

Digital and Historical Exclusivity in Feminine Linguistics: From Nüshu to Xiaohongshu

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Abstract

In the evolving landscape of human communication, exclusive spaces have emerged as a powerful tool for marginalized groups, particularly women. Drawing parallels between the ancient Nüshu (women script) and modern tagging on the social media platform Xiaohongshu, this study examines how women have historically crafted unique communication spaces for unfiltered dialogue, free from external judgments. While inclusivity remains a lauded societal ideal, exclusivity, as demonstrated by strategies like the "baby feeding" tag, can serve as a protective mechanism against entrenched gender biases. This research underscores the enduring need for such spaces, revealing the intricate balance between inclusivity and exclusivity in fostering genuine discourse. It further calls for future explorations into the dynamics of language style, user auditing, and digital exclusivity, emphasizing their implications in our digital age.

1 Introduction

In human communication, the quest for exclusive spaces persists, which historically have served as crucial havens for marginalized groups, including women. This study investigates the lineage of such spaces from the ancient Nüshu script—a unique communication medium developed by women—to the contemporary tagging strategies observed on the social media platform Xiaohongshu. These strategies facilitate unfiltered dialogue, safeguarded from external scrutiny and judgments. Even in our digital era, marginalization remains a challenge, emphasizing the need for such spaces. Although similar phenomena can be observed in other contexts, such as Western whisper networks (Reddy and Knight, 2016), the Nüshu and Xiaohongshu instances provide a distinctive perspective. This study thus marks a foundational step in fostering further research into language style, user auditing,

and the nuances of digital exclusivity in contemporary society.

2 Nüshu, a Women's Scripts from Ancient China

Originating in Jiangyong County, Hunan, Nüshu is a unique syllabic script, crafted by and for women. Evolved from Chinese characters, it served as an exclusive means of communication among women, before its unfortunate extinction in the 20th century. This script symbolizes a clandestine linguistic resistance against patriarchal norms, offering women a voice in an era where they were otherwise muted.

Structurally, Nüshu characters stand distinct, adopting a rhomboid shape from the square form of traditional Chinese characters, tailored to fit the Chengguan Tuhua dialect. These characters, characterized by dots, horizontals, virgules, and arcs, bear fine, thread-like strokes (Fasold and Connor-Linton, 2014). Notable works delving into the decipherment of Nüshu include studies by (Knight, 2013) and translation from its image (Zhang et al., 2016; Chu et al., 2020).

3 Feminism and Digital Spaces in China

Despite Nüshu's decline, culminating with Yang Huanyi's passing in 2004 (Chen, 2018), women's voices remain undeterred even as patriarchy persists. Women's education in China has seen dramatic improvements. From 1949 to 2017, the illiteracy rate among women aged 15 and above decreased from 90% to 7.3% (SCIO China, 2019). By 2020, women's enrollment in higher education exceeded that of men (NBS China, 2021), underpinning the rise of the Chinese feminist movement.

The digital age saw women using social platforms for expression and community. Exclusive online groups emerged, such as the "Women in Tech" group on Douban¹ with over 77,000 users

¹A Chinese social platform like Reddit. The platform was

(Lu, 2022). However, the challenges are also obvious. On community-based platforms like Douban, in order to ensure the exclusivity of women's communication, users are required to declare their gender identity when signing up for the group, which will later be verified by the administrators. Yet, on content-driven platforms, women have to navigate recommendation algorithms to ensure their content reaches specific audiences.

4 Exclusive Women's Script: Tagging in Social Media

Nüshu is not an isolated instance of feminism manifesting in language. Similarly, in the contemporary digital landscape, women are creating secure spaces for discussion through innovative strategies on social platforms like Xiaohongshu². Users can amplify the visibility of their posts to those who are interested in a particular subject by tagging topics. Women users notably adopt the "baby feeding" tag, even for unrelated content. Observing that genuine "baby feeding" posts attracted mainly female engagement with minimal male presence, women strategically used the tag to deter potentially critical male interactions. This tactic evolved as a method to ensure female-centric discourse.

Like the Nüshu script, which was created as a secretive language among women, these tags form an implicit barrier against unwelcome intrusion. While Nüshu emerged as a passive response to historical societal constraints and limitations, the tagging behaviors on Xiaohongshu arise from a proactive stance of self-empowerment and intentional exclusion. In this digital age, women continue to harness language and communication tools not only to express themselves but also to establish boundaries, ensuring their stories and discussions remain a safe space for them.

This tagging behavior is representative of a broader trend called user auditing (DeVos et al., 2022), where users actively manage their online interactions by setting implicit boundaries around their content, diverging from relying solely on platform algorithms or community guidelines. This strategy facilitates the creation of preferred interaction spaces, free from unnecessary criticism or undesired attention, showcasing a dynamic balance of power, control, and agency. Understanding this

considered the leading active hub for new feminist activism (Yang and Zhou, 2023).

²A Chinese social platform like Instagram or Tiktok.

user auditing can provide a nuanced view of user dynamics in the digital era, shedding light on how users counter the biases inherent in algorithmic recommendations.

Women's strategic use of the "baby feeding" tag on social media primarily aimed to shield specific posts from male scrutiny. For example, women users applied the "baby feeding" tag to safeguard personal posts, such as photos of their attire, from potential judgment or intrusion by men. This move shifted the comment quality they received to be friendlier and more informative. Research indicates that women's communication is often more cooperative and supportive than men's (Hayat et al., 2017). Studies also highlight that similar linguistic styles bolster friendship formation and convergence (Kovacs and Kleinbaum, 2020). This underscores the widespread adoption of the tag among women, linking it to both gender bias and language style. Further research is needed to delve deeper into the nuances of gender biases inherent in linguistic styles and their implications in digital interactions.

5 Discussion

Traditionally, inclusivity is recognized as the gold standard of any progressive society. Yet, the "baby-feeding" tag on Xiaohongshu demonstrates that exclusivity can also further social good when employed as a shield against longstanding gender biases. Though, the protective spaces have the risk of becoming echo chambers, limiting diverse perspectives even within the marginalized group. Such exclusivity can sideline nuanced issues and delay vital dialogues with the broader society, potentially constraining broader societal impact and understanding. This exclusivity isn't about suppressing others; it's a response to the deep-seated biases that often lead to judgment, online harassment, and reinforcement of harmful stereotypes. In these circumstances, forging women-focused spaces becomes a form of resistance. The "baby-feeding" tag mirrors the purpose of the Nüshu script: both are tools of resilience, created to provide women a space free from male scrutiny and bias, though separated by centuries and medium. Overall, the aim isn't universally endorsing exclusivity. It's to understand that such methods arise when marginalized groups seek to regain their narrative or protect their emotional and mental well-being.

References

- Xiaorong Chen. 2018. [Nüshu: from tears to sunshine](#).
- Christopher Chu, Scot Fang, and Kevin Knight. 2020. [Learning to Pronounce Chinese Without a Pronunciation Dictionary](#). In *Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP)*, pages 5687–5693, Online. Association for Computational Linguistics.
- Alicia DeVos, Aditi Dhabalia, Hong Shen, Kenneth Holstein, and Motahhare Eslami. 2022. Toward user-driven algorithm auditing: Investigating users’ strategies for uncovering harmful algorithmic behavior. In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems*, pages 1–19.
- Ralph W Fasold and Jeff Connor-Linton. 2014. *An introduction to language and linguistics*.
- Tsahi Zack Hayat, Ofrit Lesser, and Tal Samuel-Azran. 2017. Gendered discourse patterns on online social networks: A social network analysis perspective. *Computers in Human Behavior*, 77:132–139.
- Kevin Knight. 2013. [Decipherment](#). In *Proceedings of the 51st Annual Meeting of the Association for Computational Linguistics (Tutorials)*, pages 3–4, Sofia, Bulgaria. Association for Computational Linguistics.
- Balazs Kovacs and Adam M Kleinbaum. 2020. Language-style similarity and social networks. *Psychological science*, 31(2):202–213.
- Hanyun Lu. 2022. *Private social media group and women career development in technology: a PLS-SEM and bayesian network approach*. Ph.D. thesis, Instituto Superior de Economia e Gestão.
- NBS China. 2021. [Final Statistical Monitoring Report on the Implementation of China National Program for Women’s Development \(2011-2020\)](#).
- Sravana Reddy and Kevin Knight. 2016. Obfuscating gender in social media writing. In *Proceedings of the First Workshop on NLP and Computational Social Science*, pages 17–26.
- SCIO China. 2019. [Equality, development, and sharing: Progress of women’s cause in 70 years since new china’s founding](#).
- Chun Yang and Yongyuan Zhou. 2023. Shifting the struggle inward: Mainstream debate on digital grassroots feminism in china. *Asian Journal of Women’s Studies*, 29(1):69–96.
- Tongtao Zhang, Aritra Chowdhury, Nimit Dhulekar, Jinjing Xia, Kevin Knight, Heng Ji, Bülent Yener, and Liming Zhao. 2016. From image to translation: processing the endangered nyushu script. *ACM Transactions on Asian and Low-Resource Language Information Processing (TALLIP)*, 15(4):1–16.