



ARTICLE

Submitted date : May 26th 2025

Revised date : June 11st 2025

Accepted date : July 2nd 2025

Correspondence Address:

Jl. Olahraga, Karang Malang, Caturtunggal, Kec. Depok, Kabupaten Sleman,
Daerah Istimewa Yogyakarta 55281

E-mail: antoniusharya@gmail.com

Ethnomusicology in the Virtual Era: Questioning the 'Ethnos' Concept in Online Music Communities

Antonius Harya Febu Widodo ^{1*}

¹Master of Philosophy, Faculty of Philosophy, Universitas Gadjah Mada

Abstract:

This journal presents a philosophical critique of applying the classical ethnomusicological concept of "ethnos" which traditionally refers to cohesive socio-cultural groups rooted in specific locations to online music communities. Ethnomusicology has long emphasized music as embedded in culture, relying on fieldwork and direct social interaction. But with the rise of digital spaces social media, streaming platforms, and online forums new musical collectives have emerged that challenge these assumptions. Online communities often transcend geographic and ethnic boundaries, and are marked by features such as fragmentation, anonymity, pseudonymity, algorithmic mediation, and fluid identities.

The study questions whether the "ethnos" concept remains suitable in this digital context. It adopts a theoretical critique by integrating Derrida's deconstruction, Nancy's ontology of "being-with," and contemporary theories like Network Theory and Post-humanism. These frameworks are used to analyze the characteristics of virtual music communities as discussed in existing literature.

The analysis reveals a deep dissonance: digital formations tend to be unstable, dispersed, and co-constructed by non-human agents such as algorithms. Their temporality is often transient, identities are multiple and shifting, and the boundaries between the global and local are increasingly blurred. These qualities contrast sharply with the traditional assumptions of coherence, stability, and human-centered agency in the "ethnos" framework.

The paper argues for the need to develop new conceptual tools such as affective or inoperative communities, algorithmic publics, and networked collectivities and calls for broader interdisciplinary dialogue. Ultimately, it suggests that rethinking foundational categories is vital for ethnomusicology to remain responsive in a digitally interconnected world.

Keywords: Ethnomusicology; Virtual Communities; Ethnos

Abstrak:

Jurnal ini mengkritisi secara filosofis penggunaan konsep klasik etnomusikologi "ethnos" yang merujuk pada kelompok sosio-kultural yang stabil dan terikat lokasi fisik tertentu untuk memahami komunitas musik daring. Etnomusikologi awalnya fokus pada studi musik dalam konteks budaya tertentu, biasanya melalui kerja lapangan langsung. Namun, munculnya ruang digital seperti internet, media sosial, dan platform streaming menghadirkan tantangan baru. Komunitas daring kini muncul berdasarkan minat musik bersama yang melampaui batas geografis dan etnis, sering kali anonim, terfragmentasi, dikurasi algoritma, serta menunjukkan identitas yang cair dan kompleks.

Penelitian ini mempertanyakan apakah konsep "ethnos" masih relevan untuk menganalisis fenomena ini. Dengan pendekatan kritik teoretis, penulis menggabungkan pemikiran Derrida dan Nancy dengan teori jejaring dan post-humanisme untuk menelaah karakter komunitas musik virtual. Hasilnya menunjukkan ketimpangan mendasar: komunitas digital cenderung tidak stabil, dipengaruhi oleh agensi non-manusia (seperti algoritma), serta terikat pada dinamika global yang berubah-ubah. Semua ini bertentangan dengan asumsi stabilitas dan batas-batas jelas dalam konsep "ethnos" tradisional.

Jurnal ini mengusulkan perlunya alat teoretis baru seperti jaringan, komunitas afektif, komunitas inoperatif, atau publik algoritmik. Ia juga menekankan pentingnya keterlibatan lintas disiplin dengan kajian media, STS, filsafat, dan ilmu komputer. Penutupnya menyarankan bahwa mempertanyakan ulang konsep inti penting agar etnomusikologi tetap relevan dalam dunia yang semakin terhubung secara digital.

Kata kunci: Etnomusikologi; Komunitas Virtual; Etnos

1. Introduction: Rethinking Ethnicity in the Digital Age

Ethnomusicology, as a discipline, grew out of a strong foundation: the concept of 'ethnicity.' This term, borrowed from anthropology, classically refers to social-cultural groups such as tribes, nations, or ethnic groups that are considered to have a certain unity or coherence of identity, particularly in the way they make music (Fram et al., 2021). The focus is clear: understanding music not merely as sound, but as an integral part of a culture. How does music function within culture, and how is music itself a culture? Often, this understanding is closely tied to the idea of place a specific geographical region and a collective identity assumed to be hereditary and relatively stable (Huifang & Jiang, 2024). It is no surprise that the cornerstone method of classical ethnomusicology is ethnographic fieldwork. Researchers physically present themselves, participate in community life (participant observation), and interact directly to capture the meaning of music from "within" (Einarsson & Ziemke, 2017).

However, the world of music is no longer the same. The explosion of virtual spaces the internet, social media, streaming platforms, online forums, even the gaming world—has radically transformed the landscape. These digital spaces are no longer mere add-ons but have become the main stage for contemporary musical life (Roy, 2014). This is where the phenomenon we often refer to as 'online music communities' emerges. Interestingly, these groups often form not because of shared origins or locations but because of shared musical tastes or practices, easily crossing geographical and ethnic boundaries. Furthermore, the virtual world has its own rules: anonymity and the ability to use pseudonyms, which allow people to present different or even multiple personas when interacting about music (Werner & Johansson, 2014). The literature also notes another distinctive feature: these groups tend to fragment into many small groups based on specific tastes (Putra, 2025); their experiences are greatly influenced by automated recommendation systems (algorithmic curation) (Anderson et al., 2020; Hidayat & Yulianita, 2022); and the identities of their members can be highly fluid and changeable (Kunto, 2022; Latifa & Harianto, 2023); interactions are always mediated by technology; their time together can be highly variable, sometimes only fleeting (ephemeral) (Kholidi et al., 2024); and the emergence of unique dynamics between global scale and a new sense of "local" within the network (glocalisation).

The emergence of this new phenomenon, with all its distinctive characteristics, inevitably shakes the foundations of ethnomusicology. Fundamental questions arise: Is the concept of "ethnos", which has been so central until now, still relevant for understanding music in the digital age? How can we understand musical identity and practice when both are increasingly formed and expressed in this fluid, mediated virtual world?

The concept of “ethnos”, with its emphasis on physical ties to place, lineage (cultural or biological), oral tradition, and the importance of face-to-face interaction (Setiawan, 2024), feels inadequate for capturing the complex and dynamic nature of online communities interacting around music (Ferguson & Brown, 2016). The characteristics of online music communities—fragmentation, the role of algorithms, fluid identities, and so on (Anderson et al., 2020)—are clearly very different from the assumptions of coherence, clear boundaries, and identity stability found in classical “ethnos” (Scheid, 2014). Therefore, assuming that every online music group can be equated with traditional “ethnos” requires philosophical re-examination. Referring to it as ‘digital ethnos’ may oversimplify the issue, overlooking the crucial role of technology as an intermediary, the fragmented and fleeting nature of interactions, and—most importantly—the role of non-human “actors” such as algorithms and platform design in shaping group dynamics (Omid et al., 2020; MacGlone et al., 2020; Zhou, 2022).

The internet does indeed open access and functions as a kind of global music archive (Niknafs, 2019; Jiao, 2023), but it also brings new issues regarding copyright and piracy (Kenny, 2013; Turchet et al., 2023). Music education has also been affected, with the emergence of new digital-based methods but also challenges regarding quality and access gaps (Coleman, 2010; Rogers, 2013; Viola et al., 2018). Given all these complexities, this paper aims to conduct a critical examination of the conceptual foundations of ethnomusicology. The central question: Is “ethnos” still relevant? Does it need to be revised, or even abandoned? How does the nature of virtual communities challenge the assumptions and methods of ethnomusicology? And what does it mean to “do ethnomusicology” when its “field” is a digital network and its “community” resembles a dynamic network rather than a solid group? To answer these questions, a cross-disciplinary approach seems inevitable (Dilmeri et al., 2011; Bouhnik & Deshen, 2013; Lan, 2022; Costa & Schiavoni, 2022; Turchet et al., 2020).

2. Literature Review: Dissecting “Ethnos” and Preparing a Critical Lens

To unpack this issue, we need to look at two things: first, how the concept of “ethnos” is understood in the tradition of ethnomusicology, and second, what critical frameworks can help us analyse the phenomenon of virtual music communities.

• Understanding “Ethnos” in the Tradition of Ethnomusicology:

The concept of “ethnos” is akin to the DNA of ethnomusicology, a legacy of anthropology that once focused heavily on “traditional” societies (Setiawan, 2024). At that time, “ethnos” was viewed as a basic unit: a group of people considered to share cultural, linguistic, geographical, historical, and collective identity traits that tend to be stable (Wimbrayardi & Parmadi, 2021). Of course, this view has since been criticised for being overly simplistic

and often ignoring real intercultural interactions (Regar & Lestari, 2021; Kurniawan, 2023). Classical ethnomusicology adopted this perspective, often defining itself as the study of music from a particular ethnos (Lestari, 2014). Alan Merriam, for example, is famous for defining ethnomusicology as 'the study of music within culture,' highlighting the close relationship between music and behaviour in specific socio-cultural contexts (Nugroho, 2021). The focus is on distinctive repertoires, performance styles, the social functions of music (rituals, work), related belief systems, and the unique practices of the ethnic group in question (Hidayatulloh, 2021). Music is seen as a mirror of collective identity (Setiawan, 2023), and the emphasis on oral traditions (as by George List) reinforces this connection (Mere et al., 2022). However, criticism from within the discipline itself has long emerged. There is a danger of essentialism (assuming that culture is static and has an unchanging core) and homogenisation (ignoring diversity within groups). Criticism is also directed at the portrayal of culture as static and isolated (Kurniawan, 2023; Satria & Miyanti, 2016). The currents of globalisation, the phenomenon of diaspora (people living outside their ancestral lands), and critiques of the lack of attention to power relations (e.g., Talal Asad's critique of interpretive approaches, as cited in Iswanto, 2020) and the emergence of social practice theory (e.g., from Pierre Bourdieu, cited in Daluwu et al., 2022) have increasingly undermined the notion of a solid and isolated "ethnos". This indicates that the foundation of "ethnos" had already begun to crack even before the digital era, opening the door to more fundamental questions (Sukotjo et al., 2023).

• **A Critical Lens for Analysing Virtual Communities:**

To see the issue of "ethnicity" in cyberspace more clearly, we need a sharp theoretical lens. Some of the lenses we will use here are:

◦ Deconstruction (Jacques Derrida)

This is not about destruction, but about unpacking hidden assumptions. Derrida helps us question the notion of clear-cut "community" boundaries, a single centre of identity, and the illusion of "full presence" in online interactions (Gibson, 2021). How are these boundaries constructed? Who is inside and who is outside? Derrida also critiques the search for a stable "centre" of meaning (logocentrism), which is relevant because virtual communities often lack a single centre (Gibson, 2021). His concept of *différance* reminds us that meaning and identity are always in process, always deferred and different, never final. Online interactions can be seen as digital "texts" full of traces, not as complete presences (Haynes, 2010).

◦ The Ontology of "Being-With" (Jean-Luc Nancy)

Nancy radically rejects the view of community as the fusion of individuals or entities that "work" (operative) towards a common goal. For him, true community occurs when the singularity (uniqueness) of individuals is exposed to one another in their separateness. This is being-with, not

becoming one (Molek, 2017; MANTIE & TIRONI-RODÓ, 2023).

Nancy's concept of the 'inoperative community' describes a community that does not produce collective 'works,' but simply 'happens' in a fluid togetherness (Stenalt, 2021). This seems very fitting to describe many online music groups whose members come and go, without a rigid collective goal other than sharing interests.

◦ Network Theory

This theory shifts our focus: no longer viewing groups ("ethnos") as the primary unit, but examining the structure of relationships (links) between nodes in a network (Waldron, 2018). Nodes can be people, songs, platforms, algorithms; links can be "follows," 'likes,' comments, collaborations. Using network analysis tools, we can empirically map how small groups (niches) form, who the influential actors are (centrality), and how information or trends spread. This captures the dynamic and fluid nature of the online world, differing from the assumption of "ethnic" stability (Singh & Kumar, 2024).

◦ Post-humanism

This approach challenges the view that humans are the only important actors (anthropocentrism). Post-humanism acknowledges that technology, algorithms, and platforms also have "agency"—the ability to act and influence (Agyeman & Brewu, 2020). Online music experiences are not merely humans using tools, but the result of complex interactions (assemblage) between humans and technology, where both mutually shape each other (Spinetti et al., 2020; Росул, 2023). Post-humanism also invites us to consider how technology alters the way we physically perceive and experience music in the digital world.

These four lenses, each in their own way, will help us critique the application of the concept of "ethnos" to the complex and dynamic reality of virtual music communities.

3. Methods: Theoretical Criticism Approach

This study is a conceptual exploration using a qualitative approach that prioritizes theoretical critique and literature review over empirical data collection. It examines the classical ethnomusicological concept of "ethnos" in light of emerging online music communities, evaluating its continued relevance through contemporary critical theories. The goal is to build a philosophical and theoretical argument about the adequacy of traditional frameworks in addressing digital realities.

The research follows five steps: (1) analyzing the concept of "ethnos" by reviewing key literature in ethnomusicology and anthropology; (2) mapping virtual musical spaces via interdisciplinary sources to identify contrasting traits like fragmentation, algorithmic influence, identity fluidity, and glocalization; (3) selecting critical lenses Derrida's deconstruction, Nancy's

“being-with,” Network Theory, and Post-humanism for their potential to challenge core ideas of community and agency; (4) conducting a comparative-critical analysis to interpret the philosophical mismatch between “ethnos” and virtual communities using key theoretical concepts; and (5) identifying implications for ethnomusicological theory and methodology, including ethical research practices, conceptual innovation, and interdisciplinary collaboration.

To ensure rigor, the study employs theoretical triangulation, a comprehensive literature review, and coherent argumentation grounded in scholarly sources. While the non-empirical nature of the study is a limitation, its interpretative depth offers valuable insights for rethinking foundational concepts in ethnomusicology.

Results: A Portrait of the 'Music Community' in the Digital Realm

Through extensive literature review and synthesis, a nuanced portrait emerges of the online 'music community' a formation that exhibits distinctive characteristics markedly different from the classical concept of 'ethnos' in traditional ethnomusicology.

Online musical activity is no longer centered around a singular, cohesive group; rather, it is fragmented into numerous niche communities or microgroups. These groupings may be based on highly specific musical genres such as metalcore or synthwave collaborative creative practices like remixing or covering songs, shared admiration for particular artists, or even the social media platforms they inhabit. These communities often operate independently, forming a landscape that resembles a diverse mosaic rather than a unified whole.

Moreover, the dynamics within online music communities are significantly shaped by automated systems or algorithms, particularly on major platforms such as Spotify, YouTube, and TikTok. These algorithms not only recommend music but also actively influence musical tastes, connect users with others who share similar preferences, and determine which musical trends or content gain popularity. In this sense, non-human "actors" play a pivotal role in shaping musical experiences and social dynamics in the digital sphere.

Identity within online music communities tends to be fluid and multifaceted. Unlike ethnic group identities, which are often perceived as stable and singular, digital identities are highly flexible. Users may adopt pseudonyms or remain entirely anonymous. They can construct online personas distinct from their offline selves, or even maintain multiple identities across different platforms or music groups. Such experimentation with identity is both common and socially accepted.

Interactions within these communities are almost exclusively mediated by technology—devices, applications, and internet connectivity. Face-to-face

encounters are rare, replaced by communication through text, images, audio, or video, all filtered through platform interfaces. This technological mediation fundamentally alters how individuals interact and experience a sense of togetherness compared to physical gatherings.

In terms of temporality, online music communities exhibit a wide range of lifespans. Many musical trends or online challenges are ephemeral—gaining brief popularity before fading away. However, some forums or fan groups persist for years. Generally, the rapid pace of change in digital environments renders many interactions more synchronic and transient. Interestingly, these communities can transcend national boundaries, connecting individuals globally. Yet within this global space, new forms of "locality" can emerge. Specific groups or forums may develop their own language, norms, humor, or internal culture, understood only by their members, creating a distinctive virtual "place" despite geographic dispersion. This phenomenon is often referred to as glocalization.

The characteristics synthesized from the literature, when compared to the classical concept of 'ethnos', reveal stark contrasts, as summarized in Table 1.

Table 1. Comparative Characteristics of Classical 'Ethnos' vs. Synthesized Features of Virtual 'Music'

Characteristic	Classical 'Ethnos' (Based on Literature Review)	Synthesis Findings of Virtual "Music Community" Characteristics
Group Basis	Kinship, Territory/Physical Place, Shared History, Shared Culture	Specific Musical Interests/Tastes, Shared Practices, Platform Affiliation, Algorithmic Influence
Location	Bound to Specific Geography, Clear Physical Locality	Digital Network, No Fixed Physical Place / Multi-local, New Global/Local
Mode of Interaction	Predominantly Face-to-Face, Oral Communication, Oral Tradition	Mediated by Technology (Text, Audio, Video, Avatar, Platform Interface)
Identity	Relatively Stable, Tend to be Singular, Strong Collective, Tied to Offline Attributes	Fluid, Multiple, Constructed, Anonymous/Pseudonymous, Individual/Networked
Group Boundaries	Relatively Clear and Stable, Socially Maintained	Porous, Rapidly Changing, Overlapping, Often Algorithmically Influenced
Temporality	Diachronic Depth, Continuity of Tradition, Long-term Stability	Predominantly Synchronic, Ephemeral/Variable, Fast Trends, Short/Fragmented History
Key Influences	Traditional Elders, Traditional Social Institutions, Traditions, Physical Environment	Recommendation Algorithms, Platform Design, Digital Influencers, Peer Networks
Main Agency	Humans (Group Members, Traditional Leaders)	Humans and Non-Humans (Algorithms, Platforms, Software/Hardware)

These findings form the basis of the argument that directly applying the concept of 'ethnos' to virtual music phenomena may be inadequate and instead requires further interpretation through alternative theoretical lenses.

4. Discussions: Why the Concept of 'Ethnos' Is Less Relevant and What It Means for Ethnomusicology

Following the presentation of findings on the distinctive characteristics of virtual 'music communities', this section discusses why these features render the classical concept of 'ethnos' less applicable, and explores the broader implications for the future of ethnomusicological inquiry. This discussion is framed through the lens of critical theory introduced earlier.

Viewed through Derrida's deconstructive framework, the findings on fragmentation and fluid group boundaries directly challenge the notion of 'ethnos' as a clearly defined and centralized unity. Rather than a cohesive group, the digital realm resembles a decentralized network without a singular core. The fluid and interchangeable nature of identity also disrupts assumptions about a stable, unified subject echoing Derrida's critique of the illusion of "full presence" (Gibson, 2021; Haynes, 2010). The fact that group boundaries are shaped by algorithms further underscores that these "communities" are dynamic constructions rather than natural entities.

Jean-Luc Nancy's ontology of "being-with" offers a compelling alternative perspective. Instead of viewing fragmentation and ephemerality as failures of community, they can be seen as defining features of the "inoperative community" (Stenalt, 2021). Virtual togetherness may not aim to produce a coherent collective "work," but rather occurs in fleeting moments when unique individuals (singularities) are "exposed" to one another through shared musical interests while remaining distinct. This is a form of "being-with" that resists total fusion into a singular identity (Mantie & Tironi-Rodó, 2023; Oakes & Abolhasani, 2021). Technological mediation may, in fact, highlight the separateness that enables this new form of togetherness.

Network Theory provides a practical analytical tool for interpreting these findings. Its focus on the relationships between nodes within a network is particularly well-suited to analyzing the fragmented landscape of online music communities (Waldron, 2018). It allows us to map how micro-groups form (community detection), identify the most influential actors (centrality analysis), and trace the diffusion of trends or information. This approach offers a more dynamic and empirical lens than the relatively static model of 'ethnos' (Singh & Kumar, 2024).

Finally, Posthumanism is especially relevant in interpreting the role of algorithms and technological mediation. This perspective reminds us that humans are not the only significant "actors." Algorithms and platforms possess agency they actively shape taste, mediate interactions, and even

influence who connects with whom (Agyeman & Brewu, 2020; Посыл, 2023). Online musical experience is the result of a complex assemblage between humans and technologies, in which both mutually influence one another (Spinetti et al., 2020). This marks a significant departure from the anthropocentric assumptions embedded in the classical notion of 'ethnos'.

So, What Does All This Mean for Ethnomusicology? This discussion illustrates that while the classical concept of 'ethnos' holds historical value, it falls short in capturing the nuanced realities of musical life in the digital age particularly in relation to non-human agency, fluid identities, and complex network dynamics. The implications of this inadequacy are profound and call for a serious rethinking of ethnomusicological frameworks.

One major implication is the need for new research methodologies in ethnomusicology, accompanied by deep ethical reflection. Traditional fieldwork must be complemented or in some cases, replaced by online research methods such as netnography. However, this transition is far from straightforward. It raises critical questions: How do we define the "field" in a boundless digital space? How should we address ethical concerns around privacy, informed consent, and anonymity when studying online interactions that may leave permanent traces? How can we analyze the overwhelming volume of data and the often-invisible influence of algorithms? These challenges demand both methodological innovation and ethical rigor.

If the classical notion of 'ethnos' proves inadequate, ethnomusicology must remain open to exploring or developing alternative conceptual frameworks. Terms such as "networked musical publics," "algorithmic publics" (groups shaped by algorithmic curation), "affective communities" (groups formed through shared emotional resonance), or even "inoperative musical communities" (drawing on Nancy's philosophy) may offer more suitable lenses. Core ethnomusicological questions about meaning, identity, and the function of music must be rearticulated within this technologically mediated context.

This challenge is too complex for ethnomusicology to address in isolation. Dialogue and collaboration with other disciplines such as media studies, science and technology studies (STS), philosophy, digital sociology, and computer science are essential for developing a more holistic understanding. An interdisciplinary approach enables researchers to view digital musical phenomena from multiple perspectives and to construct more comprehensive analytical frameworks.

Questioning the concept of 'ethnos' is not an attempt to dismantle ethnomusicology, but rather a vital step toward ensuring that the discipline remains relevant, critical, and capable of explaining how music is lived and made meaningful in an increasingly digital world.

5. Conclusions: Toward a More Adaptive Ethnomusicology

Following a critical analysis of the concept of 'ethnos' and its confrontation with the realities of virtual 'music communities' informed by contemporary theoretical lenses several key conclusions can be drawn:

First, the classical concept of 'ethnos' proves to be insufficient. Its foundational assumptions regarding group coherence, attachment to physical place, stable collective identity, and the primacy of human agency do not align with the core characteristics of online musical aggregations, which tend to be fragmented, algorithmically shaped, fluid in identity, technologically mediated, ephemeral, and marked by glocalized dynamics. These fundamental differences render the direct application of 'ethnos' problematic.

Second, critical theoretical approaches offer valuable insights. Frameworks such as Deconstruction, Nancy's Ontology of Being-With, Network Theory, and Posthumanism help deconstruct outdated assumptions and provide more nuanced perspectives on digital musical phenomena. These theories highlight key aspects such as the instability of meaning, the relational nature of togetherness, the importance of network structures, and the agency of non-human actors that are often overlooked when relying solely on the 'ethnos' framework.

Third, the implications for ethnomusicology are both significant and urgent. To remain relevant, the discipline must adapt. This entails developing methodological flexibility by embracing digital research methods (such as netnography) and grappling with their ethical challenges; demonstrating theoretical openness by reevaluating core concepts and exploring more fitting alternative frameworks; and strengthening interdisciplinary engagement with other fields to better understand the complex interplay between music, technology, and society today.

While the notion of an "ethnomusicology without ethnos" may sound radical, the willingness to critically reassess conceptual foundations is a sign of a discipline's vitality. This is not about erasing history, but about ensuring that ethnomusicology continues to offer sharp and relevant analyses of how music is lived, experienced, and made meaningful in its many forms in the increasingly connected 21st century. This challenge also opens up exciting opportunities for ethnomusicology to expand its horizons and reaffirm its role in understanding the contemporary world. Future research can build on this foundation through deeper empirical studies and the testing of the alternative concepts proposed here.

6. References

Agyeman, K., & Brewu, J. (2020). The socio-cultural context of akan ethnomusical games and their relevance to the lives of children in ashanti region. *Social Education Research*, 229–244. <https://doi.org/10.37256/ser.122020444>

- Anderson, I., García-Gil, S., Gibson, C., Wolf, S., Shapiro, W., Semerci, O., ... & Greenberg, D. (2020). "just the way you are": linking music listening on spotify and personality. *Social Psychological and Personality Science*, 12(4), 561–572. <https://doi.org/10.1177/1948550620923228>
- Bouhnik, D., & Deshen, M. (2013). Adolescents' perception of illegal music downloads from the internet: an empirical investigation of israeli high school students' moral attitude and behaviour. *Proceedings of the American Society for Information Science and Technology*, 50(1), 1–11. <https://doi.org/10.1002/meet.14505001043>
- Coleman, E. (2010). Ethnographic approaches to digital media. *Annual Review of Anthropology*, 39(1), 487–505. <https://doi.org/10.1146/annurev.anthro.012809.104945>
- Costa, R., & Schiavoni, F. (2022). Internet of musical things environments and pure data: a perfect match?. *Cultural Arts Research and Development*, 2(1), 1–10. <https://doi.org/10.55121/card.v2i1.13>
- Daluwu, O., Sunarmi, S., & Takalumang, L. (2022). Musik iringan tari ampa wayer di kelurahan kolongan akembawi kecamatan tahuna barat kabupaten kepulauan sangihe. *Kompetensi*, 2(11), 1807–1817. <https://doi.org/10.53682/kompetensi.v2i11.5700>
- Dilmeri, A., King, T., & Dennis, C. (2011). Pirates of the web: the curse of illegal downloading. *Journal of Retailing and Consumer Services*, 18(2), 132–140. <https://doi.org/10.1016/j.jretconser.2010.12.004>
- Einarsson, A., & Ziemke, T. (2017). Exploring the multi-layered affordances of composing and performing interactive music with responsive technologies. *Frontiers in Psychology*, 8. <https://doi.org/10.3389/fpsyg.2017.01701>
- Ferguson, J., & Brown, A. (2016). Fostering a post-digital avant-garde: research-led teaching of music technology. *Organised Sound*, 21(2), 127–137. <https://doi.org/10.1017/s1355771816000054>
- Fram, N., Goudarzi, V., Terasawa, H., & Berger, J. (2021). Collaborating in isolation: assessing the effects of the covid-19 pandemic on patterns of collaborative behavior among working musicians. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.674246>
- Gibson, S. (2021). Shifting from offline to online collaborative music-making, teaching and learning: perceptions of ethno artistic mentors. *Music Education Research*, 23(2), 151–166. <https://doi.org/10.1080/14613808.2021.1904865>
- Haynes, J. (2010). In the blood: the racializing tones of music categorization. *Cultural Sociology*, 4(1), 81–100. <https://doi.org/10.1177/1749975509356862>
- Hidayat, F., & Yulianita, N. (2022). Kampanye brand awareness musik lawas indonesia. *Bandung Conference Series Public Relations*, 2(1). <https://doi.org/10.29313/bcspr.v2i1.484>
- Hidayatulloh, N. (2021). Gambus tunggal edi pulampas di pekon banjar

	<p>negeri-lampung. Selonding, 16(1), 24–36. https://doi.org/10.24821/sl.v16i1.5050</p> <p>Huifang, Q., & Jiang, H. (2024). The situation and strategies of digital literacy of rural music teachers in china. <i>Advances in Educational Technology and Psychology</i>, 8(1). https://doi.org/10.23977/aetp.2024.080128</p> <p>Iswanto, I. (2020). Analisa bentuk musikal nyayian lego-lego pada masyarakat alor di NTT. <i>Jurnal Forte Volume 1 Nomor 1 Edisi Jan-Des 2019</i>. https://doi.org/10.31220/osf.io/y6guf</p> <p>Jiao, P. (2023). The development trend of music art based on content analysis method. <i>Applied Mathematics and Nonlinear Sciences</i>, 9(1). https://doi.org/10.2478/amns.2023.1.00139</p> <p>Kenny, A. (2013). "the next level": investigating teaching and learning within an Irish traditional music online community. <i>Research Studies in Music Education</i>, 35(2), 239–253. https://doi.org/10.1177/1321103x13508349</p> <p>Kholidi, I., Umam, F., Wazis, K., & Jali, H. (2024). Young people and the fragmentation of religious authority: study of youth movements and the spirit of Islamic da'wah in Indonesia. <i>At-Turas Jurnal Studi Keislaman</i>, 11(1), 1–11. https://doi.org/10.33650/at-turas.v11i1.7986</p> <p>Kunto, I. (2022). Editorial JPI Vol. 5 No. 2 Tahun 2022. <i>Jurnal Pembelajaran Inovatif</i>, 5(2), 00. https://doi.org/10.21009/jpi.052.00</p> <p>Kurniawan, R. (2023). Instrumen tiup puik-puik dalam perspektif etnomusikologis: pedagogis, alam dan budaya. <i>Selonding</i>, 19(2), 78–86. https://doi.org/10.24821/sl.v19i2.10761</p> <p>Lan, X. (2022). Construction of a music education model based on internet big data. <i>Wireless Communications and Mobile Computing</i>, 2022, 1–6. https://doi.org/10.1155/2022/3732776</p> <p>Latifa, I., & Harianto, S. (2023). Studi etnografi virtual kehidupan di balik akun Twitter K-Popers dalam perspektif dramaturgi. <i>Communication</i>, 14(1), 40. https://doi.org/10.36080/comm.v14i1.2133</p> <p>Lestari, U. (2014). Mitos asmat "fumiripits" dalam kajian antropologi sastra. <i>Gramatika Jurnal Ilmiah Kebahasaan Dan Kesastraan</i>, 2(1), 17–28. https://doi.org/10.31813/gramatika/2.1.2014.77.17--28</p> <p>MANTIE, R., & TIRONI-RODÓ, P. (2023). Interculturalism, interculturalidad, and music education. <i>ACT: Action, Criticism, and Theory for Music Education</i>, 23(1). https://doi.org/10.22176/act23.1.102</p> <p>MacGlone, U., Vamvakaris, J., Wilson, G., & MacDonald, R. (2020). Understanding the wellbeing effects of a community music program for people with disabilities: a mixed methods, person-centered study. <i>Frontiers in Psychology</i>, 11. https://doi.org/10.3389/fpsyg.2020.588734</p> <p>Mere, W., Ahmad, H., & Susandi, S. (2022). Wong cilik dalam roman gadis pantai karya pramoedya ananta toer (kajian antropologi sastra). <i>Salinga</i>, 2(1), 107–115. https://doi.org/10.33503/salinga.v2i1.2255</p>
--	---

- Molek, N. (2017). "songs from the homeland" - popular music performance among descendants of slovenian refugees in argentina: the case of "slovenski instrumentalni ansambel". *Two Homelands*, (46). <https://doi.org/10.3986/dd.2017.2.02>
- Niknafs, N. (2019). Music education as the herald of a cosmopolitan collective imperative: on being human. *International Journal of Music Education*, 38(1), 3–17. <https://doi.org/10.1177/0255761419859635>
- Nugroho, Z. (2021). Fungsi dan bentuk penyajian mantra dan katambung dalam ritual balian mimbul kuluk metu suku dayak ngaju di kota palangka raya. *Selonding*, 16(1), 1–15. <https://doi.org/10.24821/sl.v16i1.5045>
- Oakes, S., & Abolhasani, M. (2021). Musical congruity in advertising. In [Judul Buku tidak tersedia dalam sumber] (pp. 757–774). <https://doi.org/10.1093/oxfordhb/9780190691240.013.32>
- Omidi, A., Zotto, C., Norouzi, E., & Valero-Pastor, J. (2020). Media innovation strategies for sustaining competitive advantage: evidence from music download stores in iran. *Sustainability*, 12(6), 2381. <https://doi.org/10.3390/su12062381>
- Putra, M. (2025). Radio online sebagai media ekspresi subkultur anak muda. *Bandung Conference Series Communication Management*, 5(1), 637–642. <https://doi.org/10.29313/bcscm.v5i1.18332>
- Regar, R., & Lestari, W. (2021). Estetika musik marakka dalam upacara rambu soloâ€™™ di toraja. *Jurnal Sitakara*, 6(2), 201–209. <https://doi.org/10.31851/sitakara.v6i2.6367>
- Rogers, J. (2013). The death and life of the music industry in the digital age... <https://doi.org/10.5040/9781780931463>
- Росул, Т. (2023). Sociocultural functions of choral art in subcarpathian ruthenia in the 1920s-1930s. *Culture and Art in the Modern World*, (24), 204–212. <https://doi.org/10.31866/2410-1915.24.2023.287698>
- Roy, E. (2014). All the memory in the world, all the music in the world: mediating musical patrimony in the digital age. *Networking Knowledge Journal of the Meccsa Postgraduate Network*, 7(2). <https://doi.org/10.31165/nk.2014.72.335>
- Satria, R., & Miyanti, M. (2016). Kajian musik iringan srakalan pada acara resepsi pernikahan di kecamatan selakau kabupaten sambas. *TACET*, 1(1), 20. <https://doi.org/10.26418/tacet.v1i1.59575>
- Scheid, M. (2014). Music education - privately, personally and professionally the school subject of music, digital media and tools. *Education Inquiry*, 5(2), 23255. <https://doi.org/10.3402/edui.v5.23255>
- Setiawan, A. (2023). Meneroka musisi, mengarsip memori. <https://doi.org/10.55981/brin.718>
- Setiawan, A. (2024). Etnomusikologi dan isu-isu terkini di selingkarnya. <https://doi.org/10.55981/brin.1029>
- Singh, B., & Kumar, A. (2024). Examining the impact of digitalization on

	<p>indigenous cultural heritage preservation in india. <i>Cultural</i>, 2(1), 43–57. https://doi.org/10.61996/cultural.v2i1.59</p> <p>Spinetti, F., Schoop, M., & Hofman, A. (2020). Introduction to music and the politics of memory: resounding antifascism across borders. <i>Popular Music & Society</i>, 44(2), 119–138. https://doi.org/10.1080/03007766.2020.1820780</p> <p>Stenalt, M. (2021). Digital student agency: approaching agency in digital contexts from a critical perspective. <i>Frontline Learning Research</i>, 9(3), 52–68. https://doi.org/10.14786/flr.v9i3.697</p> <p>Sukotjo, S., Md, S., & Trilaksono, J. (2023). Peran musik dalam kesenian montro di yogyakarta. <i>Resital Jurnal Seni Pertunjukan</i>, 24(3), 306–328. https://doi.org/10.24821/resital.v24i3.9374</p> <p>Turchet, L., Antoniazzi, F., Viola, F., Giunchiglia, F., & Fazekas, G. (2020). The internet of musical things ontology. <i>Journal of Web Semantics</i>, 60, 100548. https://doi.org/10.1016/j.websem.2020.100548</p> <p>Turchet, L., Lagrange, M., Rottondi, C., Fazekas, G., Peters, N., Østergaard, J., ... & Fischione, C. (2023). The internet of sounds: convergent trends, insights, and future directions. <i>IEEE Internet of Things Journal</i>, 10(13), 11264–11292. https://doi.org/10.1109/jiot.2023.3253602</p> <p>Valero, L. (2023). The production of independent popular music during the covid-19 pandemic in guayaquil city. <i>Global Journal of Cultural Studies</i>, 2, 187–195. https://doi.org/10.6000/2817-2310.2023.02.14</p> <p>Viola, F., Turchet, L., Antoniazzi, F., & Fazekas, G. (2018). C minor: a semantic publish/subscribe broker for the internet of musical things. In [Judul Prosiding tidak tersedia dalam sumber] (pp. 405–415). https://doi.org/10.23919/fruct.2018.8588087</p> <p>Waldron, J. (2018). Online music communities and social media. In [Judul Buku tidak tersedia dalam sumber]. https://doi.org/10.1093/oxfordhb/9780190219505.013.34</p> <p>Werner, A., & Johansson, S. (2014). Experts, dads and technology gendered talk about online music. <i>International Journal of Cultural Studies</i>, 19(2), 177–192. https://doi.org/10.1177/1367877914555463</p> <p>Wimbrayardi, W., & Parmadi, B. (2021). Variabilitas tangga nada talempong pacik dalam konteks kesenian tradisi minangkabau. <i>Mudra Jurnal Seni Budaya</i>, 36(2), 135–139. https://doi.org/10.31091/mudra.v36i2.1438</p> <p>Zhou, W. (2022). Digital application of information intelligence technology in contemporary music creation models. In [Judul Prosiding tidak tersedia dalam sumber] (pp. 1511–1514). https://doi.org/10.1109/icosec54921.2022.9952043</p>
--	---