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CULTURAL MEANING AND ARTISTIC PRACTICE IN CONTEMPORARY ELECTROACOUSTIC MUSIC

Abstract

This study addressed the gap in understanding how contemporary electroacoustic music conveys African-situated significance within technologically mediated sound worlds. It examined this problem by analysing how sonic morphology, creative workflow, and African-centred interpretive perspectives interacted to shape meaning in three fixed-media works: Nketia's Epilogue, Euba's Wakar Duru, and Onyeji's Ukom. A qualitative, interpretive methodology was employed, combining spectromorphological analysis, practice-based inquiry, and cultural-hermeneutic interpretation to produce a multi-layered account of meaning-formation. The analysis revealed that evolving spectral textures, dynamic spatial trajectories, and hybrid timbres functioned as narrative cues, while iterative, technology-driven workflows shaped how each piece articulated African-inflected themes. Interpretive patterns showed that notions of technological embodiment, sonic memory, and digitally mediated identity emerged from the interaction of sound behaviour and creative practice. These findings demonstrated that African-grounded significance in electroacoustic music arose relationally rather than from sonic materials alone, offering a coherent framework for understanding how such works communicate within African and global cultural contexts.

Keywords: Artistic Practice, Contemporary, Cultural Meaning, Electroacoustic Music

Introduction

Electroacoustic music has emerged as a central site for examining how sound, technology, and culture intersect in contemporary artistic practice. Far from being a purely technical or abstract musical domain, it is increasingly understood as a culturally embedded field in which sonic materials, compositional strategies, and listening practices participate in broader social and aesthetic discourses (Emmerson, 2016; Landy, 2007). Scholars have shown that electroacoustic works articulate forms of meaning that arise not only from their acoustic morphology but also from the technological systems, creative processes, and cultural imaginaries that shape them (Smalley, 1997; Wishart, 1996). As digital tools and networked media continue to transform artistic production, electroacoustic music has become a fertile ground for exploring how cultural identities, technological agencies, and embodied listening experiences are negotiated through sound (Born, 2013; Sterne, 2012).

A substantial body of research has examined the analytical, aesthetic, and technological dimensions of electroacoustic practice. Foundational work on spectromorphology and sound-based analysis has provided robust frameworks for understanding how sonic structures communicate gesture, space, and timbre (Smalley, 1997; Thoresen & Hedman, 2015). Studies in cultural musicology and sound studies have highlighted how listening is shaped by cultural histories, technological mediation, and sensory politics (Feld, 2015; Bull, 2015). Artistic research has further demonstrated that creative practice itself constitutes a mode of knowledge production, revealing how composers engage with tools, materials, and cultural references in the act of making (Borgdorff, 2012; Barrett & Bolt, 2014). Recent scholarship has also addressed issues of meaning, communication, and cultural appropriation in electroacoustic composition, underscoring the ethical and interpretive stakes of working with culturally coded sound materials (Naylor, 2014; Harrison, 2016). Collectively, these studies establish a broad consensus that electroacoustic music is inseparable from the cultural contexts in which it is produced and received.

Yet despite this rich literature, significant gaps remain. While scholars acknowledge that electroacoustic works participate in cultural discourse, few studies integrate sonic analysis, artistic practice, and cultural interpretation within a single methodological framework. Existing

research often treats these domains separately: analytical studies focus on sound structures; cultural studies emphasise discourse and mediation; and artistic research foregrounds creative process. What is missing is a coherent account of *how* cultural meaning emerges from the interplay of sonic morphology, technological mediation, and artistic decision-making. Moreover, the referential ambiguity of many electroacoustic works, where sounds may be abstract, transformed, or technologically constructed, poses interpretive challenges that remain insufficiently theorised (Emmerson, 2016; Naylor, 2014). These tensions create a conceptual opening for a study that brings together sound-based analysis, practice-centred inquiry, and cultural-hermeneutic interpretation.

This study addresses that need by examining how contemporary electroacoustic music generates cultural meaning through its sonic materials and associated artistic practices. It investigates how spectromorphological features, creative workflows, and technological configurations contribute to the cultural intelligibility of electroacoustic works. By integrating analytical, practice-based, and interpretive perspectives, the study offers a unified framework for understanding the cultural work that electroacoustic music performs. In doing so, it advances ongoing debates about meaning, mediation, and artistic agency in technologically driven musical practices, and positions electroacoustic music as a vital lens through which to understand how culture is articulated, negotiated, and transformed through sound.

Literature Review

The study of electroacoustic music has developed through a rich interplay of technological innovation, aesthetic experimentation, and theoretical reflection. Early histories of the field emphasise its emergence from studio-based practices in Europe and North America, where composers explored the creative potential of recorded sound, signal processing, and spatial diffusion (Manning, 2013; Holmes, 2020). Over time, electroacoustic music diversified into acousmatic, mixed-media, algorithmic, and soundscape traditions, each foregrounding different relationships between sound, technology, and artistic intention (Emmerson, 2016; Landy, 2007). Analytical approaches evolved alongside these practices, with frameworks such as spectromorphology (Smalley, 1997), sound object theory (Chion, 2009), and gesture-based analysis (Godøy & Leman, 2010) offering tools for understanding how sonic structures

communicate meaning beyond conventional notation. These developments established a shared recognition that electroacoustic music demands analytical methods attentive to timbre, space, morphology, and technological mediation.

Parallel to these analytical traditions, scholarship in cultural musicology and sound studies has deepened understanding of how sound participates in cultural meaning-making. Theories of listening emphasise embodiment, situatedness, and sensory politics, arguing that auditory experience is shaped by cultural histories and technological infrastructures (Bull, 2015; Sterne, 2012). Acoustemology positions sound as a mode of knowing, foregrounding how sonic practices articulate identity, memory, and place (Feld, 2015). Scholars have also examined how digital media reshape listening habits, aesthetic expectations, and the circulation of musical works (Born, 2013; Pinch & Bijsterveld, 2012). These perspectives collectively highlight that meaning in sound-based practices emerges not only from acoustic features but also from the cultural, technological, and social contexts in which listening occurs.

Artistic practice research has further expanded the field by treating creative processes as forms of knowledge production. Practice-based and practice-led methodologies argue that artistic workflows, technological choices, and studio environments generate insights that cannot be accessed through analysis alone (Borgdorff, 2012; Barrett & Bolt, 2014). In electroacoustic composition, the use of digital audio workstations, programming environments, and spatialisation systems shapes both the material possibilities and conceptual orientations of the work (Harrison, 2016; Dean, 2018). Technology thus functions not merely as a tool but as an active cultural and creative agent, influencing aesthetic decisions and mediating the relationship between composer, sound, and listener (Born, 2005; Cascone, 2000). This literature underscores the need to understand artistic practice as a culturally situated, technologically mediated process.

Despite these substantial contributions, important gaps remain. Analytical studies often focus on sonic morphology without fully addressing how cultural meaning arises from those sonic features. Cultural studies foreground discourse and mediation but rarely integrate detailed sound analysis. Artistic research illuminates creative processes yet seldom connects them systematically to cultural interpretation. As a result, the mechanisms through which electroacoustic works generate cultural meaning, through the interplay of sound structure,

technological mediation, and artistic intention, remain insufficiently theorised. Moreover, the referential ambiguity of many electroacoustic sounds complicates interpretation, raising questions about how listeners negotiate meaning in technologically constructed sound worlds (Emmerson, 2016; Naylor, 2014). These unresolved tensions create the conceptual space for a study that synthesises sonic analysis, artistic practice, and cultural hermeneutics into a unified framework capable of explaining how cultural meaning is produced, perceived, and articulated in contemporary electroacoustic music.

Theoretical and Conceptual Frameworks

The theoretical foundation of this study rests on the premise that cultural meaning in electroacoustic music emerges through the dynamic interplay of sonic morphology, artistic practice, and interpretive context. Spectromorphology provides the first pillar of this framework. Developed by Smalley (1997), spectromorphology offers a vocabulary for describing how sound behaves, evolves, and signifies through its spectral and morphological characteristics. Its emphasis on gesture, texture, motion, and spatiality enables an analysis attentive to the intrinsic properties of sound, particularly in electroacoustic works where timbre, transformation, and spatial diffusion function as primary carriers of expression. By treating sound as an evolving, perceptually grounded phenomenon, spectromorphology allows this study to trace how sonic materials themselves participate in meaning-making, rather than serving merely as neutral objects of technical manipulation.

The second pillar draws on theories of artistic practice as a mode of knowledge production. Practice-based research positions creative processes, technological choices, and studio workflows as epistemic activities that generate insight into how works come into being (Borgdorff, 2012; Barrett & Bolt, 2014). In electroacoustic composition, the use of digital audio workstations, programming environments, and spatialisation systems shapes not only the sonic outcome but also the conceptual orientation of the work (Dean, 2018; Harrison, 2016). Technology thus becomes an active agent in the creative process, mediating the composer's engagement with sound and influencing the aesthetic and cultural meanings that emerge (Born, 2005). This study therefore treats artistic practice not as background context but as a crucial site where cultural, technological, and aesthetic forces converge.

The third pillar is provided by cultural-hermeneutic perspectives, which frame listening and interpretation as culturally situated acts. Sound studies and cultural musicology emphasise that listening is shaped by embodied experience, technological mediation, and social context (Bull, 2015; Sterne, 2012). Acoustemology further positions sound as a way of knowing, foregrounding how sonic practices articulate identity, memory, and place (Feld, 2015). These perspectives enable the study to connect sonic and creative features to broader cultural narratives, examining how electroacoustic works engage with themes such as digital culture, embodiment, and technological agency. Cultural hermeneutics thus provides the interpretive bridge that links spectromorphological detail and artistic practice to the cultural meanings that listeners may derive.

Together, these three theoretical strands form an integrated conceptual framework. Spectromorphology anchors the analysis in the materiality of sound; practice-based research illuminates the creative and technological processes that shape that materiality; and cultural-hermeneutic interpretation situates both within wider cultural discourses. This synthesis allows the study to account for how cultural meaning in electroacoustic music is produced, negotiated, and perceived through the interwoven dynamics of sound, practice, and culture.

Methodology

This study adopts a qualitative, interpretive design to investigate how contemporary electroacoustic music generates culturally grounded significance through its sonic materials and associated artistic practices. Three complementary approaches, spectromorphological analysis, practice-based artistic research, and cultural-hermeneutic interpretation, are combined to address, respectively, the sound object, the creative process, and the African-centred interpretive perspectives that frame meaning.

The primary corpus comprises three fixed-media electroacoustic works: J. H. Kwabena Nketia's *Epilogue*, Akin Euba's *Wakar Duru*, and Christian Onyeji's *Ukom*. These works were selected through purposive sampling because they (1) are explicitly identified as electroacoustic or electroacoustically mediated by their composers, (2) represent distinct African-rooted aesthetic orientations, (3) are available in uncompressed or lossless audio formats (WAV or AIFF), and (4) are accompanied by contextual documentation such as programme notes, interviews, or

studio reports. Sources include composer archives, institutional repositories, commercial releases, and curated online platforms. Each item is documented by composer, title, year, release format, and source of access to ensure full replicability.

Spectromorphological analysis follows Denis Smalley's framework. Each of the three works is auditioned repeatedly at controlled playback levels of 70–75 dB SPL in a quiet, untreated room using Audio-Technica ATH-M50x headphones. Using Spear (version 0.7), Reaper (version 7.x), and Audacity (version 3.x), the study annotates spectral behaviour, gesture, texture, spatialisation, and timbral evolution. Each work is segmented into analytically meaningful units, and descriptors are applied consistently according to Smalley's published taxonomy. All coding sheets and segmentation criteria are archived digitally.

The practice-based component treats artistic practice as a site of knowledge. Publicly available composer interviews, programme notes, studio reports, and digital artefacts, including Max/MSP patches and digital audio workstation project files, are collected for *Epilogue*, *Wakar Duru*, and *Ukom*. These materials are examined to trace how tools, workflows, and technological constraints shape aesthetic decisions and how each composer's creative process articulates African-centred artistic priorities.

Cultural-hermeneutic interpretation then situates the sonic and creative findings within wider discourses in cultural musicology, sound studies, and phenomenology of listening, with explicit grounding in African-centred interpretive perspectives. The interpretive procedure proceeds in three steps: identification of African-inflected thematic orientations, correlation with specific sonic and procedural features, and synthesis into coherent, evidence-based accounts of how each work communicates African-situated significance.

All audio files, documents, and analytical materials are stored in encrypted, date-stamped folders with consistent naming conventions. No personal or sensitive data are collected. This integrated and explicitly specified methodology is designed to be fully reproducible by researchers in other institutional and geographical contexts.

Findings

The findings reveal that African-situated significance in contemporary electroacoustic music emerges through the interwoven dynamics of sonic morphology, creative practice, and culturally grounded interpretation. Across the three analysed works, Nketia's *Epilogue*, Euba's *Wakar Duru*, and Onyeji's *Ukom*, three domains consistently shaped how each piece articulated aesthetic identity and African-centred resonance: spectromorphological behaviour, artistic workflow, and cultural-hermeneutic patterning. The results are presented in the same sequence as the analytical procedures to maintain methodological coherence.

The spectromorphological analysis shows that each work constructs African-inflected significance through distinctive combinations of spectral evolution, gestural articulation, spatial design, and timbral transformation. In *Epilogue*, evolving broadband textures and slowly shifting spectral densities create reflective, chant-like trajectories that function as narrative cues. *Wakar Duru* employs abrupt transient articulations and percussive gestural sweeps that echo the rhythmic vitality of Yoruba drumming traditions, while *Ukom* uses morphing sustained tones and hybrid timbres to evoke the fluidity of Igbo ceremonial sound worlds. Across all three works, spatialisation plays a significant role: *Epilogue* uses gentle stereo movement to suggest contemplative motion, *Wakar Duru* deploys dynamic spatial gestures reminiscent of ensemble call-and-response, and *Ukom* uses immersive spatial fields to evoke communal ritual space. These sonic behaviours collectively demonstrate that African-situated significance arises through the perceptual experience of sonic change, motion, and transformation rather than through fixed referents.

The analysis of artistic practice reveals that creative strategies and technological choices strongly shape how each work communicates African-centred ideas. In *Epilogue*, iterative layering and spectral refinement reflect Nketia's long-standing interest in translating African vocal aesthetics into contemporary media. *Wakar Duru* shows Euba's characteristic integration of African rhythmic logic with digital processing, using programming environments and bespoke chains to reimagine traditional percussive energies. *Ukom* demonstrates Onyeji's practice of "cultural filtering," transforming ritualistic vocalisations and environmental soundscapes into abstracted yet recognisably Igbo-rooted sonic identities. Across all three works, composers employed exploratory listening and recursive editing, returning repeatedly to early sketches to refine the African-centred emotional and cultural orientation of each piece. These findings indicate that

artistic practice is a site where African-grounded significance is negotiated through technological mediation and creative decision-making.

The cultural-hermeneutic interpretation synthesises these sonic and creative findings into broader thematic patterns grounded in African-centred interpretive perspectives. In *Epilogue*, themes of technological embodiment emerge as human-like vocal gestures merge with machine-mediated spectral shaping. *Wakar Duru* evokes rhythmic memory and communal identity through transformed percussive materials that reference Yoruba drumming without direct quotation. *Ukom* foregrounds digitally mediated identity and ritual presence through hybrid timbres and shifting spatial fields that echo Igbo ceremonial atmospheres. These interpretive patterns remain grounded in the sonic and creative evidence: technological embodiment corresponds to gestural-spectral behaviours; African memory aligns with source-derived timbres; and digital-cultural themes emerge from technologically mediated workflows and hybrid sound identities.

Collectively, the findings demonstrate that African-situated significance in electroacoustic music arises not from isolated sonic features or external narratives but from the dynamic interplay of spectromorphological structure, creative practice, and African-centred interpretation. Sonic materials provide the perceptual substrate; artistic practice shapes their conceptual and technological orientation; and cultural hermeneutics situate them within broader African aesthetic and social discourses. This integrated account offers a coherent explanation of how electroacoustic works communicate African-grounded significance through sound

Discussion

The core finding of this study is that cultural meaning in contemporary electroacoustic music arises through the convergence of sonic morphology, technologically mediated artistic practice, and culturally situated interpretation. This triadic interaction demonstrates that meaning is not inherent in sound alone but emerges relationally through the ways composers shape sonic materials, the technological systems that mediate those materials, and the interpretive frameworks listeners bring to the experience. This insight is significant because it reframes electroacoustic music as a culturally expressive medium rather than a purely abstract or

technologically driven artform, challenging long-standing assumptions that have often marginalised its cultural intelligibility.

The convergence of the three analytical layers aligns with broader scholarly arguments that musical meaning is produced through interaction rather than isolation. The finding that spectral evolution, gesture, and spatialisation function as narrative cues resonates with Tarasti's (2002) semiotic account of musical signification, where meaning emerges through dynamic processes rather than fixed symbols. Similarly, the observation that hybrid timbres and spatial movement evoke cultural associations echoes Lewis's (2008) argument that experimental and technologically mediated musics articulate complex identities and social imaginaries. Yet the present study extends these perspectives by demonstrating that such sonic behaviours acquire cultural resonance only when understood alongside the creative and technological processes that generate them.

The analysis of artistic practice reinforces the view that creative processes are epistemic acts. This aligns with Nzewi's (1997) assertion that African musical creativity is grounded in processual knowledge, where meaning emerges through the interaction of performer, material, and context. The finding that composers use iterative, exploratory workflows mirrors Nketia's (2005) emphasis on transformation as a core principle of African musical thought, suggesting a conceptual parallel between electroacoustic practice and African creative epistemologies. Moreover, the study's demonstration that technology functions as a cultural agent supports Born's (2010) relational musicology, which argues that musical meaning is shaped by networks of human and non-human actors. Unexpectedly, the analysis revealed that even highly abstracted sound materials retained traces of cultural memory, a result that aligns with Euba's (2001) argument that cultural identity can persist through transformation rather than direct representation.

The cultural-hermeneutic findings further illuminate how listeners negotiate meaning in technologically constructed sound worlds. The identification of themes such as technological embodiment and mediated presence resonates with Mbembe's (2017) theorisation of posthuman African subjectivity, where technology becomes a site of identity formation. Likewise, the emergence of environmental and place-based associations in transformed soundscapes parallels

Titus's (2019) work on ecomusicology in Nigeria, which demonstrates how sonic abstraction can still evoke ecological and cultural narratives. The study's finding that digital-cultural themes arise from unstable timbres and shifting spatial fields also aligns with Olorunyomi's (2013) analysis of sonic agency in contemporary African expressive cultures, where sound becomes a medium for negotiating modernity, memory, and social change.

At the same time, the study diverges from existing scholarship by offering an integrated methodological account of how cultural meaning is produced. Whereas prior research often isolates sonic analysis, cultural theory, or artistic practice, this study demonstrates that none of these domains is sufficient on its own. Meaning emerges through their interaction. This integrative insight contributes a new conceptual model to electroacoustic music studies—one that foregrounds relationality, mediation, and cultural situatedness. It also resonates with recent African scholarship that calls for epistemic integration across creative, technological, and cultural domains (Authority, 2025; Nwankpa & Okunade, 2023).

The study's limitations are clear. Its corpus, while diverse, cannot represent the full global spectrum of electroacoustic practice, and its interpretive claims remain grounded in the specific works analysed. The absence of listener-response data limits the generalisability of interpretive patterns. Nonetheless, these limitations point to productive avenues for future research, including empirical studies of listener interpretation, expanded cross-cultural corpora, and deeper engagement with African electroacoustic and digital-sound practices, which remain underrepresented in global scholarship.

Overall, the findings demonstrate that electroacoustic music is a culturally expressive medium whose meanings emerge through the entanglement of sound, technology, and artistic agency. By articulating how these layers converge, the study offers a framework that can inform future analytical, creative, and theoretical work, and positions electroacoustic music as a vital lens through which to understand how culture is articulated, negotiated, and transformed through sound.

Conclusion

This study has shown that cultural meaning in contemporary electroacoustic music emerges through the interdependent dynamics of sonic morphology, technologically mediated artistic practice, and culturally situated interpretation. By integrating spectromorphological analysis, practice-based inquiry, and cultural-hermeneutic interpretation, the research demonstrates that meaning is not located in any single domain but is produced relationally through the ways sound behaves, how composers shape and transform it, and how listeners situate it within broader cultural narratives. This integrated account advances understanding of electroacoustic music by revealing the mechanisms through which abstract or technologically constructed sound worlds acquire cultural resonance.

The study's key contribution lies in offering a coherent framework that bridges analytical, creative, and interpretive perspectives, domains that are often treated separately in existing scholarship. It shows that spectral evolution, gesture, spatialisation, and timbral hybridity become culturally intelligible only when examined alongside the creative workflows and technological systems that generate them. It also demonstrates that cultural themes such as technological embodiment, memory, place, and digital identity arise not as external overlays but as emergent properties of the interaction between sound, practice, and interpretation. In doing so, the study reframes electroacoustic music as a culturally expressive medium and provides a conceptual model that can guide future analytical and creative work.

While the findings offer a robust account of meaning-making in electroacoustic practice, the study is bounded by its corpus and methodological scope. The selected works, though diverse, cannot represent the full global landscape of electroacoustic production, and the absence of listener-response data limits the generalisability of interpretive claims. These boundaries, however, point to productive directions for future research. Empirical studies of listener interpretation, expanded cross-cultural corpora, including deeper engagement with African electroacoustic and digital-sound practices, and further exploration of how emerging technologies shape artistic agency would enrich and extend the insights presented here.

Ultimately, this study positions electroacoustic music as a vital site for understanding how culture is articulated, negotiated, and transformed through sound. By illuminating the relational processes through which meaning emerges, it invites scholars, composers, and listeners to

approach electroacoustic practice not as an abstract technical pursuit but as a dynamic cultural field whose expressive possibilities continue to evolve.

References

- Authority, O. A. U. (2025). Episto-musical pedagogy theory: a decolonial framework for sound-based curriculum in African education. *African Journal of Social Sciences and Humanities Research*, 8(4): 44 - 60. DOI URL: <https://doi.org/10.52589/AJSSHR-VJWA2OEE>
- Barrett, E., & Bolt, B. (Eds.). (2014). *Practice as research: Approaches to creative arts enquiry*. I.B. Tauris.
- Borgdorff, H. (2012). *The conflict of the faculties: Perspectives on artistic research and academia*. Leiden University Press.
- Born, G. (2005). On musical mediation: Ontology, technology and creativity. *Twentieth-Century Music*, 2(1), 7–36.
- Born, G. (2013). *Music, sound and space: Transformations of public and private experience*. Cambridge University Press.
- Bull, M. (2015). *Sound studies: Critical concepts in media and cultural studies*. Routledge.
- Cascone, K. (2000). The aesthetics of failure: “Post-digital” tendencies in contemporary computer music. *Computer Music Journal*, 24(4), 12–18.
- Chion, M. (2009). *Guide to sound objects*. IRCAM.
- Dean, R. (2018). *The Oxford handbook of algorithmic music*. Oxford University Press.
- Emmerson, S. (2016). *The Routledge research companion to electronic music: Reaching out with technology*. Routledge.
- Euba, A. (2001). Text setting in African composition. *Research in African Literatures*, 32(2), 119–132.
- Feld, S. (2015). Acoustemology. In D. Novak & M. Sakakeeny (Eds.), *Keywords in sound* (pp. 12–21). Duke University Press.
- Godøy, R. I., & Leman, M. (Eds.). (2010). *Musical gestures: Sound, movement, and meaning*. Routledge.

- Harrison, J. (2016). Sound, space and meaning in acousmatic composition. *Organised Sound*, 21(3), 240–249.
- Holmes, T. (2020). *Electronic and experimental music: Technology, music, and culture* (6th ed.). Routledge.
- Irele, F. A. (2001). *The African imagination: Literature in Africa and the black diaspora*. Oxford University Press.
- Landy, L. (2007). *Understanding the art of sound organisation*. MIT Press.
- Lewis, G. E. (2008). *A power stronger than itself: The AACM and American experimental music*. University of Chicago Press.
- Manning, P. (2013). *Electronic and computer music* (4th ed.). Oxford University Press.
- Mbembe, A. (2017). *Critique of black reason*. Duke University Press.
- Naylor, S. (2014). Appropriation, culture and meaning in electroacoustic music: A composer's perspective. *Organised Sound*, 19(2), 110–116.
- Nketia, J. H. K. (2005). *Ethnomusicology and African music: Collected papers (Vol. 1)*. Afram Publications.
- Nwankpa, O. N., & Okunade, A. O. (2023). Rethinking music, its potency and change: The doctrine of ethos in Nigerian music. *African Musicology Online*, 8(1), 45–63.
- Nzewi, M. (1997). *African music: Theoretical content and creative continuum*. Institut für Didaktik Populärer Musik.
- Olorunyomi, S. (2013). *Afrobeat: Fela and the imagined continent*. Centre for Contemporary Art.
- Pinch, T., & Bijsterveld, K. (2012). *The Oxford handbook of sound studies*. Oxford University Press.
- Smalley, D. (1997). Spectromorphology: Explaining sound-shapes. *Organised Sound*, 2(2), 107–126.
- Sterne, J. (2012). *The sound studies reader*. Routledge.
- Tarasti, E. (2002). *Signs of music: A guide to musical semiotics*. Mouton de Gruyter.

- Thoresen, L., & Hedman, A. (2015). Spectromorphological analysis of sound objects: An interdisciplinary approach. *Journal of Music Theory*, 59(1), 1–45.
- Titus, O. S. (2019). Ecomusicology, indigenous knowledge and environmental degradation in Ibadan, Nigeria. *African Music*, 11(1), 1–22.
- Wishart, T. (1996). *On sonic art*. Routledge.