

Soundscape as Art: On the Spatiality of Sound Art and the Shaping of Memory

Rodrigo Rizal

Department of Art, UST College of Fine Art and Design, Tamayo Dr, Sampaloc, Manila, Philippines

Abstract

This paper posits the soundscape not merely as an acoustic environment but as a sophisticated artistic medium, arguing for its central role in the contemporary discourse of sound art. It critically examines the inherent spatiality of sound and its profound capacity to shape, store, and evoke memory. Moving beyond R. Murray Schafer's foundational ecological framework, the analysis reframes the soundscape within an artistic context, where it is intentionally composed, manipulated, and installed to create immersive, experiential spaces. The first section deconstructs the phenomenology of sound, exploring how it sculpts architectural and virtual spaces, fostering a unique, embodied listener-centricity. The second section investigates the mnemonic power of soundscapes, drawing on theories of auditory memory to argue that sound art functions as a repository of cultural, personal, and collective memory, often challenging or complementing visual-centric historical narratives. The paper is supported by conceptual diagrams and analysis of works by leading sound artists, such as Janet Cardiff, Susan Philipsz, and Brian Eno. Through a synthesis of theoretical analysis and case studies, this article contends that soundscape art, through its dual engagement with space and memory, offers a potent and distinct mode of aesthetic and socio-political experience.

Keywords

Soundscape, Sound Art, Spatiality, Auditory Memory, Acoustic Ecology, Immersive art, Phenomenology

1. Introduction

The 20th and 21st centuries have witnessed a dramatic expansion of the artistic field, a continuous challenging of its boundaries that has incorporated time, process, and environment into its core concerns. Within this expanded field, sound has emerged not as a mere parameter of musical composition but as a primary medium for artistic expression—a material in its own right. The term "sound art" has come to encompass a diverse range of practices, from gallery installations and site-specific interventions to performed actions and data sonifications. At the heart of much of this practice lies the concept of the soundscape—a term popularized by composer and educator R. Murray Schafer to describe the acoustic environment as a field of study.

However, while Schafer's work was pivotal in raising ecological awareness of our sonic surroundings, this paper proposes a critical shift in perspective: to consider the soundscape not as a found environment to be documented or preserved, but as a constructed and intentional artistic medium. This repositioning allows for a deeper investigation into the two core properties that make soundscape a uniquely powerful art form: its spatiality and its capacity for memory.

Sound is inherently spatial; it emanates from a source, propagates through a medium, and is perceived by a listener within a specific environment. This fundamental property is the raw material with which the sound artist sculpts experiential space. Furthermore, sound is intimately linked to memory and emotion. The unexpected echo of a familiar voice, the haunting melody of a forgotten time, the pervasive hum of a since-demolished factory—these sonic fragments possess an uncanny ability to collapse temporal distances and trigger vivid recollections [1].

This article, therefore, sets out to explore the following central thesis: Soundscape, when employed as a conscious artistic strategy, operates through a unique synthesis of spatial construction and mnemonic activation, creating immersive, phenomenological fields that challenge ocularcentric paradigms and offer profound insights into the nature of perception, place, and time.

To substantiate this claim, the paper is divided into two main parts. The first, *The Phenomenology of Sonic Space*, will delve into the spatial qualities of sound art. It will explore how sound defines, alters, and embodies architectural and virtual spaces, creating what LaBelle (2015) calls "backgrounds" that are fundamentally different from the discrete "objects" of visual art. The second, *The Mnemonic Resonance of Sound*, will investigate the mechanisms through which soundscapes function as vessels of memory. Drawing on cognitive psychology, cultural studies, and trauma theory, this section will analyze how sound art can archive personal experience, interrogate historical narratives, and fabricate prospective memories. Throughout, the argument will be illustrated with conceptual diagrams and analyses of seminal works, positioning soundscape art as a critical and transformative practice within contemporary art [2].

1.1 The Phenomenology of Sonic Space

The primary distinction between a soundscape as an environmental fact and a soundscape as an artwork lies in intention and manipulation. The artist curates, composes, and places sounds to create a specific spatial experience. This section deconstructs the elements of this experience, moving from the physical and architectural to the phenomenological and social.

1.2 Sound as a Spatial Sculptor

Unlike vision, which tends to be directional and framed, hearing is omnidirectional and immersive. We can close our eyes, but we cannot close our ears. This constant immersion in sound means that our sense of space is profoundly shaped by acoustic information. The composer Edgar Varèse famously described his work as "organized sound" and conceived of it as "spatial bodies" moving through a field. This conceptualization is literalized in sound art.

Sound defines space through several key acoustic properties:

- **Volume and Amplitude:** A loud sound can dominate a large space, while a whisper creates an intimate, personal sphere.
- **Reverberation and Reflection:** The time and character of reverberation inform us about the size, material, and emptiness of a space. A long reverb suggests a vast cathedral or cavern, while a dry, dead acoustic implies a small, absorbent room [3].
- **Directionality and Movement:** Through multi-channel speaker systems (e.g., 4.1, 8.1, Ambisonics), artists can create the illusion of sounds moving in three-dimensional paths around and through the listener.

Artist and theorist Brandon LaBelle (2015) argues that sound art's power comes from its ability to create "backgrounds" rather than "objects." While a painting is an object to be looked at, a sound installation is an environment to be listened within. This transforms the viewer into a "listener-participant" who actively navigates and co-creates the spatial experience. The space is no longer a neutral container but an active, vibrating participant in the work.

2. Virtual and Augmented Acoustic Space

The spatial sculpting of sound is not limited to physical architecture. With advancements in audio technology, artists now construct entirely virtual or augmented acoustic spaces. Techniques such as wave field synthesis (WFS) and binaural rendering can simulate impossible acoustics—a sound that appears to emanate from a point inside the listener's head, or an echo that defies the laws of physics. This "schizophonic" capacity—to separate a sound from its original source and resituate it elsewhere—is a core technique of soundscape art. Composer Trevor Wishart explores this as "the liberation of sound-source," enabling the creation of fantastical sonic worlds. In such works, the soundscape is not a representation of a space but the creation of a new one, a "sonic fiction" that exists only in the perceptual realm between the speakers and the listener's mind. This virtual spatiality is crucial for understanding how sound art can construct the layered, palimpsestic environments discussed later in relation to memory [4].

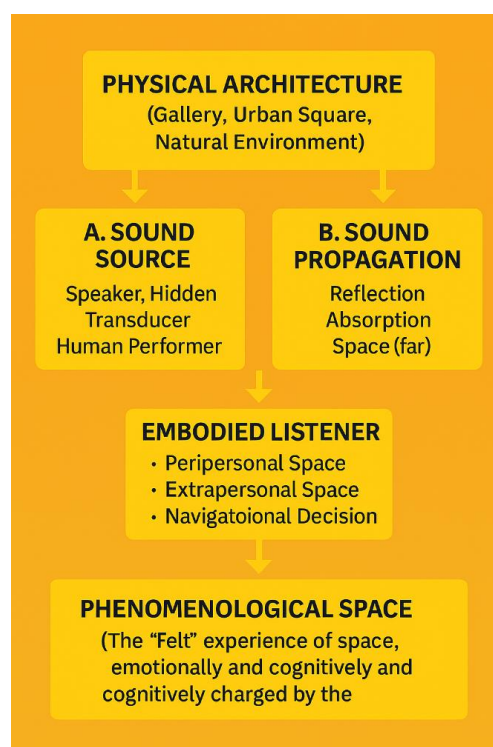


Figure 1. The Sculpting of Phenomenological Space through Sound

Figure 1 explain the process by which a physical architectural space is transformed into a phenomenological space through the intervention of sound. The embodied listener, situated within the field of sound propagation, actively interprets sonic cues to construct a personalized, experiential sense of place.

2.1 Case Study: Janet Cardiff's Walks and the Re-mapping of Place

A quintessential example of this sonic spatial sculpting is the work of Janet Cardiff, particularly her audio walks. In pieces like *The Missing Voice (Case Study B)* (1999) in London, participants are given a portable audio player and follow a narrated path through the city. Cardiff's binaural recording technique creates a hyper-realistic 3D soundfield; the listener hears her voice whispering intimately in one ear, while the sounds of a passing car or a distant conversation appear to occur in the external environment.

This creates a doubled space: the physical space of the actual city and the virtual, remembered, and imagined space of the recording. The soundscape does not merely accompany the walk; it actively re-maps it. It directs attention, alters perception of distance and scale, and overlays a fictional or historical narrative onto the present-moment reality [5]. The participant exists simultaneously in two spatial and temporal realities, with the sonic layer dictating the emotional and narrative tone of the experience. As Cardiff herself states, the work is about "the psychology of space," making the invisible layers of a place—its histories, secrets, and fictions—audibly present. This practice exemplifies how soundscape art does not just occupy space but actively produces it.

2.2 Acoustic Ecology and the Politics of Space

Returning to R. Murray Schafer's original project with a critical lens reveals the socio-political dimension of sonic spatiality. Schafer's call for "ear cleaning" and a balanced "soundscape" was inherently a project of tuning the environment, which implies a set of values about what constitutes "good" and "bad" sound. Sound artists working with site-specificity often engage in this politicized act of tuning. They can amplify marginalized sounds, such as the electromagnetic hum of urban infrastructure in Christina Kubisch's *Electrical Walks* (ongoing), or silence dominant ones, creating a temporary acoustic heterotopia. This practice is not neutral; it is an intervention into what Barry Truax calls the "acoustic communication" of a community. The soundscape artwork, therefore, can act as a critical tool that reveals the power dynamics embedded in our everyday sonic environment. For instance, the work of Hildegard Westerkamp involves "soundwalks" that guide participants to listen critically to their environment, transforming passive hearing into an active, political act of auditing the soundmarks of power, gender, and class. In this way, the spatiality of sound art is not only phenomenological but also ethical and political, questioning who has the right to be heard in a given space [6].

2.3 The Mnemonic Resonance of Sound

If sound is a master sculptor of space, it is also a powerful trigger and shaper of memory. The link between sound and memory is well-documented in psychology; the "Proustian" effect of involuntary memory, where a sensory cue triggers a vivid, unexpected recollection, is often as potent with sound as with smell. Sound artists strategically harness this connection to explore themes of history, loss, identity, and time.

3. Auditory Memory and the Archive of the Ephemeral

Human auditory memory is complex, involving echoic memory (lasting a few seconds), short-term auditory memory, and long-term memory for sounds, including semantic memory (remembering a fact about a sound) and episodic memory (remembering a specific event associated with a sound). It is this episodic, associative dimension that sound art most powerfully engages.

A soundscape can function as an archive, but an archive of the ephemeral. It does not preserve a static document but rather the affective and sensory quality of a time and place. The work of artist Susan Philipsz often revolves around this principle. In her Turner Prize-winning work *Lowlands* (2010), installed under three bridges in Glasgow, she broadcast a recording of herself singing a 16th-century Scottish lament about a drowned sailor returning to his lover. The lone, unadorned voice, echoing in the cavernous spaces beneath the bridges, evoked a profound sense of loss and longing. The soundscape became a vessel for collective memory—of folk traditions, of the city's relationship with its waterways, and of personal grief. The memory invoked is not a specific historical event but a shared emotional and cultural residue [7].

3.1 Sound and Affective Memory

The potency of sound in triggering episodic memory is closely tied to its affective power. Neuroscientific studies suggest that auditory processing has strong and rapid connections to the amygdala and hippocampus, brain centers responsible for emotional processing and memory consolidation. This neural linkage means that sounds are often encoded in memory with a strong emotional tag. A soundscape artwork, therefore, is not just an archive of sonic events, but an archive of affective tones. It preserves the feeling of a place or a moment—the anxiety of a hum, the tranquility of a slow rhythm, the joy of a specific melody. This is why the concept of "episodic memory" is crucial; it is not about recalling a fact, but about re-experiencing a specific, auto-noetic awareness of a past event. When Susan Philipsz sings a lament, she is archiving not the historical facts of shipwrecks, but the profound affective quality of loss and longing.

associated with them. The soundscape becomes a vessel for what Pierre Nora would call *lieux de mémoire* (sites of memory), but in a non-material, emotional form.

Table 1. Modes of Memory in Soundscape Art

Mode of Memory	Description	Example Artwork
Personal / Autobiographical	Uses sound to trigger or represent the artist's or listener's personal memories.	Bruce Nauman's <i>Raw Materials</i> (2004), which replayed fragmented phrases from his earlier works throughout the Tate Modern's Turbine Hall, creating a sonic retrospective.
Cultural / Collective	Engages with shared sonic symbols, music, or historical sound events that bind a community.	Susan Philipsz's <i>Lowlands</i> (2010), using a folk lament to tap into shared cultural and emotional histories.
Archival / Documentary	Uses field recordings or historical audio documents as the primary material, presenting an "acoustic truth."	Christina Kubisch's <i>Electrical Walks</i> (ongoing), using electromagnetic inductions to make the hidden electronic infrastructure of cities audible, archiving a normally inaudible layer of contemporary life.
Prosthetic / Fabricated	Creates false or fictional memories by implanting a soundscape that suggests a past that never was.	Janet Cardiff's <i>The Forty Part Motet</i> (2001), which allows listeners to walk among 40 separately recorded singers, creating an impossible, hyper-personal memory of a Renaissance choral performance.

Table 1 reveals that sound art not only records reality but also reshapes memories and emotions. Through the narrative and spatialization of sound, artists allow viewers to re-experience time, history, and themselves on the level of "auditory memory."

3.2 Sound, Trauma and the Counter-Monument

The mnemonic power of sound is particularly potent in addressing traumatic histories, where traditional visual monuments can risk simplification or aestheticization. Sound can evoke absence, presence, and the unrepresentable. In sites of historical trauma, a soundscape can function as a "counter-monument," challenging the authority and permanence of stone and steel [8].

An powerful example is the *Memorial to the Murdered Jews of Europe* in Berlin. While the visual element is Peter Eisenman's field of stelae, a crucial sonic component was proposed and, in some interpretations, is felt in the unsettling quiet and the way the stone blocks absorb sound, creating a hushed, disorienting atmosphere. A more direct sonic counter-monument is *The Stones Cry Out* by Holocaust scholar James E. Young, a concept for a memorial that would play the last words of victims from hidden speakers, making the ground itself seem to speak. This use of soundscape gives voice to absence and makes the past palpably present in a way that is immediate, emotional, and deeply personal for each listener. It avoids didacticism, instead creating a space for active, reflective remembrance.

3.3 Sound, the Body, and Embodied Memory

The effectiveness of sonic counter-monuments lies in their ability to engage embodied memory. Sound is not merely processed by the brain; it is felt by the entire body as vibration and resonance. This haptic quality of sound connects it directly to the pre-reflective, visceral memory of the body. The philosopher Jean-Luc Nancy describes listening as a process of being "all ears," a state of openness where the subject is permeated and shaped by the sonic event. In the context of trauma, which is often stored non-verbally in the body, a soundscape can bypass intellectual defenses and access this somatic memory. The low-frequency rumble in a sound installation might not "represent" a bomb blast, but it can trigger the bodily memory of fear and concussion. This is why the voice in Philipsz's work is so effective-it is not a

grand, operatic voice, but a fragile, human one that resonates with our own bodily experience of vulnerability and grief. The memory it triggers is not a cognitive picture, but a somatic echo, aligning with Michel Serres' notion of the body as a "sacred depository" of layered, sensory knowledge [9].

4. Discussion: The Synthesis of Space and Memory in the Soundscape Artwork

The analysis of spatiality and memory, while separated for clarity, reveals that these two dimensions are inextricably linked in the experience of soundscape art. A soundscape sculpts a space that is always already saturated with time. The echo is not just a spatial marker but a temporal one—a trace of a sound that has just passed. The layered field recordings in a site-specific work create a palimpsest of times within a single space.

This synthesis is the core of the aesthetic and conceptual power of soundscape art. It creates what theorist Gernot Böhme calls the "atmosphere" of a space—the pervasive, pre-conscious mood that fundamentally shapes our experience of being in a place. An artist like Brian Eno, with his concept of "Ambient Music," intentionally creates soundscapes that are "as ignorable as they are interesting," designed to tint the spatial atmosphere and, by extension, color the emotional and cognitive states of those within it. The memories formed or triggered in such an environment are not just recollections of the sound itself, but of the entire embodied situation—the feeling of being in that particular space, at that time, under that sonic influence.

Furthermore, this synthesis positions soundscape art as a critical tool for interrogating our contemporary world. In an era of increasing visual saturation and digital disembodiment, the immersive, tactile, and temporal nature of sound art offers a resistant mode of perception. It demands slowness, presence, and an embodied engagement that counters the rapid, scrolling, surface-level engagement of much digital visual culture. As theorist Salomé Voegelin argues, sound art's value lies in its ability to create a "sonic possible world" that critiques the here and now by making us perceive our environment anew. In a society dominated by the logic of the image and the screen, to listen deeply is a political act [10]. Sound artists create "acoustic territories" that resist the homogenization of public space and the attention economy. By making us listen critically to the spaces we inhabit—to their histories, their social dynamics, and their hidden frequencies—soundscape art fosters a deeper ecological and political awareness. It reclaims the right to silence, to noise, and to a shared auditory commons, proposing an ethics of listening as a foundation for a more attentive and empathetic community. In this sense, the soundscape artwork is not merely an aesthetic object but a social tool, a "non-cochlear" art that uses sound to think critically about space, time, and our place within collective life.

5. Conclusion

This paper has argued for a reconceptualization of the soundscape from an ecological given to a sophisticated artistic medium, whose primary agencies are the sculpting of space and the shaping of memory. Through its inherent spatial properties—its omnidirectionality, its interaction with architecture, its ability to create immersive backgrounds—sound art constructs unique phenomenological fields that re-center the experience on the embodied listener. Concurrently, through its deep-seated connection to auditory memory, both personal and collective, sound art functions as a dynamic archive of emotion, history, and cultural identity. It can trigger involuntary recollection, voice historical absences, and even fabricate prosthetic memories.

The works of artists like Janet Cardiff, Susan Philipsz, and Brian Eno demonstrate how the intentional composition of a soundscape can collapse the distance between past and present, real and virtual, personal and public. The soundscape artwork, therefore, is not a static object but a spatio-temporal event—a catalyst for experience that challenges the dominance of the visual and opens up new territories for aesthetic, philosophical, and political inquiry. As our world grows ever more complex and layered with information, the ability of soundscape art to render these layers audible, spatial, and mnemonic ensures its continued and growing relevance as a vital form of artistic expression in the 21st century.

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