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# Queer, Nonbinary, or Ambiguous? Rethinking Voice Labels through Queer Theory in HCI

Martina De Cet  
Chalmers University of Technology  
and University of Gothenburg  
Gothenburg, Sweden  
demart@chalmers.se

Maxwell Hope  
University of Delaware  
Newark, Delaware, USA  
maxhope@udel.edu

Ilaria Torre  
Chalmers University of Technology  
and University of Gothenburg  
Gothenburg, Sweden  
ilariat@chalmers.se



Figure 1: A rainbow sound-wave filled with diverse silhouettes, symbolising the fluid, relational nature of voice and identity beyond the gender binary. Generated through Canva Magic Media.

## Abstract

This paper explores how feminist and queer theories can inform voice design in technology, particularly in Human-Computer Interaction (HCI). It argues that biological sex and gender are socially constructed and performative, and that voice is a site where identity is both enacted and interpreted. Building on this framework, the paper examines the political and cultural implications of labels such as “ambiguous”, “queer” and “nonbinary” in voice design. While “ambiguous” voices aim to reduce gendering broadly, “queer” and “nonbinary” voices intentionally represent gender-non-conforming people and challenge binary thinking. To ground this analysis in community perspectives, we report findings from a survey with non-binary participants, examining how they label voices constructed from gender-expansive individuals and which terms they find most affirming. With this work, we offer practical guidelines for labelling voices in ways that affirm queer and nonbinary identities, clarifying when terms like “queer” and “nonbinary” are preferable and when “ambiguous” may be appropriate. Recognising these distinctions is key to ethical, inclusive design.

## CCS Concepts

• **Human-centered computing** → **Sound-based input / output**; *HCI theory, concepts and models*.

## Keywords

Gender-Ambiguous Voice, Queer Voice, Nonbinary Voice, Gender Studies, Queer Studies, Voice Design, Voice Technology

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## 1 The Power of Voice

Voice is everywhere. For many, it is how we express ourselves, how we are understood, and how we are categorised. But voice is more than sound; it is not just biological or a tool for communication, but a social, cultural, and political phenomenon [19]. For example, the way someone speaks can indicate their origin or social class, and whose voice is heard can reveal and reinforce power dynamics.

Voice carries meaning. People frequently interpret voices through assumptions about gender, race, class, and identity. When we hear a voice, we do not just register sound; we *hear* someone. Quick, unconscious judgments often arise: Is this person a man or a woman? Young or old? Trustworthy or not? Voice is also political: many public systems (buses, airports, call centres) use feminine voices for assistive roles, while male voices dominate positions of authority. Voice, then, is never just a design feature; it is a space where societal norms and values are performed, contested, and negotiated [19].

Voice is not only socially and culturally significant but also central to everyday technology. Voice assistants (VAs) such as Siri and Alexa are embedded in millions of devices worldwide [38]. These systems are typically designed to sound recognisably masculine or feminine, reflecting the binary gender norms encoded in the datasets used to train them. Common corpora such as the LJ Speech



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[31] and Ryan Speech [58] datasets contain only cisgender woman and man voices, which limits representation and constrains how synthetic voices are perceived. Prior HCI research has shown how these binary design choices shape user perception and can reinforce stereotyped expectations [21, 29, 36, 45, 52]. Organisations like UNESCO have echoed these concerns, highlighting the need to rethink how voice technologies reflect and shape gender norms [55].

As awareness of gender diversity grows and speech technology advances, there is increasing interest in developing non-gendered synthetic voices. HCI research has contributed to this by exploring so-called “gender-neutral” voices [14]. However, neutral voices often still rely on binary assumptions, since technologies reproduce cultural expectations about how gender should sound [47, 48]. In addition, complete removal of gender cues is rarely possible, since perceptions depend on a listener’s age, gender identity, cultural background, and prior experience [10, 23]. As a result, the field has increasingly turned toward terms such as “ambiguous” [14–16, 51, 53], “gender-expansive” [27, 59], and “nonbinary” [11, 35] that seek to reduce the salience of gender cues rather than eliminate them entirely. These terms better capture the subjective and context-dependent nature of gender perception and more accurately reflect users’ identities and experiences. For example, a voice that sounds ambiguous to some may be perceived as masculine or feminine by others, highlighting the importance of context-aware design. Similarly, a voice labelled “nonbinary” may be perceived as more inclusive and welcoming. These shifts highlight how naming and categorisation themselves play a central role: terminology shapes how voices are interpreted, who feels recognised, and which identities are made possible, or excluded, through design.

This paper argues that the labelling of synthetic voices that challenge binary thinking should reflect the communities they represent and draw on insights from feminist, gender and queer studies. To support this claim, the following sections present a framework for using “queer” and “nonbinary” as more accurate alternatives to labels such as “ambiguous”. In addition, we conducted a survey looking at how nonbinary people label different gender-expansive synthetic voices. We also emphasise that “ambiguous” is not inherently incorrect: it remains appropriate when the goal is simply to minimise gendering, for instance, in experimental contexts. Our analysis is situated within Western linguistic and cultural contexts, which shape the theoretical frameworks and examples we foreground. Situating our analysis within these perspectives grounds our recommendations in rigorous theory, encourages meaningful interdisciplinary dialogue, and supports inclusive, socially responsible practices in voice design.

## 2 Reconsidering How We Label Non-Gendered Voices: Introducing Queer

As mentioned above, a range of terms has emerged in recent years to describe voices that do not fit neatly into binary categories. This raises the question of terminology we address in this paper: which word best captures the experiences and preferences of those most affected? In particular, we ask why the term “queer”, a central concept in queer and gender studies, long associated with challenging binaries and destabilising normative categories, has not been taken

up in HCI research on voice design. If queer already names resistance to fixed categories, why is it absent from this discourse? If “ambiguous” is beginning to replace “neutral”, what could it mean to instead conceptualise these voices as “queer”, “nonbinary”, or other community-informed terms?

What does queer mean, and how has its meaning evolved? From the late 19th century through the 20th century, queer was used as a slur [9]. In recent decades, many within LGBTQIA+ communities have reclaimed it as a broad and fluid category, encompassing diverse sexual orientations and gender identities. It refers to identities, expressions, or orientations that resist normative structures of gender and sexuality. In this context, queer is not a fixed identity but a way of inhabiting gender and sexuality that challenges binary thinking and embraces ambiguity, contradiction, and diversity. To describe someone or something as queer is to acknowledge its resistance to categorisation and potential to disrupt norms.

This broader understanding of queer has also shaped work in HCI, where researchers have used it as a methodological and critical design lens. Queer HCI treats queerness as an approach to design that questions taken-for-granted norms and opens up space for alternative ways of thinking about technology. Prior work has shown how queering can be used to challenge heteronormative structures in design [34]. Queer HCI special interest groups have further emphasised queering as an ongoing process of unsettling binary classifications and foregrounding marginalised experiences [17, 49]. In addition, Queer HCI work has emphasised that research involving queer identities must be shaped by queer communities themselves, highlighting the importance of positionality, community involvement, and sensitivity when naming or representing queer experiences [17]. These works highlight how queer approaches can open space for non-normative identities, bodies, and practices in HCI. Bringing this work into conversation with voice design helps clarify why “queer” is more than a descriptive term: it is an established conceptual tool in HCI that resists binary categorisation and invites more expansive modes of representation.

If HCI already uses the word “queer”, why are these beyond-the-binary voices not called queer? We see one main reason. Researchers may have adopted existing terms for convenience without checking whether they accurately captured what they meant. Our intention here is not to criticise those who have used terms like “gender-neutral” or “gender-ambiguous”. Indeed, while “gender-neutral” can be misleading, as true neutrality is unattainable, “ambiguous” remains useful when the goal is to minimise gendering, e.g. in research contexts. However, when voices are designed to represent queer, nonbinary, or transgender communities, labels such as “queer”, “nonbinary”, or “any gender” may better reflect their purpose. These terms acknowledge that such voices are intended not only to reduce gendering [13, 16], as ambiguous voices do, but also to provide inclusive options for groups under-represented in technology, including queer, nonbinary, and transgender individuals [40, 56].

This raises a broader issue: why it matters to think beyond a male–female binary when conceptualising sex and gender. The next section answers this by explaining why framing humans as only two sexes or genders is limiting, then turns to feminist theorists who critique binary structures, highlighting how these frameworks influence ideas of biology, identity, and gender. Engaging with

these perspectives helps imagine labels and representations that are inclusive, affirming, and reflective of human diversity.

### 3 From Intersex to Queer: Rethinking Gender, Identity, and Voice through a Gender Studies Lens

The world is full of diverse individuals, each with a unique gender identity, and many people do not fit neatly into the “traditional” male/female categories. Even when we examine biology, the “classic” two-sex division is not fully accurate. While most humans can be categorised as male or female, a portion of the population is intersex<sup>1</sup>, highlighting that sex (and gender) cannot be understood solely through biological terms. Recognising intersex individuals illustrates why limiting our understanding of sex/gender to two categories is insufficient. It shows that sex/gender exists on a spectrum, and embracing this diversity allows for a more inclusive perspective that acknowledges each person’s unique identity and expression.

This move toward thinking beyond the binary is not new. Feminist scholars have long pointed out that what we call “sex” and “gender” is never just a biological fact, but it is always shaped by culture and power. Their work shows that the categories we take for granted, male and female, nature and nurture, are themselves unstable [22, 44]. While “sex” and “gender” may be intertwined, we now focus on gender, turning to Butler and Barad’s accounts of gender as performative and relational, which is essential for HCI moving forward in labelling voices.

#### 3.1 Performative and Relational Gender: Butler and Barad

Butler, in *Gender Trouble* [7], explains that gender is not innate but something we do. Gender is performative: it is created through repeated actions such as speaking, dressing, and moving, which follow social norms but can also be disrupted. Repeating gendered behaviours playfully shows that gender is socially constructed, not fixed [8]. Drag exemplifies this: by exaggerating masculinity or femininity, it reveals that all gender expressions are performances, not expressions of some inner truth. Voices beyond the binary can work similarly. When used in everyday technologies, they might slowly challenge the idea that a voice must sound distinctly male or female. Non-gendered voice design can thus be performative in the Butlerian sense: doing and undoing gender through repetition.

This potential becomes even clearer when we consider Butler’s later work, *Critically Queer* [9], which pushed us to rethink the language we use to describe voices that aim to represent queer people. In this text, Butler explores how the term “queer” has been reclaimed as a politically powerful and flexible identity. Its power, Butler argues, lies in its refusal to be pinned down. Queer resists stable definitions and makes space for identities and expressions that do not fit within normative or binary categories. It is precisely this openness, this instability, that makes the term useful for disrupting dominant assumptions about gender and sexuality.

<sup>1</sup>Intersex is an umbrella term for people born with reproductive or sexual anatomy that does not fit typical definitions of male or female. This can include variations in chromosomes, genitals, and internal reproductive organs. Intersex variations are naturally occurring and not a disorder, disease, or condition [30].

A similar understanding of gender’s openness can be found in Karen Barad’s theory of agential realism. Barad argues that things do not have fixed, essential qualities but take shape through relations, or *intra-actions*, between people, materials, and social norms [3]. From this perspective, gender does not exist as a stable property waiting to be expressed; it becomes meaningful through the specific contexts and encounters that bring it into focus. Barad uses quantum metaphors to explain this relationality: just as light can appear as a particle or a wave depending on the conditions of observation, gender can hold multiple possibilities at once. Queer and nonbinary identities highlight this flexibility, showing that gender does not need to settle into one category but can remain fluid, contextual, and open.

Reading Butler and Barad brings us back to the motivation for this paper: why do we label non-gendered voices in the ways we do? While terms such as “ambiguous” can describe how these voices elicit varied gendered responses, they may also, if used uncritically, reinforce the categories they aim to unsettle. As Butler notes, fixed identity labels like “gay”, “lesbian”, or “bisexual” can inadvertently stabilise the norms they resist. Conventional labels for synthetic voices can operate similarly by positioning voices relative to “male” or “female”, as in between, unclear, or neutral, rather than recognising them as existing outside or beyond the binary. Framing such voices as “queer” instead invites us to see voice as fluid, relational, and open to interpretation. Queerness, as Butler reminds us, is not a stable identity but a process and a refusal of fixity.

This raises a further question: if voices perform identity, how do listeners shape that performance? Perception, expectation, and interpretation all play roles in making a voice seem masculine, feminine, or queer. Some listeners may resist fluidity and categorise voices reflexively. Prior work [27] shows that cisgender listeners often rely on automatic binary judgments, whereas gender-expansive listeners are more likely to engage reflective processes that allow reinterpretation. Recognising this tension prepares us to turn to Freya Jarman-Ivens, whose work highlights how voicing and listening are inseparable, and how queerness is negotiated not only in sounding but also in hearing.

#### 3.2 Queering the Voice: Listening and Naming with Jarman-Ivens

The work *Queer Voices: Technologies, Vocalities, and the Musical Flaw* by Freya Jarman-Ivens [32] focuses not on how gender is expressed through body or appearance, but through voice. She reminds us that the voice is often left out of conversations about identity because it is hard to define. But that is where its queer potential lies. Voice is both “of the body” and “beyond the body” [32], a space that can shift, blur, or resist binary gender categorisation.

One of the most important parts of her argument is that listening is never neutral. It is shaped by our expectations, our emotions, and our social context. When we hear a voice as “masculine” or “feminine”, we are not just noticing pitch or tone; we are interpreting what we hear through what we have learned. As Jarman-Ivens said, listening is “an act of power”, it shapes what we hear.

She also warns us about the act of naming. Like Butler, Jarman-Ivens points out that naming something can freeze it, turning something fluid into something fixed. When we create categories, even

well-meaning ones, we risk losing what made them powerful in the first place. This is a big challenge for voice design. Instead of trying to eliminate gender or neatly fit queerness into a checkbox, Jarman-Ivens encourages us to stay with the messiness. Let voices remain unsettled. Let listening be an open, curious act.

Bringing Jarman-Ivens into this discussion helps us make our main point clearer: so-called “gender-ambiguous” voices are not just technical features or inclusive design choices. They are part of a wider cultural and political conversation about identity, recognition, and normativity. Rather than trying to fix identity in sound, we can take a more queer approach to voice, one that values messiness, uncertainty, texture, and the power of listening. In doing so, we open up space for voices to be heard differently, and for listeners to hear differently too. With this in mind, how we name these voices becomes more than a technical or linguistic decision: it becomes an ethical and political one.

At the same time, naming can be an act of reclamation. To understand this, we move from theory to practice by engaging the communities affected by these labels. In the next subsection, we present a survey conducted to explore how nonbinary participants label synthetic voices created from gender-expansive individuals.

### 3.3 Nonbinary and “Any Gender” Labelling: Evidence from the Nonbinary Community

To determine which labels are affirming for people who do not fit within the binary gender categorisation, it is essential to involve community members most directly affected. For this reason, we conducted an anonymous online survey asking nonbinary participants to label four different synthetic voices (without revealing that the voices were based on nonbinary speakers), see [26] for more on how these voices were developed. Because the synthetic voices were created from American English speakers, we specifically recruited speakers of American English to participate.

For this survey, “nonbinary” was used as an umbrella term. Participants could select multiple identity labels from the following list: “nonbinary”, “male”, “female”, “agender”, “genderqueer”, and “other: please specify”. This allowed participants to indicate nonbinary as either their primary identity or one identity among others. Because gender is expressed and perceived differently across races and cultures, we also asked participants an open-ended question about their race and ethnicity.

**3.3.1 Participants:** The survey was designed using Gorilla [6] and participants were recruited via Prolific [42]; the study was Institutional Review Board (IRB) approved by the IRB of the University of Delaware. 18 nonbinary participants responded to the survey. Ten participants identified exclusively as “nonbinary”. Others selected additional labels: three also identified as genderqueer, two also as female, one also as male, one as agender, and one as male with a write-in note indicating hormone replacement therapy. In terms of race and ethnicity, twelve participants identified as white or Caucasian, two as Hispanic, one as Latinx, one as Black, one as Native American, and one as multiracial. This limited racial and cultural diversity constrains the generalisability of the findings, and further research is needed to examine how race, culture, gender,



Figure 2: Word cloud showing the distribution of voice labels from the 18 nonbinary participants.

and nonbinary voice labelling intersect. Even with these limitations, this study represents an initial step toward understanding how nonbinary community members prefer to label voices.

**3.3.2 Results:** The experiment resulted in 72 voice labels (four voices \* 18 participants). Among the 18 nonbinary participants, only two used binary gender labels to describe all four voices. The remaining 16 participants used exclusively gender-expansive terms or a mix of binary and gender-expansive terminology. Thus, out of the 72 labels, 39 of them included gender-expansive language. The most common labels were “nonbinary” (N = 9), “any gender” (N = 7), and descriptions of a “mix of masculine and feminine” qualities (N = 5). See Figure 2 for a better visualisation of the labels.

One participant observes: “...to me, the voice sounds like a man’s, young 20s or so, and potentially nonbinary/genderfluid.” This response performs a kind of double articulation: it mobilises a normative, binary category (“man”) while also reaching toward gender-expansive descriptors (“nonbinary”, “genderfluid”). Another participant remarks: “This sounds like someone who would be nonbinary, man, woman, etc. I could envision anyone with a voice similar to this...” Here, the invocation of “nonbinary” sits alongside binary terms, but the participant also gestures toward an “any gender” potentiality, disrupting the presumption that voices must be tethered to singular, stable gender categories. A third participant reflects: “This voice sounds slightly feminine, but I think their gender identity is nonbinary and they use he/him pronouns, but that they/them are fine too until they figure it out.” In this response, gender is articulated through a layered set of signifiers: “feminine” timbre, a nonbinary identity claim, and multiple pronoun possibilities. Importantly, the

voice is not assimilated into “womanhood”, even though the participant perceives femininity, but is instead understood as inhabiting a field of shifting identifications and affective qualities.

Taken together, these responses illustrate how nonbinary participants both claim and contest categorical language. They deploy “nonbinary” as a descriptive resource, but also expand beyond fixed identity markers by imagining voices as inhabitable by “any gender”. This interpretive move exemplifies a critical insight from queer and feminist theory: gender is not a closed set of oppositional categories but a dynamic, relational practice that exceeds binary logics. “Nonbinary”, in this sense, is itself queer, not only as a label but as a refusal of containment. The preference for “nonbinary” or “any gender” labelling reflects a politics of indeterminacy: voices need not be anchored to binary bodies, but can instead signify the multiplicity and variability that feminist and queer theorists have long recognised as fundamental to the lived experience of gender.

#### 4 So What: Queer, Nonbinary, Any Gender or Ambiguous?

This paper has shown that the way we design, describe, and listen to voices is shaped by cultural assumptions about gender and identity. Butler’s work reminds us that gender is something we do rather than something we are, and that queerness resists categorisation. Barad adds that gender is shaped through relations and becomes meaningful only in the situations where it is produced. Jarman-Ivens extends this to voice, highlighting that listening is never neutral and that naming can restrict the fluidity we aim to support.

Taking these arguments together, we suggest that when designing or analysing voices in HCI, the words we use, whether “queer”, “ambiguous”, or otherwise, must be chosen carefully. It is important to note that holding space for all terms and understanding their differences allows us to build voice technologies that are not only inclusive but also precise, attuned to the complexities of both identity and perception. With this in mind, we offer the following recommendations on when each label is most appropriate:

- **Queer:** Use “queer” when a voice aligns with or represents queer identities, experiences, or politics. Rather than marking the absence of gender, queer signals an active refusal of binary norms and embraces fluidity and nonconformity. It also highlights voice as a site of self-expression, whether in queer digital spaces, inclusive education, gender-diverse health services, or as the voice of an avatar or agent explicitly representing a queer identity. Drawing on queer theory, the term also works as a provocation, encouraging us to imagine new forms of gendered embodiment in technology.
- **Nonbinary or “Any Gender”:** Use “nonbinary” or “any gender”, when a voice is closely tied to the experiences and identities of nonbinary or other gender-expansive people. These labels can affirm multiplicity and fluidity or signal rejection of binary categorisation. Our small community-informed survey (see 3.3) suggests that nonbinary listeners often prefer these labels for voices based on gender-expansive speakers, echoing research showing that nonbinary speech-device users reject binary labels [59] and may inhabit post-human spaces of gender [28]. More research with larger samples is

needed to deepen understanding of how these communities wish such voices to be described.

- **Ambiguous:** Use “ambiguous” when the goal is to minimise gendering in situations where assigning, signalling, or representing a specific gender is not desired. This is especially relevant in technical, experimental, or comparative research settings, where reducing gender cues can help limit bias or confounds [53]. Ambiguous voices can therefore be useful when researchers want participants to focus on factors other than gender or when a design seeks to reduce the salience of binary cues without representing any particular identity. However, as Sutton [51] notes, ambiguous voices are not a stand-alone solution to gender stereotyping. Gendered expectations are deeply ingrained through culture and experience, and in many Western contexts they continue to operate within a man–woman binary. Consequently, even ambiguous voices are often “pulled” toward being heard as masculine or feminine. Moreover, voice is only one of several cues through which gender is assigned; language style, personality traits, and visual or embodied design can all override vocal ambiguity [51]. It is also important to note a linguistic limitation of the term “ambiguous”: the prefix “ambi-” means “both”, which subtly reinforces the same male–female binary that often pulls these voices toward being heard as one gender or the other.

After outlining when each label is appropriate, we also offer recommendations for researchers who aim to create either 1) less gendered, more ambiguous agents or 2) agents that intentionally reflect queer or nonbinary identities.

##### 4.1 Reduce Gendering

For **voice assistants**, we suggest:

- **Language:** Avoid gendered grammar if you are using gendered languages. For example, in Spanish, instead of saying “estoy listo/lista” (“I am ready”, masculine/feminine), one could say “ya estoy” (“here I am”), which conveys readiness without gendered morphemes.
- **Interaction style:** Use neutral phrasing that does not align with culturally gendered patterns. Avoid nurturing or service-oriented language (“Don’t worry, I’ll help”) or overly commanding language (“Proceed to the next step”). Instead, provide outcome-focused statements such as, for example: “The process is complete. Please proceed by uploading the document.” [24, 25].

For **embodied agents**, we highlight:

- **Appearance:** Avoid binary cues such as exaggerated sexual characteristics, body shapes, clothing, or facial features that signal masculinity or femininity [4, 5, 18, 54].
- **Movement:** Use neutral gestures and posture, avoiding culturally gendered patterns in how space is occupied, or gestures are performed [12, 39, 57].
- **Behaviour and function:** Design tasks and behaviours without reinforcing gendered expectations, such as caregiving or commanding roles [37, 43, 50].

For **human and environmental factors** we note:

- **User characteristics:** Be aware that age, gender (both categorical gender and gradient aspects of gender), ethnicity, class, and sexuality influence how people perceive gender in technology [1, 27, 41].
- **Context and culture:** Surrounding cues, including other objects, agent names, and local cultural norms, shape perception of gender [2, 33]. The same agent may be interpreted differently in different societies [1].

## 4.2 Queering Agents

When the goal is to design a queer or nonbinary voice assistant or agent, the aim is not to minimise gender cues but to express identities that challenge or expand binary categorisation. Queer and nonbinary people often combine traits that may be read as masculine, feminine, both, or neither, and these expressions shift across contexts. Agents can reflect this. Although users might still interpret agents through culturally embedded gender expectations [20], layered or mixed cues can produce agents that more closely reflect queer and nonbinary lived experiences. Designing for this complexity supports representations that resist simple categorisation while allowing situated forms of gender expression.

However, since queer expression varies, giving recommendations is difficult. We therefore suggest that researchers prototype designs and validate decisions by involving community members in defining what a queer agent or assistant should look or sound like. Designers can experiment with combinations, for example, pairing a feminine or mid-pitch voice with a more masculine or androgynous appearance, or blending visual elements traditionally associated with different genders, to explore forms that disrupt binary norms rather than reproduce them. This approach helps ensure that the intended identity is recognised rather than interpreted as unintentional ambiguity. Finally, if it is possible for developers and researchers, giving multiple options for these parts of expression can help queer and nonbinary individuals mix-and-match on their own to create a queer agent or assistant using stylistic bricolage; that is, whenever possible, it should not only be the designers who get to experiment with combinations, but it should also be possible for the community members as end-users to do so.

## 5 Limitations and Future Directions

Our survey of nonbinary community members has limitations. While the sample included a range of nonbinary identities, future work could focus on sub-communities such as agender participants to capture more specific preferences. Our study had limited racial and cultural diversity, which constrains generalisability, and further research is needed to examine how race, culture, gender, and nonbinary voice labelling intersect. Even with these limitations, this study is an initial step toward understanding how nonbinary community members prefer to label voices.

Looking ahead, we emphasise the need for researchers across fields, ourselves included, to engage respectfully with the queer community, especially nonbinary individuals. Too often, studies on gender and technology are conducted without the active participation of the communities they address. This risks misrepresenting experiences and reinforcing exclusion. Genuine collaboration at

every stage of research, from question formulation to interpretation of results, is essential. Prioritising participatory methodologies, valuing lived experience as expert knowledge, and challenging cis-normative frameworks that have shaped gendered technologies are critical steps. Including researchers from queer and gender studies can also provide valuable theoretical and methodological insights [46]. By centring these voices, we can develop technologies that are inclusive, affirming, and reflective of human diversity.

Furthermore, we strongly advocate for a greater emphasis on qualitative research methods, such as ethnographic studies, focus groups, and in-depth interviews. Quantitative methods are invaluable for identifying large-scale trends and testing hypotheses, but they often rely on predefined categories and survey instruments that can inadvertently reproduce normative assumptions. By contrast, qualitative approaches make it possible to explore the depth and complexity of participants' lived experiences, especially around questions of identity, language, and representation that resist simple categorisation. These methods provide participants with space to express their perspectives in their own words, revealing insights that might otherwise remain hidden in structured, quantitative measures. For nonbinary individuals, whose experiences frequently fall outside binary frameworks, such nuanced understanding is crucial for ethical and effective design.

For our part, our next step is to engage more closely with nonbinary communities through a dedicated study involving focus groups and interviews. This research aims to better understand how nonbinary people perceive queer/nonbinary voices, whether current labelling options resonate with them, and what alternatives might feel more accurate and empowering. We want to learn how queer individuals prefer to name and describe these voices, and whether terms like “ambiguous” are experienced as affirming or limiting. Through this work, we hope to contribute to a more inclusive, community-informed approach to designing technology, one that challenges normative assumptions and values the diversity of gender expression. By doing so, we can move toward technologies that do not just avoid harm but celebrate and support all identities.

## 6 Conclusion

This paper has argued that voice design is never neutral and that the labels we assign to voices beyond the binary carry cultural, political, and personal meaning. The terms “queer”, “nonbinary” and “ambiguous” are not interchangeable; each refers to different design goals, user communities, and theoretical perspectives. Ambiguous voices may aim to reduce gender bias in technology more broadly, while queer and nonbinary voices intentionally affirm and represent gender-diverse identities and challenge binary thinking. Recognising the difference and knowing when to use each term is not just a matter of precision, but a commitment to inclusion and ethical design. If we are to create voice technologies that truly serve diverse users, we must be precise in language, intentional in representation, and critical of the norms we continue to reinforce.

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