Received: 4 October 2024 Accepted: 25 January 2025 DOI: https://doi.org/10.33182/joph.v5i1.3450

Posthumanist Approach to the Cultural Heritage of Tuhu Chinese Musical Instruments

Tengteng Yu¹, Sayam Chuangprakhon²*, Watcharanon Sangmuenna³, Piyapun Santaveesuk⁴

Abstract

This study explores the preservation of the Tuhu, a traditional bowed string instrument of the Zhuang people in Guangxi Zhuang Autonomous Region, China, through a posthumanist perspective. The Tuhu represents the community's cultural identity and is vital to Zhuang opera and folk music. However, modernization and a decreasing number of skilled players pose significant threats to its transmission. Employing qualitative methods such as ethnographic fieldwork, in-depth interviews, and participant observation in Debao County and Jingxi City regions with rich Zhuang musical traditions, the research engaged five key informants, including local musicians, cultural practitioners, and educators. Thematic analysis revealed the instrumental agency of the Tuhu, environmental influences, and the role of digital technologies in cultural transmission. Findings indicate that preserving the Tuhu necessitates its integration into educational curricula, improved accessibility through digital platforms, and collaboration between cultural practitioners and academic institutions, fostering younger generations' engagement with traditional practices.

Keywords: Tuhu, Zhuang culture, posthumanism, cultural preservation, traditional music education

Introduction

The Tuhu, a traditional bowed string instrument of the Zhuang people in the Guangxi Zhuang Autonomous Region of China, holds significant cultural value as a musical instrument and a symbol of Zhuang ethnic identity (Chen et al., 2024; Guangguo et al., 2024; Jirajarupat & Yinghua, 2023). Used primarily in Zhuang opera and ensemble performances, the Tuhu is integral to the region's folk music traditions. Passed down through oral traditions, this instrument has long been a part of Zhuang community life. However, in the face of rapid modernization, the transmission and preservation of the Tuhu are at risk. With fewer young people learning to play the instrument and an aging population of traditional performers, there is growing concern about the sustainability of Tuhu within the region's cultural landscape. This issue highlights the need for a deeper exploration of how the Tuhu can be preserved and integrated into contemporary life (Li, 2023; Zhang, 2020).

The preservation of Tuhu is faced with several challenges. Firstly, the number of skilled Tuhu players is steadily declining, with many remaining players being elderly. This demographic shift threatens the continuity of knowledge transfer as younger generations show less interest in

⁴ Faculty of Liberal Arts, Shinawatra University, Thailand. E-mail: piyapun.s@siu.ac.th



¹ Guangxi Vocational University of Agriculture, P.R. China. Email: ytt2022@qq.com

² College of Music, Mahasarakham University, Thailand. E-mail: sayam.c@msu.ac.th (* Correspondence author)

³ College of Music, Mahasarakham University, Thailand. E-mail: watcharanon.s@msu.ac.th

2 Posthumanist Approach to the Cultural Heritage of Tuhu Chinese Musical Instruments

traditional Zhuang music. Additionally, the formal education system in Guangxi has not prioritized the inclusion of Tuhu in music curricula, limiting exposure to this culturally rich instrument. In the broader context, global influences, along with urbanization and shifting social values, have further marginalized the role of traditional instruments like the Tuhu in both public and educational spaces. Consequently, there is an urgent need to explore how Tuhu can be preserved in modern educational frameworks and community practices to prevent the loss of this important cultural heritage (Helen, 2016; Howard, 2016).

This study explores the preservation of Tuhu through the lens of posthumanist theory, which emphasizes the interconnectedness of humans, objects, and their environments in cultural processes. A posthumanist approach shifts the focus from a purely human-centered understanding of cultural heritage, allowing for a broader exploration of how material objects, such as the Tuhu, interact with artistic practices (Dedeoğlu & Zampaki, 2023; Nicenboim et al., 2024; Ulmer, 2017). This research aims to investigate the preservation of Tuhu within this framework, focusing on various factors—including the instrument's materiality, the role of educational institutions, and the influence of modern technologies that contribute to its continued relevance. This study's central research question is: "How can the preservation of Tuhu be re-imagined through a posthumanist approach that considers the interaction between human practices, material objects, and cultural heritage?"

The significance of this research lies in its potential to offer new perspectives on preserving Tuhu musical traditions. By examining the interplay between the instrument, cultural practices, and educational systems, this study aims to provide a holistic understanding of how Tuhu can be preserved and transmitted to future generations. This approach addresses the human aspects of cultural heritage, such as performance and teaching (Barthel-Bouchier, 2016; Price et al., 2016). It considers how the instrument and its surrounding cultural and technological context can influence its preservation. Through this research, practical recommendations may emerge, offering strategies for integrating Tuhu into educational curricula, promoting its use in community settings, and leveraging digital technologies to enhance its visibility and accessibility. This study thus contributes to the broader discourse on cultural heritage preservation, providing valuable insights into how traditional practices like Tuhu can be sustained in an ever-changing world.

Literature Review

This literature review focuses on three key areas related to the preservation of cultural heritage, specifically examining how traditional musical instruments like the Tuhu can be approached through a posthumanist perspective. The first section will explore posthumanist theory and its application to cultural heritage preservation. The second section will delve into the role of materiality in cultural transmission, mainly focusing on the instrument itself as an active participant in the preservation process. Finally, the third section will address the integration of traditional music into educational systems, looking at how contemporary pedagogical approaches can be adapted to support the preservation and transmission of the Tuhu.

Posthumanist Theory and Cultural Heritage Preservation

Posthumanist theory emphasizes the interconnectedness of humans, objects, and environments in understanding culture. It broadens the scope of preservation by recognizing the agency of nonhuman actors, such as artifacts, musical instruments, and technologies, in shaping cultural practices. This theory encourages examining how objects like the Tuhu are embedded within cultural

Journal of Posthumanism

ecosystems, including social, material, and environmental factors. Applying posthumanist theory to the preservation of the Tuhu offers a novel perspective on how the instrument can be maintained and revitalized. It suggests that the Tuhu plays an active role in its preservation, influencing its use, teaching, and appreciation within Zhuang communities and beyond. The instrument's physical characteristics, such as design and sound, contribute to its cultural significance and its integration into performances and educational settings. By adopting a posthumanist approach, the preservation of the Tuhu can be understood as a dynamic process involving not only human musicians and educators but also the materiality of the instrument and its interaction with other cultural elements (Abraham, 2023; Chude-Sokei, 2015; Ferrando, 2023).

The Role of Materiality in Cultural Transmission

Materiality is key in transmitting cultural heritage, especially in musical instruments like the Tuhu. The instrument's unique construction, sound, and cultural significance make it a carrier of cultural meaning. Its design and craftsmanship are deeply rooted in Zhuang traditions, and regional musical styles influence its sound. This aligns with posthumanist theory, which emphasizes the role of material objects in shaping cultural practices. Understanding the Tuhu's materiality allows a deeper appreciation of its contribution to the preservation of Zhuang music. The instrument's construction, materials, and techniques are all integral to its cultural value. Its materiality also interacts with the environment, influencing how players and listeners experience it. Preservation efforts can focus on teaching performance skills and maintaining the craftsmanship and knowledge required to produce and repair the instrument, ensuring the Tuhu authentically represents Zhuang musical traditions (Chen & Sensai, 2024; Schuiling & Payne, 2022; Shen & Wang, 2024).

Integration of Traditional Music into Educational Systems

Traditional music education is crucial for preserving cultural heritage, particularly the Tuhu, essential for survival. However, modern pedagogical frameworks prioritize Western traditions and overlook indigenous instruments like the Tuhu. To address this, contemporary approaches must embrace local musical heritage and give prominence to instruments like the Tuhu. A posthumanist approach to education recognizes the Tuhu as an object embodied by cultural knowledge and practices, requiring a more integrated curriculum that includes its history, craftsmanship, and performance. This approach fosters a deeper understanding of the instrument's cultural significance and creates an immersive learning experience. Digital technologies can enhance the accessibility and visibility of the Tuhu, allowing students from various backgrounds to engage with Zhuang musical traditions. By combining traditional teaching methods with modern educational tools, the preservation of the Tuhu can be more effectively supported within contemporary educational settings (Cheng et al., 2022; Lehtinen-Schnabel, 2023; Ou & Gu, 2022).

Materials and methods

This research adopts a qualitative approach, drawing from posthumanist theory to explore the preservation of the Tuhu Chinese musical instruments in the Guangxi Zhuang Autonomous Region. Using ethnographic fieldwork, in-depth interviews, and participant observation, the study examines how the Tuhu, as a cultural artifact, interacts with its environment, performers, and the broader social context to contribute to its preservation (Mauthner, 2015; Mauthner, 2019).

Research Design

The research design incorporates case studies and ethnographic methods to capture the rich cultural context surrounding the Tuhu. Ethnography allows for an immersive investigation of Tuhu's role in Zhuang communities and how it is transmitted across generations. The study emphasizes not only the human aspects, such as musicians, educators, and cultural preservationists but also the material and environmental factors that influence the use and transmission of the instrument. By taking a posthumanist approach, the study moves beyond viewing the Tuhu as merely an object, instead focusing on its agency in cultural practices.

Research Site

Fieldwork was conducted in key locations within the Guangxi Zhuang Autonomous Region, where Tuhu traditions remain most prevalent. These locations include Debao County and Jingxi City, known for their strong cultural ties to Zhuang music and are home to local Zhuang opera troupes and traditional instrumental ensembles. These areas' geographical and cultural importance makes them ideal sites for exploring the preservation and transmission of Tuhu music traditions.

Key Informants

Data were collected through in-depth interviews with five key informants, who were selected based on their expertise and roles in the preservation and transmission of Tuhu music. These informants include local musicians, cultural heritage practitioners, and educators involved in teaching traditional Zhuang instruments. They were chosen using purposive sampling, ensuring that each informant contributed unique insights into the current status of Tuhu within their respective communities, as shown in Table 1.

Туре	Number	Contribution
Local musicians	2	Provided insights on traditional playing techniques and community practices.
Cultural heritage practitioners	1	Discussed the cultural significance of the Tuhu and efforts for its preservation.
Educators	2	Shared information on the current status of Tuhu in local education systems and challenges in introducing the instrument to students.

Table 1. Summary of Key Informants and Their Contribution

Data Collection Methods

The research employed multiple qualitative methods for data collection, including ethnographic fieldwork, participant observation, and in-depth interviews. These methods were chosen to provide a holistic view of Tuhu's cultural and educational significance while allowing the researcher to gain firsthand experience of the instrument's usage in formal and informal settings, as shown in Table 2.

Method	Purpose	Duration/Frequency
Ethnographic Fieldwork	To observe traditional performances of Tuhu in its cultural context.	Conducted during 5 events over a 6-month period.
Participant Observation	To experience firsthand how the Tuhu is taught and played in workshops.	Participated in 3 workshops, each lasting 3 hours.
Semi-Structured Interviews	To gather in-depth insights from key informants.	5 interviews, each lasting 1-2 hours.

Table 2. Overview of Data Collection Methods

Data Analysis

The data collected from interviews, field notes, and participant observation were analyzed using thematic analysis. This method allowed the researcher to identify recurring patterns and themes related to the preservation of Tuhu, focusing particularly on its materiality and role in educational systems. The posthumanist framework guided the analysis, which helped reveal the interplay between human actors and the Tuhu in the preservation process.

Step 1: All interviews were transcribed verbatim to capture the informants' perspectives accurately. Field notes and observations were also organized and prepared for coding.

Step 2: The data were coded to identify key themes, including challenges in preservation, the role of materiality, and the integration of Tuhu into school curricula. Codes were assigned to specific portions of the text that dealt with these themes.

Step 3: The initial codes were grouped into broader themes related to the research objective, such as "educational barriers," "cultural transmission," and "material agency of Tuhu." This allowed the researcher to identify relationships between the themes and the informants' experiences.

Step 4: The final analysis stage involved interpreting the data within the posthumanist framework, focusing on how the Tuhu interacts with human and material actors in its preservation.

Results

The preservation of Tuhu Chinese musical instruments in the Guangxi Zhuang Autonomous Region offers a rich site for examining cultural heritage through a posthumanist lens. Posthumanism challenges the human-centered view of cultural transmission, emphasizing the interconnectedness between human beings, objects, and environments. In the case of Tuhu, this approach allows for an exploration of how the instrument, alongside its human players and the surrounding cultural and material environment, contributes to its preservation.

The Instrumental Agency of Tuhu: A Posthumanist Perspective

From a posthumanist perspective, the Tuhu is not merely a passive object in cultural practices but an active agent that participates in preserving and transmitting Zhuang musical heritage. The Tuhu's materiality, including its physical structure, unique sound, and cultural significance, is vital in shaping how it is played, stored, and preserved. This agency challenges the traditional view of instruments as mere tools, highlighting the intricate relationship between human players, the instrument itself, and the cultural environment in which it exists.

One of the key informants, a performer and expert on Tuhu from Jingxi City, Guangxi, emphasized how the instrument's design directly influences its style and technique. The informant noted that the Tuhu's unique resonator, crafted from local materials such as ironwood or paulownia wood, produces a deep, resonant sound central to the Zhuang musical tradition. The structure of the Tuhu, as depicted in Figure 1, illustrates the detailed components of the instrument, such as the soundbox, bow, and fine-tuning pegs, all of which contribute to its distinct tonal qualities. These material features interact with the environment and the performer, impacting how music is produced and experienced.

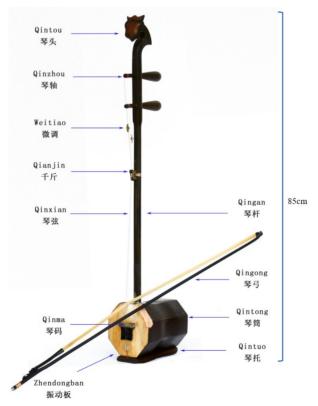


Figure 1. The structure of Tuhu

Posthumanism allows us to reconceptualize the Tuhu's role in cultural preservation. Rather than viewing the instrument as a passive vessel for human expression, it is understood as a co-participant in transmitting Zhuang music. The physical properties of the Tuhu, including its size, the tension of its strings, and its tuning, typically done in perfect fifths, shape how musicians interact with it.

Journal of Posthumanism

For example, the tension of the strings and the ergonomic design of the instrument's bow (as mentioned in the interviews) dictate the specific bowing and string pressing techniques that performers must master. This interaction between the material properties of the instrument and the musician's body forms a complex network of co-creation, where both the human and the instruments contribute to the final musical outcome.

Moreover, the cultural symbolism embedded within the Tuhu adds another layer to its agency. The instrument is deeply tied to Zhuang cultural identity, especially within the context of Zhuang opera and the Zhuang Eight Tones Instrumental Ensemble. As one of the informants described, the Tuhu's presence in traditional performances is not merely functional but represents the continuity of Zhuang cultural practices. The phoenix-head decoration, often carved onto the head of the Tuhu, symbolizes prosperity and cultural pride, and its visual presence on the instrument reinforces its artistic significance within the community.

In analyzing the instrumental agency of the Tuhu, posthumanism opens new ways of understanding cultural heritage. The preservation of Tuhu is not only about human efforts to pass down skills and knowledge but also about recognizing the instrument's role in that process. Its physical properties guide how it is handled, stored, and maintained, while its symbolic meanings contribute to its value within the Zhuang cultural framework. As such, posthumanism provides a more holistic understanding of how cultural preservation occurs, highlighting the intertwined roles of human and non-human actors in the ongoing transmission of Zhuang musical traditions.

Human-Technology-Environment Interactions in the Transmission of Tuhu

In preserving the Tuhu, a traditional Zhuang musical instrument, the interactions between human musicians, the natural environment of Guangxi, and digital technologies emerge as central themes when viewed through a posthumanist lens. Posthumanism encourages us to look beyond human agency and recognize the active roles that non-human elements play in cultural transmission. In this section, we explore how this intricate web of relationships shapes the preservation and transmission of Tuhu.

The natural environment of Guangxi plays a pivotal role in the materiality and sound production of the Tuhu. With its high humidity and fluctuating temperatures, the local climate directly affects the instrument's wooden structure and string tension, requiring musicians to adjust their playing techniques accordingly. During interviews, one key informant mentioned that the quality of sound produced by the Tuhu changes based on the humidity levels, necessitating regular maintenance and care. This emphasizes that the environment is not a passive backdrop but an active participant in the instrument's transmission.

Digital technologies have further amplified the transmission and preservation of Tuhu. In recent years, online platforms have become vital for disseminating Tuhu music and techniques to younger generations who may not have direct access to traditional masters. Several informants noted that online tutorials, digital sheet music, and video demonstrations are used to bridge the gap between older and younger musicians. These digital resources not only make the instrument more accessible but also extend the transmission network beyond Guangxi to national and even global audiences. From a posthumanist perspective, digital platforms act as co-creators in the preservation process, facilitating the flow of knowledge and skills in ways that were not previously possible. These platforms enhance the human capacity for cultural transmission by connecting musicians and learners across geographical boundaries.

8 Posthumanist Approach to the Cultural Heritage of Tuhu Chinese Musical Instruments

Educational institutions also play a significant role in this network of interactions. As noted by several informants, schools in Guangxi have begun incorporating Tuhu into their music curricula, though the process is still in its early stages. This formalization of Tuhu into the educational system ensures that younger generations preserve and revitalize the instrument. However, challenges remain, such as inadequate teachers and appropriate teaching materials. In response, digital tools are increasingly relied upon to supplement in-person instruction, with teachers using online resources to guide students in their practice. This blending of traditional and digital education aligns with posthumanist theory, which recognizes that human knowledge and skills are enhanced through technological integration.

Posthumanism reframes the understanding of Tuhu transmission by shifting the focus from human musicians as the sole agents of preservation to recognizing the dynamic interaction between humans, technology, and the environment. These interconnected forces together form a network that sustains the cultural vitality of the Tuhu. Without the support of digital technologies, the expertise of human musicians, and the unique environmental conditions of Guangxi, the transmission of Tuhu would be incomplete. Each of these elements plays an active role in ensuring the preservation of this cultural heritage, demonstrating the relevance of a posthumanist approach in understanding cultural transmission in a modern context.

Posthumanist Educational Practices: Integrating Tuhu into Contemporary Curricula

The integration of Tuhu into contemporary curricula is pivotal for fostering an understanding of its cultural significance among younger generations. Interviews with educators reveal that including Tuhu in music programs is about imparting technical skills and cultivating an appreciation for Zhuang cultural heritage. Educators emphasize that the teaching of Tuhu should incorporate the practical aspects of playing the instrument and its historical context, cultural symbolism, and the narratives surrounding its use in Zhuang traditions. By doing so, students can develop a deeper connection to their cultural roots, viewing Tuhu as more than just an instrument but an embodiment of their heritage.

Figure 2 depicts a performance illustrating the Glissando and Ti-gong Bowing practices. The educational practices surrounding Tuhu must embrace diverse techniques and approaches. This figure exemplifies how traditional methods are preserved and taught in contemporary settings. The ability to showcase and analyze these practices through educational platforms allows for greater accessibility and engagement, enabling students to experience the richness of Tuhu firsthand. By using digital tools to present these techniques, educators can reach a wider audience, fostering interest and participation in the cultural preservation of Tuhu.

Furthermore, Figure 3, showcasing the video of Glissando and Ti-gong Bowing practice, highlights the role of technology in facilitating immersive learning experiences. Incorporating multimedia resources in teaching Tuhu can enhance students' understanding of complex techniques and provide a more engaging learning environment. This approach aligns with posthumanist thought, as it recognizes that the materiality of educational resources including videos, online tutorials, and interactive platforms—contributes to the learning experience. Such integration not only democratizes access to cultural knowledge but also transforms the dynamics of the educational process, where students become active participants in the preservation of Tuhu.

Glissando and Ti-gong Bowing Practice

Excerpt from "Ba Zhui Yao"



Figure 2. Glissando and Ti-gong bowing practice

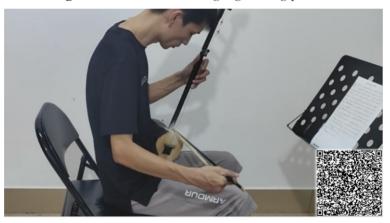


Figure 3. The video of Glissando and Ti-gong bowing practice

Moreover, establishing collaborative relationships between educational institutions and local cultural practitioners is crucial in enriching the educational landscape. Engaging Tuhu players and folk artists in the curriculum development allows for a more authentic transmission of knowledge and skills. Through workshops, master classes, and community engagement initiatives, students gain exposure to the lived experiences of Tuhu practitioners, further deepening their understanding and appreciation of the instrument. This collaborative model exemplifies a posthumanist approach, wherein human and material entities coalesce to foster a comprehensive educational experience centered around Tuhu.

Conclusion

The findings of this study underscore the critical importance of adopting a posthumanist approach to the preservation of Tuhu, a traditional bowed string instrument of the Zhuang people in Guangxi, China. This approach highlights the interconnectedness between the Tuhu, its cultural environment, and its surrounding human practices. The results reveal that the Tuhu is not merely an object but

posthumanism.co.uk

an active agent in cultural transmission, a notion that aligns with the principles of posthumanism, which posits that cultural practices are co-created by both human and non-human actors (Nicenboim et al., 2024; Ulmer, 2017).

The study emphasizes the instrumental agency of the Tuhu, demonstrating how its physical properties influence playing techniques and cultural significance. The unique construction materials and design of the Tuhu significantly shape its sound and, consequently, its role in Zhuang cultural identity. As noted by one informant, the Tuhu's resonant qualities are integral to traditional performances, reinforcing its value within the community (Chen et al., 2024). This finding is consistent with previous research that emphasizes the materiality of cultural artifacts in shaping heritage practices (Abraham, 2023; Ferrando, 2023).

The research also sheds light on the dynamic interplay between the Tuhu, the natural environment, and digital technologies. The climate in Guangxi plays a crucial role in how musicians interact with the instrument, affecting sound production and maintenance (Li, 2023). Furthermore, integrating digital technologies into the learning and dissemination of Tuhu music has been identified as a key factor in bridging generational gaps and expanding accessibility. Online platforms enable the transmission of knowledge beyond geographical boundaries, allowing for a more extensive reach of Zhuang musical traditions (Helen, 2016; Howard, 2016). This intersection of traditional practices and modern technologies reflects the posthumanist principle of understanding culture as an assemblage of various interacting entities (Dedeoğlu & Zampaki, 2023).

The study highlights the need for a more integrated approach to education, including the Tuhu within the curriculum. Despite acknowledging its cultural significance, the current educational frameworks often prioritize Western musical traditions, leaving Indigenous instruments underrepresented (Jirajarupat & Yinghua, 2023). By recognizing the Tuhu as an embodiment of Zhuang heritage, educational practices can foster a deeper appreciation and understanding among students. Collaborative efforts between cultural practitioners and educational institutions can enhance the authenticity of knowledge transmission, further solidifying the role of Tuhu within contemporary music education (Cheng et al., 2022; Ou & Gu, 2022).

In conclusion, this study affirms the potential of a posthumanist framework in addressing the challenges associated with preserving the Tuhu. By recognizing the instrument's agency and the interplay between human practices, environmental factors, and technological advancements, a more holistic understanding of cultural preservation emerges. The findings suggest that the Tuhu's preservation is not solely dependent on human efforts but is an ongoing negotiation involving various actors, including the instrument itself, the environment, and digital platforms.

Future research should explore the potential for incorporating Tuhu into formal music education, examining case studies where such integration has been successfully implemented. Additionally, investigating the role of community engagement in Tuhu preservation efforts could provide valuable insights into how local practices adapt in response to modernization. Longitudinal studies examining the impact of digital resources on Tuhu transmission could also offer critical perspectives on the sustainability of traditional music practices in an increasingly globalized world.

Acknowledgments

This research project was financially supported by Mahasarakham University.

References

- Abraham, A. L. (2023). 21st Century Piano Pedagogy: Unearthing Embodied-Translations in More-than-Human Soundscapes [Doctoral dissertation], ResearchSpace@ Auckland.
- Barthel-Bouchier, D. (2016). *Cultural heritage and the challenge of sustainability*. Routledge. https://doi.org/10.4324/9781315431055
- Chen, H., & Sensai, P. (2024). Education and Literacy in the Development and Transmission of Chinese Yao Nationality Folk Songs. International Journal of Education and Literacy Studies, 12(1), 213-220. https://doi.org/10.7575/aiac.ijels.v.12n.1p.213
- Chen, X., Chuangprakhon, S., & Liu, R. (2024). Tianqin: Evolutionary Perspectives on the Culture of Chinese Folk Musical Instruments in Playing Techniques and Cultural Change. *Evolutionary Studies in Imaginative Culture*, 8(2), 58-69. https://doi.org/10.70082/esiculture.vi.671
- Cheng, M., Pang, B., Zeng, X., Xu, W., & Chang, Y. (2022). Integration of the traditions of folk-instrumental art into the works of Chinese composers of the 20th and 21st centuries. *Rupkatha Journal on Interdisciplinary Studies in Humanities*, 14(2), 1-17. https://doi.org/10.21659/rupkatha.v14n2.19
- Chude-Sokei, L. (2015). The sound of culture: Diaspora and black technopoetics. Wesleyan University Press.
- Dedeoğlu, Ç., & Zampaki, N. (2023). Posthumanism for sustainability: A scoping review. Journal of Posthumanism, 3(1), 33-57. https://doi.org/10.33182/joph.v3i1.2761
- Ferrando, F. (2023). The Art of Being Posthuman: Who are We in the 21st Century? John Wiley & Sons.
- Guangguo, W., Chuangprakhon, S., Liu, S., Jian, S., & Santaveesuk, P. (2024). The role of Zhuang stringed instruments in the Zhuang autonomous region of Guangxi, China: A cultural analysis. *Multidisciplinary Reviews*, 7(8), 2024178-2024178. https://doi.org/10.31893/multirev.2024178
- Helen, R. (2016). Intangible Cultural Heritage in China Today: Policy and Practice in the Early Twenty-First Century 1. In *music as intangible cultural heritage* (pp. 23-54). Routledge.
- Howard, K. (Ed.). (2016). Music as intangible cultural heritage: Policy, ideology, and practice in the preservation of East Asian traditions. Routledge. https://doi.org/10.4324/9781315596723
- Jirajarupat, P., & Yinghua, Z. (2023). The Transmission of Guqin Musical Instrument Knowledge Literacy and its Reflection Study in Guizhou Province, China. *International Journal of Education and Literacy Studies*, 11(2), 22-29. https://doi.org/10.7575/aiac.ijels.v.11n.2p.22
- Lehtinen-Schnabel, J. (2023). Novel opportunities for intercultural music education: Integrating singing and a language-aware approach in Learn-Finnish-by-Singing choirs. *Research Studies in Music Education*, 45(3), 478-496. https://doi.org/10.1177/1321103X221136826
- Li, C. (2023). Analysing the modern repertoire for Erhu through a comparison of two works: Capriccio No. 2-Mongolian Fantasy, and Wailing Waters [Doctoral dissertation], Open Access Te Herenga Waka-Victoria University of Wellington.
- Mauthner, N. (2015). "The past was never simply there to begin with and the future is not simply what will unfold': a posthumanist performative approach to qualitative longitudinal research. *International Journal of Social Research Methodology*, 18(3), 321-336. https://doi.org/10.1080/13645579.2015.1022298
- Mauthner, N. S. (2019). Toward a posthumanist ethics of qualitative research in a big data era. American Behavioral Scientist, 63(6), 669-698. https://doi.org/10.1177/0002764218792701
- Nicenboim, I., Oogjes, D., Biggs, H., & Nam, S. (2024). Decentering Through Design: Bridging Posthuman Theory with More-than-Human Design Practices. *Human-Computer Interaction*, 1-26. https://doi.org/10.1080/07370024.2023.2283535
- Ou, W. A., & Gu, M. M. (2022). Competence beyond language: translanguaging and spatial repertoire in teacher-student interaction in a music classroom in an international Chinese University. *International Journal* of Bilingual Education and Bilingualism, 25(8), 2741-2758. https://doi.org/10.1080/13670050.2021.1949261
- Price, N., Talley, M. K., & Vaccaro, A. M. (Eds.). (2016). Historical and philosophical issues in the conservation of cultural heritage. Getty Publications.
- Schuiling, F., & Payne, E. (2022). Material Cultures of Music Notation. Routledge. https://doi.org/10.4324/9780429342837

12 Posthumanist Approach to the Cultural Heritage of Tuhu Chinese Musical Instruments

- Shen, H., & Wang, S. (2024). Traditional Chinese Ideology and Material Culture: An Archaeological Exploration of Historical Perspectives and Artefacts. *Mediterranean Archaeology and Archaeometry*, 24(3), 237-252.
- Ulmer, J. B. (2017). Posthumanism as research methodology: Inquiry in the Anthropocene. *International journal of qualitative studies in education*, 30(9), 832-848. https://doi.org/10.1080/09518398.2017.1336806
- Zhang, Y. (2020). Going to the Countryside: The Rural in the Modern Chinese Cultural Imagination, 1915-1965. University of Michigan Press. https://doi.org/10.3998/mpub.10142190