communicate with folks from all around the world and in such a way that its correct and engaging." - P3

1925	Theme	Definition	Example from Transcripts
1926			
1927	Exclusionary Design	Design that neglects to account for the specific needs and use cases of Black users.	"So I was wearing like a head wrap that had like a button in the back. And like the head machine wasn't wide enough to go past it, so kept knocking me in the head. And like, eventually, like, you know, we made it work. But the dentist had told me after like, yeah, like, they did not design this machine to really consider different types of like, things that people wear on their heads. Because because she had another she had another, had another black man who had like his head, he had like his, his he had really long locks, and they were rolled up into a bun as well. And that also was like hitting him when it was going around too. So that's what that's what I think about. I think another thing is like, we think we go to TSA. I always feel like it's black women who have to have their hair touched. Um, maybe that's not the case." - P2
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1944	Exclusionary Editing	AI editors often recommend editing or removing words and names commonly used by Black users.	"I mean, I kind of understood it, because that's a parameter they said on it. It was like, oh, we can't write anything with offensive language or something like that. I forgot to you know, to spell did it gave me but, um, it showed that it does have parameters, and it can, you know, be controlled, essentially, but, you know, that word is a part of our culture. And, you know, I couldn't you know, write a script or write out that part of the script. I had to write that part of script myself because the word had to be implemented into that space. Like, there's no way I could, because, you know, instead of like five or six times when I was writing it out, when I entered it in there, I only use it once and like, wouldn't touch it. So but, I mean, maybe I was kind of happy in a way because it was like no, but at the same time like you You can still get it to do what you want to do, you just have to change the parameters on it. So if I would have, you know, put in dot, dot, you know, whatever and kind of spelled it out like that, then if they would have put that word in there, but I wouldn't have known it that way. It just depends." - Black Tiger
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1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028	Highs of being Black	Positive and empowering aspects of being Black in America.	"Um, I think black is beautiful. Like, I think black is creative, being black is is to be creative. It's to be innovative, resourceful. I like those are some of the, I guess, like, key adjectives that come to mind? I think resourceful is an interesting one. Because like I mentioned earlier, like, obviously, historically, there have been you know, this country, the United States hasn't served black Americans. And so I think that idea of being resourceful comes from a place of of hurt and pain, but has led to like innovation and creativity and you know, things that are beautiful, right? So I think yeah, like that. Those are some of the adjectives that that come to mind when describing the black experience in the United States." - Purple Lizzard
	Inclusive Design	Technology is designed with inclusivity at its core, ensuring global relevance and equity.	"Um, I wonder if like, if, if in a prompt you you're using language that is commonly using black communities, if, if the model is not familiar with how to respond or is, I guess, not certain, or I don't know how you would even determine certainty here but let's just let's just say like that was already predetermined. Then some sort of like response, say saying, like, based on your prompt, this is what I've understood. And based on what I've understood, this is my answer to your question. I think that might be helpful. I also think in the future would be really interesting to see the model respond in that same language. I think that would be very interesting. Um, yeah, but I just I'm not exactly sure how that would work." - Purple Lizzard

2029	Theme	Definition	Example from Transcripts
2030	Internalized Construct	Exploring how marginalized individuals may internalize discriminatory beliefs.	I always feel like you're being scrutinized just for like breathing. Right? Yeah. Um, I really feel like that's it, that's really just like, again, go at having to be on going back to being on guard, right? That's just exhausting. It's mentally taxing. Um, always, like, feel like granted either, like, not all black people go through this, but it just like, for me, it just like always questioning myself, right? Like, did I do this wrong? Or am I am I am I able to do this? Right? Do I have enough experience? Like, again, like, the I think the psychological gymnastics you have to do to, to really just like survive is shitty. And even then, like also being being in a place where you get so much knowledge and know so much about, like how the world works, and especially like how the US works is also very, you deal with a lot of anger, too. So it's also been something as well, I think it was who said that? It's like, something along those lines, like, the more educated you get about like the systems that work particularly in the US, James Baldwin? - P2
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2081 2082	Theme	Definition	Example from Transcripts
2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 2100 2101 2102 2103 2104 2105 2106 2107 2108 2109 2110 2111 2112 2113 2114 2115 2116 2117 2118 2119 2120 2121 2122 2123 2124 2125 2126 2127 2128 2129 2130 2131 2132	Lows of being Black	The challenges and hardships of being Black in America.	"I'm sure you already know as a black man, right? It's hard. It's hard. being black in America and it's something that having kind of grown up here. A lot of my cousins back home don't understand. So they assume that you know, America's the land of milk and honey money just grows on trees, everyone's Kumbaya, but I have a cousin who is now attending university here in Florida. And he had a rude awakening. Right? He was in DeLand, Florida, when a very few black folks at the time I think now the school has increased their diversity. But it was it was a shock to him, right of all the things I told him, I'm worried, I'm like, Hey, you should read up on American history. Because these are things that you don't think about here in Ghana, that you're going to unfortunately, as a black man in this country, given the history, especially what we're living through right now, this is a very real possibility for you, and I don't want you to be caught off guard. So I think that the black experience is one that you have to kind of tread cautiously. And that's a really unfortunate, because I feel like in some places, you can't fully be black, I think there's an expectation to assimilate to white culture, right. And I'm guilty of it, right. straightening your hair and skin bleaching and all these things that are really unfortunate fear of authority figures. There's just a lot of things that come with being black that I think other cultures and other folks maybe don't necessarily have to deal with on a daily basis." - MamaAfrika

2133	Theme	Definition	Example from Transcripts
2134	Mixed Emotions	A mix of positive and negative emotions related to participants' experiences.	So there were parts that I was like, okay, like, I see where you're going. And I could see how like the tone was trying to be there. But I do think that like, the third paragraph there is very serious. Like, I don't know how it became this coffee became like, that's not how the real world works. Like, I don't I don't know how I got that serious. Like, you have to be responsible for your actions, I think is definitely a heavy statement. for spilled coffee. In my personal opinion. So yeah, so I do think that it kind of, like faded, I guess in terms of like that the the tone that I was trying to use in my original message. Yeah, it also feels like a script. Like, I don't know, like, it doesn't feel like I like someone would actually say this, like, even via text or even phone call. Like, I'm not exactly sure if I would say you know, they think they can do whatever they want. Like I would see like, I would even like rephrase that to be like, like man like people are like I would say like think they can do whatever you know, whatever you want. Like not gonna get caught up for example, which is like really the same thing as saying there won't be any consequences but I'm just not sure if I would say that in this in this situation. So definitely opportunity to sort of change the tone or to match the original text here, original prompt so. - Purple Lizzard
2162	Negative Emotions	Negative emotions triggered by participants' experiences.	"Sometimes it makes me feel like I'm kind of dumb is dumb. Yeah, I'll say dumb. Like, my English is not the best. But I do know that my English is the best. It's just sometimes it's it's a bit different, or it has more embellishments in there." - P9
2167	Positive Emotions	Positive emotions evoked by participants' experiences.	"It's great for me. I like it. I use it all the time. And for, for having to write a paper where it's like, it has to be this way, and there's no wiggle room for it. I'm all about it. So the only thing about spellcheck and this was also mentioned on social media specific words, like well, AutoCorrect, when you're trying to, like you're trying to say a specific word in a community. That means something that might not be nice to say, but autocorrect to something else. And so I noticed that that was a popular, a popular topic that was trending. And they were talking about that, like on the news and stuff like that. That's the only time and that rarely happens. That's the only time where I don't see it working out. But I use it all the time. And it's really convenient. I have no issues with it." - P13

2185 2186	Theme	Definition	Example from Transcripts
2187 2188 2189 2190 2191 2192 2193 2194 2195 2196 2197 2198 2199 2200 2201 2202 2203 2204 2205 2206 2207 2208 2209 2210	Psychological Impact	Examining the emotional, psychological, and mental health impacts from discrimination.	Are they people are treating me different because of like how my hair looks or, or my phenotype as, granted I'm light skinned, but I do have more of like black, you know, like a black more of a black phenotype. So just like, if someone were to treat me different or even like if someone says something snarky to me, like you always have to question was that because I am black or because I'm a black woman, right? It's Oh, you always have to think about these things. And it sucks. Though, we have to be on guard. That's what it feels like always to be on guard always be like out there protecting myself, especially when I feel like I always have to advocate for myself, especially like being this whole graduate program. I always feel like I have to fight for my life. And always support myself because it feels like no one else has really done that except me and other black woman. So yeah, so like when it comes to this navigating, where I feel like I'm always on guard. And like, even though you even notice the wrongdoings and stuff, too, it's just like, and so you feel like you're the one the only one who speaks up, or something's wrong. Right? - P2
2211 2212 2213 2214 2215 2216 2217 2218 2219 2220 2221 2222 2223 2224 2225 2226 2227 2228 2229 2230 2231 2232 2233 2234 2235 2236	Racism	Instances of discrimination and judgment participants experienced based on their identity.	Are there even biases and how like, the like, how the, you know, the filtering systems that they use to go through resumes and stuff? Or like, are they gonna see, I mean, we already saw it like, basic, like names and stuff, I'm not sure if like, that's like in the AI systems, I know that that's like at the human level. But if you're training again, if you're training these AI systems, and you're biased yourself, right, is going to be in, like in the system, right? So like, you've ever think about like, Oh, if this person doesn't have like, a white sounding name, right, then that's, that's it? No, or like, it can also be used dangerously to like, Oh, they're involved in a lot of like, like, woman of like, like, people of color centric things, right? Like, oh, I'm part of like the National Black honor society Who knows, right, like, so it's just like, that's really, that's really really scary. Because I really feel like I can definitely use it a — is being used it can be continued to use to exclude us. I'm terribly I'm really trying to get like other ways that it's done. - P2

2237	Theme	Definition	Example from Transcripts
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2239	Reliant	A growing dependency on AI, contributing to a decline in critical thinking and independence.	"It's made me lazy. It's kind of like the calculator, right? Like um I don't know how to spell anymore. Um because we're so reliant on these technologies of this technology to do it for us. Because like someone had just, this is so funny. I was just in a, in a call where one of the activities was like to spell camouflage. And like I'm sitting here, I was like, damn, I don't know how to spell camouflage. And like, you see all these other people put in the chat. Like they spelled it correctly and stuff. And then like, and then like, the presenter was like, Wow, you guys really know how to spell camouflage. That's really, really good. It's like the first time like, when, like when the majority of people knew how to spell it, right. And then someone said, like, yeah, just just autocorrect! Because you can, it's on Zoom. Right. So, so, um, so yeah. I just like, it's anyway, just to go to say like, like, not camouflage. Excuse me. Um, yeah, autocorrect has really made me lazy. And also, I feel like I'm really relying on it to spell things out for me, especially like those really tricky words in English. So you just like, you wouldn't think it's spelled that way, but it is spelled that way. Um, so most definitely, yeah." - P2
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2264	Style Conforming	Participants used automated editing to achieve "professionalism" in sentence structure.	"I will say like, I have like a because you know, ChatGPT I look at it as a way to just to ease to I look at it as a platform that you can communicate with the computer a lot easier. So I created a part I say, ChatGPT create an email about create email that introduces me to this person, I create an email with this particular subject topic I put the prompt in. And then you know, I have a few more parameters, different things that I use to kind of like match the email but I do like to tone the Email, to style the email, you know, obviously, you know, either the first person, third person or what I want to say and kind of do it that way. But it depends, like, if I'm emailing a friend, I tell it, you know, this is a friend, this is the language I want you to use, or this is a professional and this is what I want you to use, and kind of do it that way. So I frame it, you know, I put different parameters and and depending on who I'm talking about what the message would be how long I want it to be." - Black Tiger
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Theme	Definition	Example from Transcripts
Style Consistency	Users perceive that AI-generated text does not impact their personal writing style.	"I think it does didn't really correct anything? Maybe because I was taking too long to think about it. With some juicy gossip that I have, um Yeah, it didn't I was surprised about that thing about baby mama. Yeah, yeah, I was. I was surprised about that. Um, it didn't it didn't capitalize January. Yeah, yeah. It's like it pretty. It doesn't affect my voice." - P2
Style Dissonance	Users feel that AI-generated text does not reflect their personal voice or style.	"It's cute. I think it's a nice like, little narration but it's not like how I would go about it. Yeah, it's, you know, I mean, I think it's being repetitive too I feel like it's just saying the same thing." - P2
Task Aid	The process of generating ideas and tasks like outlines and itineraries with AI support.	"So I use ChatGPT was one thing that recently came out. And I use it to automate certain tasks that I do on a daily like when it comes to formatting emails, learning formatting text, say for example, I have some paper I would use it to format to prediction in the grammars they're looking for and I would use ChatGPT to format the text the format the text by asking to fix grammar, diction. From typing after better ways, more more correct ways of saying things. When it comes to email, sometimes I need to quickly respond to something, I would ask it, for me, the template does something for me to, to use and to format my, my response in that way. So I think those are the things that I use it for this reason, mainly for like automating certain tasks that I do done previously, such as like reading texts or answering emails or recommendation letters difference." - P5
Underrepresented	Aspects of identity and personal style outside societal norms can lead to exclusion.	"Yeah, I'm, I think, like, definitely with like spellcheck. I'm like some words that are used in the way that like, like language that's used by black people may be considered spelled like incorrectly Um, by like, I guess, you know, whatever application that you're using, so I definitely think that could be considered exclusionary, right. Because it's like, it's incorrect to who and like, you know, it kind of brings that question of like, what is formal? Like, what is correct? What is to be considered? a correct way of speaking? So yeah, no, I definitely think that there, there are aspects that are very much exclusionary." - P1

2341	Theme	Definition	Example from Transcripts
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2343	Design Reflection	Users' thoughts on how system design impacts their experience.	<p data-bbox="854 308 1455 1003"> "You're gonna laugh, because the only example that comes to mind is hinge. So, you know, I'm on the apps swiping, you know, doing what I do, not a fan of swiping, but here we are in 2023. And one thing I started noticing I told some, my girlfriend's like, you guys, just correct me if I'm crazy. But this is something I've noticed as a trend is, obviously there are algorithms at play, and they're seeing what kind of individuals you're swiping on, I'm sure they're taking the demographic information and like plotting things and finding folks who are similar to, you know, to display to you. And there'll be days, and I'm like Colorado's, diverse enough, but it's not the most woke slash black friendly place. I remember swiping, and I had like, 50 black men, like one after the next. And then another day had all Asian men, one after the next. And then the next time I had all Caucasian men when I was like, this is weird. This is actually crazy thinking that it'd be like a random sample, like a random bag. I get when it is when that, you know, no, literally one after the next for. Yeah, decades of profiles. It was very strange, and it still happens today." - MamaAfrika </p>
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