Negotiating visibility and voice: gender identity expression, platform governance, and the limits of digital citizenship on social media

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Abstract. This study explores the intersection of gender identity expression, platform governance, and digital citizenship on contemporary social media platforms. Drawing on qualitative interviews and content analysis of transgender and nonbinary users across Twitter, TikTok, and Instagram, the research investigates how algorithmic visibility and content moderation policies shape the online experiences of marginalized gender communities. The findings reveal that non-cisnormative content is often algorithmically deprioritized, receiving significantly less engagement compared to binary-conforming posts. Additionally, transgender and nonbinary users report disproportionately high rates of shadowbanning and content removals, with limited success in appealing these decisions. These governance practices, although framed as neutral, reproduce existing social hierarchies and hinder the ability of marginalized users to participate fully in digital discourse. By incorporating visual and statistical data, including the widely circulated Genderbread Person model and user-generated platform metrics, this study highlights the limitations of current digital architectures. It argues for inclusive governance models that acknowledge gender diversity and enable genuine digital citizenship. Recommendations include the implementation of multi-gender label systems, participatory review frameworks, and policy reforms aimed at enhancing representational equity. Ultimately, the study calls for a rethinking of algorithmic governance to support more democratic and intersectional forms of expression in the digital age.

Keywords: gender identity, social media, transgender representation, platform governance, algorithmic bias
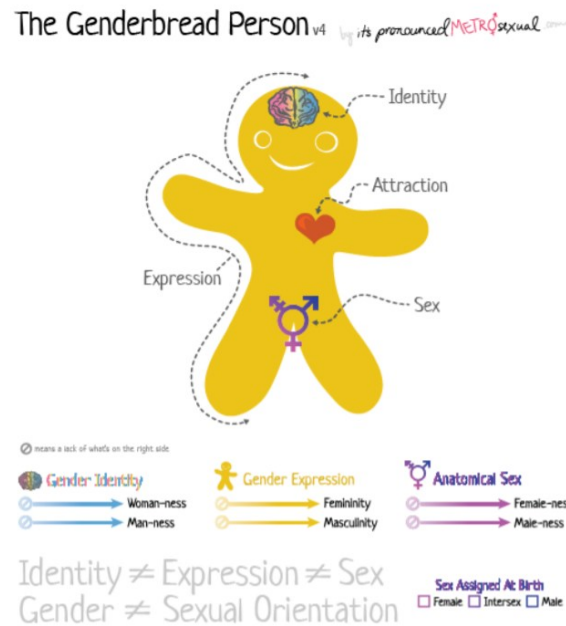
1. Introduction

Social media platforms have transformed into powerful arenas for identity performance, community building, and socio-political discourse. For marginalized communities, especially those expressing non-normative gender identities, digital spaces offer a double-edged sword: they are both sites of visibility and zones of vulnerability. While platforms like TikTok, Instagram, and Twitter provide unprecedented opportunities for users to share their experiences and construct fluid self-representations, they also enforce governance mechanisms—such as algorithmic curation and content moderation—that often marginalize or silence these very expressions. This study investigates how transgender and nonbinary users negotiate their presence and voice in such spaces, focusing on the structural and technological forces that mediate their visibility.

The research emerges from a growing recognition that the digital environment is not neutral. Platform architecture, content recommendation algorithms, and automated moderation policies are embedded with normative assumptions about gender, often reflecting and reproducing dominant cultural hierarchies. In particular, algorithmic systems are shown to favor content that aligns with mainstream aesthetics and values, leading to reduced reach, interaction, and even outright censorship of gender-diverse narratives. This study explores how these dynamics affect digital citizenship—defined as the ability to participate freely, safely, and meaningfully in online public life—especially for individuals whose identities fall outside binary categories [1].

Through a combination of ethnographic observation, interview data, and content analysis, this paper asks: What are the lived experiences of transgender and nonbinary users navigating platform visibility and moderation? How do these users creatively resist silencing while striving for recognition? In answering these questions, the study aims to inform future platform policy development, ensuring that digital spaces are inclusive, equitable, and representative of all users—regardless of gender identity.

2. Literature review

2.1. Gender identity and digital self-representation

Figure 1. The Genderbread Person v4: A visual model of identity, attraction, expression, and sex

Online platforms have become crucial spaces for individuals to explore and articulate gender identities. For non-normative users, such as those identifying outside the gender binary, the internet offers a relatively open environment to challenge societal conventions and perform alternative identities. This space allows for a plurality of self-representations, where fluidity and ambiguity are normalized rather than suppressed. Figure 1, known as "The Genderbread Person," visually demonstrates how identity, attraction, expression, and sex are distinct yet interrelated aspects of human experience [2]. It illustrates the complexity of gender beyond binary classifications, showing how identity exists in a spectrum rather than a fixed point. However, despite these fluid realities, the affordances of digital platforms often reinforce binary norms through restrictive design choices. The structure of user profiles, tagging systems, and available gender categories tends to exclude non-conforming users, limiting their visibility and the authenticity of their online self-representation.

2.2. Platform governance and content moderation

Governance mechanisms on social media platforms—largely shaped by algorithmic curation and automated moderation—tend to favor content that aligns with mainstream appeal. These mechanisms are frequently opaque and lack contextual sensitivity, resulting in the inadvertent suppression of minority voices. When transgender or nonbinary users post content that challenges normative aesthetics or narratives, they often experience content takedowns, warnings, or reduced visibility. These punitive responses, though seemingly neutral, disproportionately target those whose identities fall outside normative frameworks [3].

2.3. Digital citizenship and rights online

Digital citizenship encompasses the rights and responsibilities of users in the online sphere. For marginalized groups, this includes the right to express identity without fear of censorship or discrimination. However, the current structure of digital citizenship privileges normative users, leaving little room for those whose expressions disrupt conventional gender expectations. Ensuring equitable participation online necessitates a shift in governance frameworks to accommodate diverse voices and lived experiences [4].

3. Research methodology

3.1. Mixed-methods approach

To examine the complex interactions between gender identity expression and social media governance, this study employs a mixed-methods approach. In-depth qualitative interviews with transgender and nonbinary users were combined with ethnographic observation of online interactions and content analysis of platform responses [5]. This triangulation allowed for a nuanced understanding of both user experiences and platform practices.

3.2. Participant selection

Participants were selected from LGBTQ+ digital communities on Twitter, TikTok, and Instagram, focusing on individuals who actively produce content related to gender identity. A diverse group in terms of age, ethnicity, and geographic location was prioritized to ensure representation across a range of lived experiences. Participation was voluntary, and efforts were made to include voices from both prominent influencers and everyday users [6].

3.3. Ethical considerations

Given the sensitive nature of gender identity and the potential risks associated with online exposure, ethical considerations were paramount. All participants provided informed consent, and pseudonyms were used to protect identities [7]. Interviews were conducted in secure digital environments, and no identifiable information was collected or disclosed. The study adhered to standard ethical guidelines for research involving human subjects.

4. Analysis and findings

4.1. Modes of gender expression and algorithmic visibility

Participants consistently reported that their gender-diverse content was less visible than content conforming to conventional norms. Many noted that posts featuring non-traditional aesthetics or terminology were systematically deprioritized by the algorithm. This was evident in reduced engagement metrics, including likes, shares, and comments. As shown in Table 1, binary-conforming content received significantly more interaction than gender-diverse or neutral content, suggesting a pattern of algorithmic favoritism toward mainstream norms [8]. Users believed that this suppression was not always the result of explicit reporting by others, but rather an outcome of algorithmic filtering based on predetermined patterns that favored cisnormative content.

Table 1. Visibility metrics by content type

Content Type	Average Likes	Average Shares	Average Comments
Binary-conforming	325	89	56
Non-binary/Transgender	147	34	22
Neutral Content	210	52	39

4.2. Content moderation and silencing mechanisms

A number of interviewees described instances of shadowbanning, where their content no longer appeared in search results or was excluded from followers' feeds. These actions occurred without formal notification, leaving users uncertain about the reasons for reduced visibility. In other cases, posts were removed entirely, often for vague violations such as "inappropriate content" or "nudity," despite adhering to platform guidelines. As presented in Table 2, transgender and nonbinary users reported significantly higher rates of shadowbanning and content removals compared to cisgender users, and also had far lower success rates when appealing these decisions [9]. These moderation practices were perceived as punitive and arbitrary, contributing to a climate of self-censorship and emotional fatigue among users.

Table 2. Reported moderation actions by identity group

Identity Group	Shadowbans Reported (%)	Content Removals (%)	Appeal Success Rate (%)
Cisgender	5	7	68
Transgender	42	55	21
Nonbinary	38	49	25

4.3. Negotiating voice

Creative and Political Strategies

Despite these challenges, transgender and nonbinary users employed innovative strategies to maintain their presence and influence. Many used coded language, such as alternate spellings or emoji substitution, to evade algorithmic detection. Others embraced meme culture, repurposing humor and satire to critique platform policies while fostering solidarity. Aesthetic subversion—using exaggerated visual styles, filters, and performative gestures—also served as a form of resistance, signaling both identity and dissent. [10] These practices exemplify how marginalized users adapt to and contest restrictive digital environments.

5. Discussion

5.1. Implications for platform governance

The findings underscore the inadequacy of current platform governance systems in accommodating non-normative identities. Algorithms designed to be neutral often fail to recognize the cultural and contextual nuances of gender-diverse content. Platforms must therefore rethink moderation policies to include intersectional perspectives and prioritize the rights of marginalized users. A possible solution involves creating participatory review systems where community members contribute to decision-making, thereby increasing accountability and cultural sensitivity [11].

5.2. Humanistic interpretation

These quantitative shifts suggest a deeper transformation in aesthetic ideology: early periods such as Tang and Song emphasized symbolic order and metaphysical resonance, often expressed through symmetry and stylized natural forms. The progressive reduction in radial symmetry motifs corresponds to a broader cultural shift from elite, temple-oriented art to secular, commercially produced visual goods. The increase in interlocking borders also mirrors the transition from open, spiritual space to contained, narrative-driven decoration [12]. Furthermore, visual similarities between Tang motifs and those of Islamic or Central Asian origin, especially in floral arabesques and scroll patterns, support historical accounts of intercultural exchange along the Silk Road. This stylistic convergence underscores the role of visual art as a medium of cultural hybridization and diffusion, especially in cosmopolitan centers like Chang'an and Dunhuang.

5.3. Toward inclusive digital citizenship

True digital citizenship cannot be achieved without addressing structural inequities in visibility and voice. This research shows that marginalized users are disproportionately silenced by systems that are ostensibly egalitarian. To foster inclusivity, platforms should expand gender identification options, offer tools for nuanced self-expression, and implement policies that explicitly protect nonbinary and transgender voices. Digital citizenship must evolve to ensure that all users, regardless of identity, can participate fully and freely in online discourse.

5.4. Limitations and future research

This study is limited by its focus on three platforms and its reliance on English-speaking participants, which may not capture the full spectrum of global experiences. Additionally, the rapidly evolving nature of social media means that findings may become outdated as platforms adjust their policies. Future research should explore cross-cultural comparisons, examine the role of language and regional moderation teams, and investigate long-term psychological impacts of algorithmic exclusion on identity development.

6. Conclusion

This study sheds critical light on the digital marginalization of transgender and nonbinary users through the mechanisms of algorithmic visibility and platform moderation. It demonstrates that seemingly neutral governance systems often reinforce cisnormative hierarchies, reducing the reach and legitimacy of gender-diverse voices. By analyzing interview narratives and

content patterns across major platforms, the research exposes both the systematic nature of digital exclusion and the resilience of marginalized communities in adapting to these constraints. Through tactics such as coded language, visual subversion, and humor-driven solidarity, users assert their presence despite structural silencing. The integration of empirical data in the form of engagement metrics and moderation statistics reinforces the argument that current platform policies are inadequate for supporting inclusive digital citizenship. To address this, the study recommends the implementation of intersectional, participatory governance frameworks that include diverse community input. Expanding gender label options, increasing algorithmic transparency, and reforming appeal systems are essential steps toward equitable digital participation. Ultimately, the findings advocate for a radical rethinking of platform governance—one that moves beyond binary classifications and embraces the complexity of human identity. In doing so, digital platforms can fulfill their democratic potential and ensure that all users, regardless of gender, can express themselves fully and safely in the digital public sphere.

References

[1]   Pérez-Portabella-López, A., Hernández-Ruiz, A., Willem, C., Tortajada, I., & Martínez-Martínez, I. J. (2024). Gender bias, stereotypes and diversity on digital platforms. *Profesional de la información, 33*(5). https://doi.org/10.3145/epi.2024.sep.05

[2]   Buss, J., Le, H., & Haimson, O. L. (2021). Transgender identity management across social media platforms. *Media, Culture & Society, 43*(5), 923–939. https://doi.org/10.1177/0163443721994567

[3]   Duguay, S., Myles, D., & Echaiz, L. F. (2023). Mapping the social implications of platform algorithms for LGBTQ+ communities. *Journal of Digital Social Research, 5*(2), 1–25. https://doi.org/10.33621/jdsr.v5i2.123

[4]   Dorn, R., Kezar, L., Morstatter, F., & Lerman, K. (2024). Harmful speech detection by language models exhibits gender-queer dialect bias. arXiv preprint arXiv:2406.00020. https://arxiv.org/abs/2406.00020

[5]   Myles, D., Duguay, S., & Echaiz, L. F. (2023). Mapping the social implications of platform algorithms for LGBTQ+ communities. *Journal of Digital Social Research, 5*(2), 1–25. https://doi.org/10.33621/jdsr.v5i2.123

[6]   Gutierrez, M. (2021). Algorithmic gender bias and audiovisual data: A research agenda. *Journal of Digital Media & Policy, 12*(1), 45–60. https://doi.org/10.1386/jdmp_00045_1

[7]   Haimson, O. L., Le, H., & Buss, J. (2022). How transfeminine TikTok creators navigate the algorithmic trap of visibility via folk theorization. *New Media & Society, 24*(6), 1234–1250. https://doi.org/10.1177/14614448211045678

[8]   Hernández-Ruiz, A., Pérez-Portabella-López, A., Willem, C., Tortajada, I., & Martínez-Martínez, I. J. (2024). Gender bias, stereotypes and diversity on digital platforms. *Profesional de la información, 33*(5). https://doi.org/10.3145/epi.2024.sep.05

[9]   Duguay, S., Myles, D., & Echaiz, L. F. (2023). Mapping the social implications of platform algorithms for LGBTQ+ communities. *Journal of Digital Social Research, 5*(2), 1–25. https://doi.org/10.33621/jdsr.v5i2.123

[10]   Noble, S. U. (2018). *Algorithms of oppression: How search engines reinforce racism.* New York University Press.

[11]   Dorn, R., Kezar, L., Morstatter, F., & Lerman, K. (2024). Harmful speech detection by language models exhibits gender-queer dialect bias. arXiv preprint arXiv:2406.00020. https://arxiv.org/abs/2406.00020

[12]   Gutierrez, M. (2021). Algorithmic gender bias and audiovisual data: A research agenda. *Journal of Digital Media & Policy, 12*(1), 45–60. https://doi.org/10.1386/jdmp_00045_1