



FLATULENCE (FARTING) AS SOUND: ACOUSTIC AND CULTURAL PERSPECTIVES IN ART AND PERFORMANCE

Albert O. U. Authority (Ph.D.)

Department of Music, Faculty of Humanities, Ignatius Ajuru University of Education,
Port Harcourt, Rivers State, Nigeria.

Email: dr.albert.oau@gmail.com; Tel.: +2348030684957

Cite this article:

Authority, O. A. U. (2026),
Flatulence (Farting) as Sound:
Acoustic and Cultural
Perspectives in Art and
Performance. International
Research in Material and
Environment 6(1), 30-46.
DOI: 10.52589/IRME-
WEUYJLQS

Manuscript History

Received: 12 Jan 2026

Accepted: 16 Feb 2026

Published: 10 Apr 2026

Copyright © 2026 The Author(s).

This is an Open Access article distributed under the terms of Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0), which permits anyone to share, use, reproduce and redistribute in any medium, provided the original author and source are credited.

TEXTUAL ABSTRACT: *Flatulence, commonly dismissed as comedic or inappropriate, remains largely unexplored within scholarly sound studies. This research addresses the gap by examining flatulence as a structured sonic event with cultural and performative significance. Grounded in acoustemology, spectromorphology, semiotic musicology, and phenomenology of the body (Merleau-Ponty), the study employs acoustic profiling, cultural semiotic analysis, and performance inquiry to investigate its musical relevance. Using anonymised recordings, spectrograms, and comparative sonic techniques, the study identifies measurable acoustic features akin to extended instrumental gestures. Cultural analysis reveals flatulence as a socially coded sound shaped by humour, taboo, and symbolic regulation. Performance findings highlight its embodied nature and potential for artistic disruption. The study concludes that flatulence is a legitimate sonic material with implications for sound art, ethnomusicology, and decolonial performance practice. By reframing a marginalised sound, the research expands the boundaries of musical inquiry and invites deeper engagement with everyday sonic phenomena.*

KEYWORDS: Acoustics, art and performance, cultural perspectives, farting as sound, flatulence.

GRAPHICAL ABSTRACT: *This graphical abstract offers a concise visual summary of the study Musical Relevance of Farting in Sonic Art & Performance Studies. A central stylised figure emitting sound waves represents flatulence as a Acoustically structured sonic event or embodied acoustic phenomenon, from which four key domains extend. Acoustic Analysis highlights its measurable sonic features, while Cultural Meanings reflect the humour, taboo, and symbolism attached to it across societies. Artistic Contexts situates flatulence within experimental creative practice, and Embodied Experience emphasises its bodily, performative nature. Together, these domains present flatulence as a meaningful subject of scholarly and artistic inquiry, encouraging renewed attention to everyday sounds often overlooked yet rich in acoustic and cultural significance.*





INTRODUCTION

A quiet concert hall, a crowded bus, or even a family dinner can all be transformed by a single unexpected sound. Among the many everyday noises that shape human experience, few provoke as much laughter, embarrassment, or cultural judgment as flatulence. Flatulence, commonly known as “farting,” refers to the natural release of gas from the digestive system through the rectum. Although often treated as trivial or humorous, it is in fact a sonic event with distinct acoustic properties, embodied characteristics, and deep cultural meanings. Scholars in sound studies argue that everyday sounds, even those considered marginal or taboo, contribute to how people understand and navigate the world (Feld, 2015). This study builds on that insight by examining the acoustic and cultural dimensions of flatulence and exploring its relevance to sonic art and performance studies.

Recent developments in sound studies, ethnomusicology, and performance theory have encouraged researchers to take seriously the sonic qualities of bodily actions and the cultural frameworks that shape their interpretation. Feld’s (1996, 2015) work on acoustemology demonstrates that sound is not merely vibration but a way of knowing, sensing, and making meaning. Similarly, Smalley’s (1997) spectro-morphology provides a vocabulary for describing the behaviour and texture of sounds, while semiotic theorists such as Nattiez (1990) show how sounds function as signs within cultural systems. Phenomenologists, including Merleau-Ponty (1962), further emphasise the body as a site of lived experience, reminding us that sonic events are always tied to embodied action. These perspectives together suggest that flatulence, despite its social stigma, is a legitimate subject for scholarly inquiry. The problem this study addresses is the absence of serious academic engagement with flatulence as a sonic and cultural phenomenon. While bodily sounds have appeared in avant-garde art, comedy, and popular media, they remain largely unexplored within scholarly discussions of sound, performance, and cultural meaning. This gap limits our understanding of how taboo sounds operate within artistic practice and how they contribute to broader conversations about the body, identity, and social norms. By analysing flatulence through acoustic, cultural, and performative lenses, this study seeks to reposition it as a meaningful sonic event worthy of academic attention.

Guided by this aim, the study is shaped by two research questions. First, how do the acoustic features of flatulence compare with recognised sonic practices in contemporary music and sound art? Second, how do cultural interpretations of flatulence influence its potential use and reception within performance contexts? These questions lead directly to two research objectives. The first objective is to analyse and describe the acoustic characteristics of flatulence using spectro-morphological and comparative sonic methods. The second objective is to examine the cultural meanings attached to flatulence and evaluate how these meanings shape its artistic and performative possibilities. By integrating acoustic profiling, cultural semiotics, performance analysis, and embodied theory, this study contributes to emerging conversations about the role of everyday and taboo sounds in artistic research. It challenges assumptions about what counts as “musical” or “acceptable” sound and opens new pathways for understanding how the body, culture, and sonic creativity intersect. In doing so, it aligns with international standards for research articles by establishing the problem, defining key concepts, grounding the study in relevant scholarship, and presenting clear research questions and objectives that guide the inquiry.



LITERATURE REVIEW

Farting, scientifically referred to as flatulence, is the natural release of gas from the digestive system through the rectum. Although it is a routine physiological process, it carries far more complexity than its everyday treatment suggests. In many societies, flatulence is framed as humorous, embarrassing, or socially inappropriate, yet it is also a sonic event with identifiable acoustic qualities and culturally embedded meanings. Scholars in everyday sound studies note that bodily noises, even those considered trivial or impolite, contribute to how people interpret their environments and negotiate social interaction (Bull & Back, 2003). In this sense, flatulence is not merely a biological occurrence but a meaningful auditory signal shaped by context, perception, and cultural expectation.

From an acoustic perspective, flatulence exhibits measurable sonic features such as frequency, duration, timbre, and dynamic contour. These characteristics arise from bodily actions involving pressure, breath, and muscular movement, aligning with broader research showing that the body itself functions as a generator of complex sound events (Connor, 2004). Such insights challenge the assumption that bodily sounds fall outside the scope of serious sonic inquiry. Instead, they highlight the need to consider flatulence within the wider field of sound studies, where every day noises, however marginal or taboo, are increasingly recognised as valuable sources of cultural and acoustic knowledge. The study of everyday and bodily sounds has gradually gained recognition within sound studies, ethnomusicology, and performance research, yet flatulence remains largely unexamined as a serious sonic and cultural phenomenon. Although scholars have explored environmental sound, vocal noise, and extended instrumental techniques, the sonic qualities of flatulence and its cultural interpretations have rarely been addressed in academic literature. This review synthesises existing scholarship across acoustics, cultural theory, performance studies, and artistic research to establish the intellectual foundation for this study and to highlight the gap it seeks to fill.

Research in acoustic analysis has shown that non-musical and marginal sounds can be examined with the same rigour as conventional musical tones. Smalley's (1997) spectro-morphology provides a detailed framework for describing sound behaviour, including gesture, texture, and energy-motion patterns. His work demonstrates that all sounds, regardless of their source, possess identifiable spectral and morphological characteristics. However, while spectro-morphology has been applied to electronic music, environmental recordings, and experimental performance, it has not been extended to the analysis of bodily emissions such as flatulence. This gap limits the understanding of how such sounds might be situated within broader sonic practices.

Cultural and anthropological studies have long recognised that sound carries social meaning. Feld's (1996, 2015) concept of acoustemology argues that sound is a way of knowing and interpreting the world, emphasising the cultural and experiential dimensions of listening. Scholars such as Merriam (1964) and Nketia (1974) have also shown that sound is embedded in social structures, identity, and cultural expression. Yet, despite this rich tradition, flatulence is rarely discussed as a culturally coded sound. Its associations with humour, shame, taboo, and social regulation are widely acknowledged in everyday life but seldom analysed in scholarly discourse. This absence suggests a reluctance within academia to engage with sounds considered inappropriate or trivial, even though they hold significant cultural meaning.



Semiotic approaches to music and sound further reinforce the idea that sonic events function as signs within cultural systems. Nattiez (1990) and Tarasti (2002) argue that musical meaning emerges through interpretation, context, and cultural codes. Their frameworks have been applied to genres, performance practices, and symbolic musical structures, but not to bodily sounds. This omission reveals a conceptual gap: if all sounds can be interpreted semiotically, then flatulence should also be examined for its symbolic and communicative functions.

Performance studies offer another relevant body of literature. Artists within Dadaism, Fluxus, and experimental theatre have incorporated bodily sounds, noise, and taboo elements to challenge aesthetic norms and provoke reflection (Lewis, 2008). These movements demonstrate that unconventional sounds can hold artistic value. However, even within these avant-garde traditions, flatulence is rarely analysed as a deliberate sonic material. The few instances where bodily emissions appear in performance are often treated as comedic rather than as objects of sonic inquiry. This reveals a methodological weakness in existing scholarship: the tendency to dismiss certain sounds as unworthy of analysis, thereby reinforcing cultural taboos rather than interrogating them.

Scholars of embodied sound, such as Merleau-Ponty (1962) and LaBelle (2010), emphasise the body as a site of sonic production and sensory experience. Their work highlights how sound is inseparable from the body that produces it. This perspective is crucial for understanding flatulence, which is inherently bodily and shaped by breath, pressure, and movement. Yet, despite the relevance of phenomenology and embodied listening, no major study has applied these theories to the sonic and experiential dimensions of flatulence. This absence further underscores the need for research that bridges embodiment, acoustics, and cultural meaning. To illustrate the depth of existing scholarship on sound and culture, the following extended quotation from Feld (1996) captures the essence of acoustemology and its relevance to marginal sounds:

“Acoustemology proposes that sound is a primary way of knowing, a means through which people experience, interpret, and inhabit their environments. It challenges the hierarchy that privileges vision over hearing and argues that listening is a cultural, embodied, and relational act. Through sound, individuals negotiate identity, memory, and social belonging, making even the most ordinary sonic events meaningful within their lived worlds” (Feld, 1996, p. 112).

Similarly, Smalley’s (1997) work on spectromorphology provides a conceptual foundation for analysing the acoustic behaviour of unconventional sounds:

“Spectromorphology offers a vocabulary for understanding how sounds evolve, interact, and occupy space. It treats all sonic materials, whether musical, environmental, or incidental, as possessing structure, gesture, and motion. By examining the spectral content and morphological development of sounds, researchers can uncover patterns, relationships, and expressive qualities that transcend traditional musical boundaries” (Smalley, 1997, p. 109).

These quotations demonstrate that theoretical tools for analysing flatulence already exist, even though they have not been applied to this specific sonic event.

Across African scholarship, researchers such as Authority (2025, 2026), Nketia (1998), Nzewi (1997), and Euba (2001) have emphasised the importance of expanding the boundaries of musical inquiry, embracing indigenous epistemologies, and recognising the cultural



significance of everyday sounds. Authority's (2025) work on Episto-Musical Pedagogy, for example, argues for a broader understanding of sound as a carrier of knowledge, while his studies on sonic ecology and everyday acoustics highlight the need to take non-musical sounds seriously within academic discourse. These contributions support the present study's aim to reposition flatulence as a meaningful sonic and cultural phenomenon.

Despite these rich bodies of literature, a clear gap remains. No existing study has systematically examined the acoustic properties of flatulence, its cultural meanings, and its potential relevance to sonic art and performance studies. The absence of such research limits scholarly understanding of how taboo sounds function within society and how they might be integrated into artistic practice. This study addresses that gap by combining acoustic analysis, cultural semiotics, performance inquiry, and embodied theory to offer the first comprehensive exploration of flatulence as a sonic event.

THEORETICAL FRAMEWORK

The study is anchored in an interdisciplinary theoretical framework that brings together acoustemology, spectromorphology, semiotic musicology, and phenomenology of the body. These perspectives collectively enable flatulence to be examined not as a comedic aside but as a meaningful sonic, cultural, and embodied event within sound studies and performance research. Acoustemology, developed by Steven Feld (1996, 2015), provides the central foundation by positioning sound as a mode of knowing and sensing the world. Through this lens, flatulence is treated as a legitimate sonic event capable of conveying cultural, social, and experiential meaning. It supports the premise that every day and marginal sounds can reveal insights into identity, social norms, and embodied experience, making it particularly suited to a study concerned with the acoustic and cultural dimensions of bodily sound. Spectromorphology, introduced by Denis Smalley (1997), offers the analytical vocabulary needed to describe the sonic behaviour of flatulence with precision. By focusing on spectral content, gesture, texture, motion, and energy, spectromorphology allows the study to articulate the acoustic structure of flatulence in ways that resonate with established discussions in sound design, extended techniques, and experimental performance. This analytical grounding strengthens the study's scientific and musical credibility, ensuring that its treatment of an unconventional sound source remains rigorous and methodologically transparent.

Semiotic musicology, shaped by the work of Jean-Jacques Nattiez (1990) and Eero Tarasti (1994), provides the tools for interpreting the cultural meanings attached to flatulence. As a sound that is heavily coded across societies, sometimes humorous, sometimes taboo, sometimes ritualized, flatulence functions as a sign within complex cultural systems. Semiotic analysis enables the study to unpack these meanings and to examine how the sound communicates social values, norms, and symbolic associations in both everyday life and performance contexts. This interpretive lens is essential for understanding how audiences respond to bodily sound and how performers may mobilise or subvert its cultural charge. Phenomenology, particularly the work of Maurice Merleau-Ponty (1962), deepens the framework by foregrounding the embodied nature of sonic production. Flatulence is an inherently corporeal sound, shaped by breath, pressure, movement, and sensation. Phenomenology helps illuminate how the body becomes a site of sonic expression and how performers and listeners experience such sounds in lived, sensory terms. This perspective



reinforces the study's attention to embodiment and situates flatulence within broader debates about corporeality, perception, and the materiality of sound.

Together, these lenses form a coherent and mutually reinforcing framework. Acoustemology positions flatulence as meaningful sound; spectromorphology accounts for its acoustic behaviour; semiotic musicology interprets its cultural significance; and phenomenology reveals its embodied dimensions. This integrated approach supports a rigorous, culturally sensitive, and theoretically grounded exploration of flatulence as a sonic and performative phenomenon, aligning the study with contemporary scholarship in sound studies, ethnomusicology, and artistic research.

RESEARCH METHOD

This study employs a multi-stage, qualitative, and interpretive research design integrating acoustic analysis, cultural semiotics, performance studies, artistic research, and archival inquiry. All procedures were designed to be fully reproducible by researchers in any country, with transparent identification of data sources, analytical tools, and interpretive protocols. The study uses anonymised, ethically sourced sound recordings from publicly accessible acoustic libraries and open-access repositories; no human participants were recruited, and no institutional ethics approval was required. All software, analytical tools, and methodological choices are explicitly identified within each subsection.

Acoustic Analysis

The study opens with a detailed acoustic examination of anonymised flatulence recordings drawn from open-access sound libraries that explicitly permit research use. Each recording was analysed using Sonic Visualiser (version 4.5) and Praat (version 6.4), which enabled the generation of spectrograms, waveform displays, and frequency-domain measurements. Attention was given to frequency range, amplitude envelope, patterns of attack and decay, transient behaviour, and distinctive timbral qualities. To classify these features, the analysis followed Smalley's spectro-morphology, which provides a structured vocabulary for identifying gesture types, textural behaviours, and energy-motion trajectories. These sonic characteristics were then compared with recognised extended techniques in contemporary music, among them breath noise, fricatives, percussive bursts, brass flutter-tonguing, membrane releases, and aerophone turbulence, to establish the extent to which flatulence shares musical analogues. This stage of the research forms the empirical anchor for everything that follows.

The acoustic findings also generate the primary descriptors that guide later interpretive work. Identifying a sound as "percussive-burst-like" or "turbulence-rich", for example, becomes the starting point for examining how such gestures are culturally coded as humorous, taboo, or transgressive. In this way, the acoustic analysis not only clarifies the sonic structure of the material but also shapes the semiotic questions that underpin the next phase of the study.



Cultural Analysis

Building directly on the acoustic descriptors established earlier, the study proceeds with a cultural semiotic analysis that explores how different societies interpret, regulate, and symbolise flatulence as a sonic event. This stage draws on Peircean semiotics, Nattiez's tripartite model, and anthropological theories of taboo to examine the layers of meaning attached to bodily sound. The analysis involves coding cultural associations linked to humour, shame, ritual cleansing, social bonding, and bodily transgression, ensuring that each meaning is grounded in identifiable textual or historical sources rather than anecdotal assumption.

To maintain full reproducibility, the cultural corpus is drawn from clearly defined materials: ethnographic literature on bodily taboo, historical accounts of sonic humour, media representations in film, animation, and internet culture, and documentation of artistic movements such as Dadaism, Fluxus, sound poetry, and experimental theatre. Each source is examined for the ways it frames or responds to bodily sound, and these interpretations are then mapped against the acoustic categories generated in the first stage of the study. For instance, turbulence-rich sounds are compared with cultural associations of chaos or disorder, while short percussive bursts are aligned with comedic timing conventions widely used in animation and film sound design. This cultural analysis provides the interpretive lens through which performance practices are subsequently examined. By clarifying why particular sonic gestures provoke laughter, discomfort, or moments of collective bonding, it shapes the analytical questions that guide the performance-centred inquiry. In this way, the cultural stage does not stand apart from the acoustic work but builds directly upon it, transforming sonic descriptors into culturally meaningful categories that illuminate how flatulence operates within broader social and artistic contexts.

Performance Studies

The performance dimension of the study examines how bodily sounds, particularly those resembling or derived from flatulence, operate within both live and mediated performance contexts. Drawing on the work of Brandon LaBelle, Pauline Oliveros, and wider scholarship in embodied sound studies, the analysis considers how performers use such sounds intentionally, how audiences respond to them, and how spatial placement, improvisational choices, and the ethics of bodily humour shape the overall experience. The corpus for this stage includes documented performances, video archives, and published analyses of works that incorporate bodily sound or bodily comedy, ensuring that the inquiry is grounded in verifiable and reproducible sources.

Each performance was examined through a structured interpretive process. The first step involved identifying the sonic gesture itself, using the acoustic categories established earlier in the study. The second step mapped this gesture onto the cultural meanings or taboos identified in the semiotic analysis, allowing the performance to be understood not only as a sonic event but as a culturally situated act. The third step explored how performers manipulate or reframe these meanings through timing, framing, amplification, or spatialisation, revealing the artistic strategies used to heighten, soften, or subvert the cultural charge of the sound. Finally, where audience responses were available, such as laughter, discomfort, silence, or active participation, these were analysed to understand how the performance negotiated social expectations and affective reactions.



This stage of the research is directly shaped by the earlier acoustic and cultural analyses. If a turbulence-rich sound has been shown to carry cultural associations of chaos or humour, for example, the performance analysis investigates how performers either reinforce that expectation or deliberately challenge it. In this way, the performance inquiry becomes the point at which sonic structure and cultural meaning converge, revealing how bodily sound acquires artistic significance when placed within the dynamics of live or mediated performance.

Artistic Research

The artistic research component of the study involves both analysing and, where appropriate, creating sound-based artistic materials that make use of filtered, transformed, or recontextualised flatulence recordings. All digital manipulations were carried out using Reaper (version 7.0) and Audacity (version 3.4), with full documentation of the plug-ins, filters, and processing chains employed to ensure that the procedures can be reproduced with precision. This stage explores how sounds derived from flatulence can be reframed as compositional resources, elements within sound installations, or components of broader sonic experimentation. The work includes generating derivative textures through filtering, granulation, and time-stretching; testing spatial diffusion strategies in both stereo and multichannel formats; and examining existing artworks that incorporate bodily or otherwise taboo sounds.

The artistic research is closely informed by the earlier acoustic and cultural findings. The acoustic analysis determines what is sonically possible, what gestures, textures, and timbral qualities can be meaningfully transformed, while the cultural analysis clarifies which aspects of the sound carry symbolic or affective weight. Together, these insights guide the creative and analytical decisions made in this stage, ensuring that the artistic work remains grounded in both the material properties of the sound and the cultural meanings that shape its reception.

Archival Research

To support and contextualise the preceding stages of the study, a substantial body of archival material was consulted across sound studies collections, performance art archives, ethnomusicological case studies, and medical acoustics literature. All sources were either publicly accessible or accessed through institutional licences, ensuring that the research can be reproduced without restriction. These materials provide historical precedents for the use of bodily sound in performance, document how taboo or liminal sounds have been treated across different cultures, and offer scientific accounts of bodily sound production from medical and acoustic perspectives. They also supply comparative examples of socially regulated or marginalised sounds, allowing the study to situate flatulence within a broader field of sonic practices that challenge or negotiate cultural boundaries. By grounding the analysis in established scholarship rather than anecdotal or culturally narrow interpretations, the archival research strengthens the methodological rigour of the project and ensures that its conclusions rest on a robust and verifiable evidentiary base.



Integration

The final stage of the study brings together the acoustic, cultural, performance, artistic, and archival findings into a single interpretive framework. This synthesis follows a clear sequential logic. The acoustic analysis establishes what flatulence sounds like as a sonic structure, providing the empirical descriptors that anchor the entire inquiry. The cultural analysis then interprets these sonic structures within social and symbolic systems, showing how particular gestures acquire meanings associated with humour, shame, transgression, or ritual significance. Building on this, the performance analysis examines how artists mobilise or subvert these meanings in live and mediated contexts, revealing how bodily sound becomes an expressive tool shaped by intention, framing, spatialisation, and audience response. The artistic research extends this exploration by testing how the sounds can be transformed, reframed, or reimagined within compositional and installation practices, demonstrating their creative potential beyond their everyday associations. Finally, the archival research situates all these findings within broader historical and cross-cultural patterns, ensuring that the study is grounded in established scholarship and not confined to contemporary or culturally narrow interpretations.

Throughout this integrative process, the theoretical framework, drawing on acoustemology, theories of sonic taboo, phenomenology of the body, semiotic musicology, and Episto-Musical Pedagogy Theory (Authority, 2025) provides the conceptual coherence that binds the stages together. The result is a triangulated methodology that treats flatulence not as a trivial or comedic sound but as a culturally meaningful sonic event with artistic, symbolic, and performative potential.

FINDINGS

The findings of this study present a coherent picture of flatulence as a structured, culturally meaningful, and performatively significant sonic event. Drawing on acoustic profiling, cultural semiotics, performance analysis, and embodied theory, the results reveal that flatulence possesses identifiable spectro-morphological features, carries strong symbolic associations across societies, and holds untapped potential within artistic and experimental sound practices. Rather than treating the sound as trivial or comedic, the analysis demonstrates its measurable acoustic behaviour, its deep cultural coding, and its capacity to provoke, challenge, or enrich performance contexts. Together, these findings offer the first interdisciplinary account of flatulence within sonic art and performance studies, aligning empirical evidence with theoretical insight to reposition a marginalised sound within scholarly discourse.

Acoustic Behaviour and Spectro-morphological Features of Flatulence

The acoustic analysis revealed that flatulence possesses clear sonic structures that can be described using spectro-morphological vocabulary. The recordings showed identifiable attacks, sustained noise bands, and variable decays, demonstrating that flatulence is not a random burst of sound but a patterned acoustic event. Most samples displayed a noisy spectral profile with energy concentrated in the low- to mid-frequency range, often between 80 Hz and 450 Hz. The gestures observed ranged from short percussive bursts to longer, flutter-like emissions resembling aerophone turbulence. Spectrograms showed that some samples shared similarities with extended instrumental techniques, particularly brass flutter-tonguing and



percussive membrane releases. These resemblances were most evident in the irregular oscillations and rapid fluctuations in amplitude. The findings confirm that flatulence can be meaningfully compared with recognised sonic practices in contemporary music.

Table 1. Acoustic Features and Comparable Musical Techniques

Feature	Observed Pattern	Comparable Musical Technique
Frequency Range	80–450 Hz dominant	Low brass resonance; aerophone turbulence
Attack Type	Sharp, soft, or staggered	Percussive onset; breath noise
Duration	0.2–1.8 seconds	Short noise bursts; extended fluttering
Harmonic/Noise Ratio	Predominantly noise-based	Noise-driven extended techniques
Dynamic Range	Narrow to moderate	Breath-based dynamics

Table 1 offers a concise overview of the main acoustic features observed across the anonymised recordings, highlighting consistent patterns in frequency, duration, timbre, and dynamic behaviour. These observations show clearly that flatulence possesses measurable and structured sonic qualities, allowing it to be examined with the same level of analytical precision typically applied to other sound materials used in contemporary sonic art.

Cultural Meanings and Semiotic Interpretations

The cultural semiotic analysis showed that flatulence carries strong symbolic meanings across societies. Participants in the literature and archival sources consistently associated it with humour, taboo, shame, and social regulation. In some cultures, flatulence is treated as a cleansing act or a sign of bodily honesty, while in others it is heavily policed as inappropriate or disrespectful. These meanings shape how people respond to the sound in public and private spaces.

Semiotic interpretation revealed that flatulence functions as a signifier of social boundaries. It can disrupt formal settings, reinforce group bonding in informal contexts, or serve as a comedic device in media. The analysis of film, animation, and internet culture showed that flatulence is often exaggerated for humour, reinforcing its status as a taboo sound while simultaneously normalising it through repetition. These findings confirm that flatulence is not only an acoustic event but also a culturally coded sound that communicates social values and expectations.

Historical, Artistic, and Media Contexts of Bodily Sounds

The review of artistic movements revealed that bodily sounds have appeared in Dadaism, Fluxus, sound poetry, and experimental theatre, but flatulence itself has rarely been treated as a serious sonic material. Artists have used coughing, breathing, throat clearing, and other bodily noises to challenge aesthetic norms, yet flatulence remains largely excluded from formal artistic exploration.

Media analysis showed that flatulence is widely used in comedy, animation, and digital culture. Sound designers often exaggerate or synthesise the sound to heighten comedic effect. This widespread use demonstrates its cultural familiarity but also highlights a gap: despite its presence in entertainment, flatulence has not been examined for its acoustic or artistic potential.



Embodied Experience and Performance Possibilities

The embodied analysis revealed that flatulence is deeply tied to bodily sensation, pressure, and movement. Drawing on phenomenological perspectives, the findings show that the sound cannot be separated from the body that produces it. This embodied quality gives flatulence a unique position within performance studies, where the body is central to meaning-making. Performance analysis showed that when bodily sounds are used intentionally in performance, they provoke strong audience reactions, ranging from discomfort to laughter. These reactions depend on cultural expectations, the setting, and the performer's intention. The findings suggest that flatulence, if used deliberately in performance, could function as a tool for challenging norms, provoking reflection, or exploring themes of vulnerability, honesty, and taboo.

An artistic research experiment using filtered flatulence recordings demonstrated that the sound can be transformed into textures resembling low-frequency drones, rhythmic bursts, or percussive accents. This confirms its potential as a raw material for sonic art.

Archival and Literature-Based Insights

The archival review showed that while bodily sounds appear in medical acoustics literature, they are rarely discussed in artistic or cultural scholarship. Ethnomusicological texts acknowledge taboo sounds but seldom analyse them acoustically. This reinforces the need for interdisciplinary research that bridges acoustics, culture, and performance. The literature also revealed that scholars such as Feld, Smalley, Nattiez, and Merleau-Ponty provide strong theoretical foundations for analysing marginal sounds, even though they did not apply their frameworks to flatulence. This study, therefore, extends existing theories into new territory.

Integrated Interpretation of Acoustic, Cultural, and Performance Data

Bringing together the acoustic, cultural, and performance findings shows that flatulence is a complex sonic event with measurable acoustic features, strong cultural meanings, and significant performative potential. The acoustic data reveal what the sound *is*, the cultural data explain what the sound *means*, and the performance data show what the sound *can do* in artistic contexts.

Table 2. *Integrated Summary Findings*

Dimension	Key Findings	Implications
Acoustic	Structured noise with identifiable gestures	Suitable for sonic art and experimental composition
Cultural	Taboo, humorous, symbolic, socially regulated	Influences audience reception and artistic framing
Performance	Embodied, provocative, norm-challenging	Can be used to explore vulnerability, humour, and social boundaries

Table 2 provides a consolidated interpretation of the study's findings by bringing together the acoustic, cultural, and performative dimensions of flatulence into a single analytical frame. This triangulated view shows how the sound operates simultaneously as a measurable sonic event, a culturally coded symbol, and a performative gesture capable of provoking audience response or artistic reflection. By aligning these three strands, the table highlights the



interconnected nature of flatulence as both an embodied sound and a social phenomenon, demonstrating how its acoustic structure, cultural meanings, and performance potential reinforce one another in shaping its relevance within sonic art and performance studies.

The findings demonstrate that flatulence is not merely a comedic bodily function but a meaningful sonic event with acoustic structure, cultural significance, and artistic potential. By analysing it through multiple lenses, this study provides the first comprehensive understanding of flatulence within sonic art and performance studies.

DISCUSSION

The findings of this study show that flatulence, although commonly dismissed as humorous or inappropriate, is a structured sonic event with clear acoustic, cultural, and performative dimensions. When examined through the combined lenses of acoustemology, spectromorphology, semiotic musicology, and phenomenology, flatulence emerges as a meaningful sound that can be analysed with the same seriousness applied to other sonic materials. This section discusses these findings in relation to existing scholarships and highlights their implications for sound studies and performance research.

The acoustic analysis demonstrated that flatulence possesses identifiable spectromorphological features, including distinct attacks, sustained noise bands, and patterned decays. These characteristics align with Smalley's (1997) argument that all sounds, regardless of their source, exhibit morphological behaviour that can be described and interpreted. The resemblance between flatulence and extended instrumental techniques, such as brass flutter-tonguing or aerophone turbulence, supports the idea that bodily sounds can share structural similarities with recognised musical practices. This reinforces Feld's (2015) view that sound is not limited to traditional musical tones but encompasses the full range of human and environmental sonic expressions. The findings, therefore, challenge the narrow boundaries of what is considered musically legitimate.

Culturally, the study revealed that flatulence is heavily coded with meanings related to taboo, humour, shame, and social regulation. These interpretations vary across societies but consistently demonstrate that flatulence functions as a sign within cultural systems. This aligns with Nattiez's (1990) semiotic model, which emphasises that meaning emerges through cultural interpretation rather than through sound alone. The strong symbolic associations attached to flatulence explain why it is often excluded from formal artistic contexts despite its acoustic richness. The findings suggest that cultural stigma, rather than sonic limitations, is the primary barrier to its acceptance in performance and sound art.

The historical and artistic review further showed that while bodily sounds have appeared in avant-garde movements such as Dadaism and Fluxus, flatulence itself has rarely been explored as deliberate artistic material. Artists have used coughing, breathing, and other bodily noises to challenge aesthetic norms (Lewis, 2008), yet flatulence remains largely absent from scholarly and artistic discourse. This absence reflects a broader reluctance within academia to engage with sounds considered socially inappropriate. The findings, therefore, highlight a gap between the theoretical openness of sound studies and the practical boundaries imposed by cultural norms.



The embodied analysis revealed that flatulence is inseparable from the body that produces it, supporting Merleau-Ponty's (1962) argument that bodily experience is central to perception and meaning. The sound is shaped by pressure, movement, and sensation, making it a deeply embodied sonic event. This embodied quality gives flatulence unique potential within performance studies, where the body is a primary site of expression. Audience reactions observed in performance contexts, ranging from discomfort to laughter, demonstrate that flatulence can provoke strong emotional and social responses. These reactions confirm that the sound carries performative power, even when unintended. The integration of acoustic, cultural, and performative findings shows that flatulence operates simultaneously as a sonic structure, a cultural symbol, and a performative gesture. This triangulated understanding aligns with Feld's (1996) acoustemology, which emphasises the interconnectedness of sound, culture, and experience. It also resonates with Authority's (2025) argument that everyday sounds can serve as carriers of knowledge within artistic and educational contexts. By applying these theoretical perspectives to flatulence, the study extends existing scholarship into an area that has been largely overlooked.

Overall, the findings challenge the assumption that flatulence is unworthy of academic attention. Instead, they demonstrate that it is a complex sonic event with measurable acoustic features, strong cultural meanings, and significant performative potential. The study contributes to sound studies by expanding the scope of what can be analysed as sound, to ethnomusicology by highlighting the cultural coding of taboo sounds, and to performance studies by revealing new possibilities for embodied sonic expression. The results also open pathways for future research, including the creative use of flatulence in sound art, the exploration of other taboo sounds, and the development of decolonial approaches to sonic analysis that embrace the full spectrum of human sonic experience.

IMPLICATIONS

The findings of this study carry significant implications for sound studies, ethnomusicology, performance research, and artistic practice. By demonstrating that flatulence possesses structured acoustic features, culturally embedded meanings, and performative potential, the study challenges long-standing assumptions about what constitutes legitimate sonic material. It expands the boundaries of scholarly inquiry by showing that everyday and taboo sounds can illuminate how societies construct meaning, regulate behaviour, and negotiate embodied experience. One key implication is the need for a broader and more inclusive understanding of sound within academic and artistic contexts. Scholars such as Born (2010) and Bohlman (1993) have argued that musicology and sound studies must continually widen their scope to reflect the full diversity of human sonic experience. The present study supports this position by demonstrating that marginalised sounds, including flatulence, can be analysed with the same rigour applied to conventional musical materials, prompting a reconsideration of the sonic hierarchies that shape artistic production and academic discourse.

A further implication concerns the role of culture in shaping sonic interpretation. The strong symbolic associations attached to flatulence highlight the importance of cultural context in determining how sounds are perceived, valued, or rejected. Stokes (2010) emphasises that musical and sonic meaning is always embedded within social frameworks, identity structures, and cultural expectations. The findings of this study reinforce this insight by showing how



humour, taboo, and social norms influence responses to bodily sounds. Recognising these cultural dynamics enables artists and scholars to engage more critically with the social dimensions of sound. The study also has implications for performance practice. The embodied nature of flatulence, combined with its capacity to provoke strong audience reactions, suggests that it can serve as a powerful tool for exploring vulnerability, humour, and social boundaries in performance. This aligns with McClary's (1991) argument that performance can challenge cultural expectations and open new spaces for reflection. By incorporating taboo sounds into performance, artists may disrupt conventional aesthetics and invite audiences to reconsider their assumptions about the body, sound, and social propriety.

SUGGESTIONS

Based on these implications, several practical suggestions emerge:

- Future research should examine other marginal or taboo sounds using similarly interdisciplinary approaches to deepen understanding of how societies regulate sonic behaviour and how artists might creatively engage with such sounds.
- Sound artists and composers may experiment with filtered or transformed flatulence recordings as raw material for installations, compositions, or multimedia works, thereby expanding the sonic palette available to contemporary practice.
- Educators in sound studies and ethnomusicology could incorporate discussions of taboo sounds into their curricula to encourage critical thinking about cultural norms, sonic hierarchies, and embodied listening.

CONCLUSION

This study set out to investigate flatulence as a sonic, cultural, and performative phenomenon, addressing the absence of systematic research on a sound that is simultaneously ubiquitous and socially regulated. Through an integrated methodology combining acoustic analysis, cultural semiotics, performance inquiry, artistic research, and archival study, the research established a coherent framework for understanding how flatulence operates across sonic, symbolic, and artistic domains. In doing so, the study demonstrated that flatulence is a structured acoustic event, a culturally coded symbol, and a performative gesture with significant artistic potential.

The study's key contribution lies in showing that a sound typically dismissed as trivial can, when examined rigorously, reveal complex intersections between sonic structure, cultural meaning, and embodied practice. Theoretically, it advances debates on sonic taboo, acoustemology, and embodied listening by foregrounding a sound that tests the limits of social acceptability. Methodologically, it offers a reproducible, interdisciplinary model for analysing marginal or culturally sensitive sounds. Empirically, it provides the first comprehensive account of flatulence within sonic art and performance studies, demonstrating how acoustic features, cultural coding, and performative contexts interact to shape interpretation. These findings have wider significance for sound studies and related fields. They challenge disciplinary boundaries, expand the repertoire of sounds considered worthy of scholarly



attention, and highlight the value of examining sonic materials that sit at the edges of social propriety. The study also points to several forward-looking implications: it suggests that taboo sounds can serve as productive sites for artistic experimentation; that cultural analysis of everyday sonic events can deepen understanding of social norms; and that sound-based curricula may benefit from engaging more directly with marginal or uncomfortable sonic materials.

Future research could build on this work by examining how other bodily or socially regulated sounds function within different cultural contexts, or by exploring how audiences respond to taboo sounds in controlled performance settings. Further inquiry might also investigate how digital culture reshapes the circulation and interpretation of such sounds, or how emerging technologies enable new forms of sonic transformation that challenge existing cultural codes. These directions would help address unresolved questions about the limits of sonic acceptability, the ethics of bodily sound in performance, and the shifting boundaries of sonic art.

Taken together, the study demonstrates that even the most ordinary or socially uncomfortable sounds can reveal profound truths about culture, embodiment, and the ways we listen. When we learn to hear what we once ignored, we discover that the world is richer, stranger, and more instructive than we ever imagined.

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.
- Authority, O. A. U. (2026). Intermodal synergy in Nigerian popular culture: The therapeutic nexus of music–comedy fusion in stress relief. *International Journal of Research and Innovation in Social Science*, 9(12).
- Bohlman, P. V. (1993). Musicology as a political act. *The Journal of Musicology*, 11(4), 411–436.
- Born, G. (2010). For a relational musicology: Music and interdisciplinarity, beyond the practice turn. *Journal of the Royal Musical Association*, 135(2), 205–243.
- Bull, M., & Back, L. (2003). *The auditory culture reader*. Berg.
- Connor, S. (2004). *The book of skin*. Reaktion Books.
- Euba, A. (2001). Text setting in an African composition. *Research in African Literatures*, 32(2), 119–132.
- Feld, S. (1996). Waterfalls of song: An acoustemology of place resounding in Bosavi, Papua New Guinea. In S. Feld & K. Basso (Eds.), *Senses of place* (pp. 91–135). School of American Research Press.
- Feld, S. (2015). Acoustemology. In D. Novak & M. Sakakeeny (Eds.), *Keywords in sound* (pp. 12–21). Duke University Press.
- LaBelle, B. (2010). *Acoustic territories: Sound culture and everyday life*. Bloomsbury.
- Lewis, G. E. (2008). *A power stronger than itself: The AACM and American experimental music*. University of Chicago Press.
- McClary, S. (1991). *Feminine endings: Music, gender, and sexuality*. University of Minnesota Press.



-
- Merleau-Ponty, M. (1962). *Phenomenology of perception*. Routledge.
- Merriam, A. (1964). *The anthropology of music*. Northwestern University Press.
- Nattiez, J.-J. (1990). *Music and discourse: Toward a semiology of music*. Princeton University Press.
- Nketia, J. H. K. (1974). *The music of Africa*. W. W. Norton.
- Nketia, J. H. K. (1998). The scholarly study of African music: A historical review. In R. Stone (Ed.), *Africa: The Garland encyclopedia of world music* (Vol. 1, pp. 13–73). Garland Publishing.
- Nzewi, M. (1997). *African music: Theoretical content and creative continuum*. Institut für Didaktik populärer Musik.
- Smalley, D. (1997). Spectromorphology: Explaining sound-shapes. *Organised Sound*, 2(2), 107–126.
- Stokes, M. (2010). *The republic of love: Cultural intimacy in Turkish popular music*. University of Chicago Press.
- Tarasti, E. (1994). *A theory of musical semiotics*. Indiana University Press.
- Tarasti, E. (2002). *Signs of music: A guide to musical semiotics*. Mouton de Gruyter.