'Always the Present'
Imagine this process:

Record a soundscape → play it back in the same location → record the blended result → play it back again → repeat.

Eventually, the past dissolves into abstraction, leaving only the clarity of the present.

Keywords: *soundscape composition, contemporary music, Fluxus, sound art, Zen Buddhism, Wndelwiser, Cage, Neuhous, Eno, Takis, Feldman.*

Title: The *Negative Space* in Sound Art.

Abstract

[In Zen philosophy, sound is not merely an auditory phenomenon but a gateway to understanding the nature of reality, the self and the interconnectedness of all things. It is also an immediate and ephemeral experience that serves as a tool to anchor the mind in the present moment.]

This paper presents a framework in sound art, focusing on minimal sound materials to transform the listener's perception. Drawing inspiration from the aesthetics of artists such as Morton Feldman, Bill Fontana, Takis, the Fluxus movement, Zen philosophy and Soundscape Composition, it explores the conceptual positioning, identification and implementation of this paper proposal within the spectrum of contemporary music.

The Negative Space concept which is presented in this paper does not introduce an unprecedented method for working with organized sound, although some practical implementations are described, instead it suggests a general compositional framework that allows the music to resonate more profoundly with the listener. This framework is based on the deliberate selection of only essential sonic elements, able to shape the listener's auditory experience. Artworks created within this concept are never truly finished - they only complete in the present moment - and emerge through a process of reduction or precise curation of recorded, live or synthesized sound. Importantly, these artworks remain inseparable from the listener's acoustic environment.

Insights concerning the aesthetics of this concept, which will be referred to from now on the this paper as "Negative Space" (a borrowed name from contemporary visual arts), are examined in relation to the general discourse on sound art, with the potential to provide new perspectives on how we engage with and design our soundscapes. Finally, a variety of creative techniques and implementations, inspired by the Negative Space concept are also discussed.

1. Introduction

This paper focuses on an approach to contemporary music, in particular to sound art and soundscape composition, emphasizing simplicity and reduction in the process of creation. Rather than assert a fixed musical statement crafted by a *distant* composer - often disconnected from the listener's acoustic reality - it seeks to create sound art that integrates seamlessly into the listener's soundscape, by subtly refines the auditory environment with selected sound elements, aiming to provoke perceptual transformation and arouse awareness of specific sonic characteristics. The *final* piece is the precise moment of listening to the combination of the curated sounds along with the listener's environment. Artworks created on the Negative Space framework can take any form for their presentation - either be fixed media works or sound installations. The former does not exclude the works as autonomous pieces but propose an aesthetic concept on their creation, while the latter are more easily to imagine within the concept of Negative Space, as sound installations inherently mostly blend with the environment of their presentation. Thus, a detailed discussion concerning the contextual framing of this paper's proposal is presented further.

2. Conception

The arousal for this artistic approach generated from a unique personal experience. It stemmed while working for a commissioned sound installation for the Greek Pavilion of the 18th Venice Architecture Biennale, focusing my work on the soundscape of old Venetian shipyards. The installation features small speakers placed inside the presentation models, playing a curated selection of site-related sounds in a weighted, randomized sequence. During this process, I was testing the power endurance of a speaker in my flat in Athens, continuously playing a recording of a calm sea. After several hours of casual listening, I unexpectedly experienced a profound psychological impact. My flat, although partly dominated by the external urban noise of the city, underwent an acoustic transformation. The soft, low-volume sound of the waves reshaped the perception of space, creating a serene auditory environment inside the flat. I fell asleep after a while and in the morning it was clear that this experience has modulated my perception and evoked some important questions. Can we, as listeners, connect deeper with our acoustic environment when sound art is intentionally integrated with it rather than overshadowing it? As composers, is it possible to produce strong perceptual transformations by using the minimum of sound materials? What defines the boundary between sound art and conventional soundscape design?

3. Negative Space as a concept of Contemporary Music

During the research process for this paper, numerous considerations emerged regarding the scope of the artistic practices. While my initial focus was on Soundscape Composition, the primary subject of my PhD research, soon it became

evident that the concept of Negative Space could extend beyond it. Soundscape Compositions can be created based on the framework of the Negative Space, concurrently the negative space concept is equally applicable to a broader range of artistic sound practices - widely known and referred to as Sound Art. Nonetheless, a closer comparison between Negative Space and Soundscape Composition follows in the next section, as I believe they are related and complementary approaches to create contemporary music. Before delving into that discussion, I think it is important to provide a basic description about art, sound art and contemporary art, to help us conceptualize the proposed concept better.

There are numerous definitions of **art**, ranging from Plato's *Mimetic* theory which expresses that all art is mimetic by nature *(Cambridge University Press, 2009)*, to Marcel Duchamp's *Readymade* concept, which revolves around the idea that the concept of an artwork is more important than the finished artistic output *(Danto, A. C. 1997)*. As a music composer, I understand art as a means of creating profound experiences, by making possible the expression of a wide range of emotions to the listeners. Some of these emotions can be generated even from simple ordinary actions, while others are so nuanced, subconscious and elusive that are only possible, at least as I have personally experienced them, only through certain artistic practices. In the music domain and especially in the electroacoustic music sub-genre, these elusive emotions can be created by a combination of novel compositional methods and precise sound synthesis. Thus, based on the experimental use of both, a composer has access to a pool full of different subliminal emotions, waiting to be re-discovered and they are usually only accessible through these experimental methods.

Contemporary music is a broad and evolving field that encompasses a wide range of musical styles and practices developed from the mid-20th century to the present. It is characterized by its experimental approaches, expanded instrumental techniques and the adaptation of new technologies *(Landy, 2007).* Unlike traditional classical or popular music, contemporary music often challenges conventional notions of tonality, rhythm and structure, exploring atonality, minimalism, serialism, while sometimes it includes multimedia presentations *(Demers, 2010)*. Composers such as Alvin Lucier, John Cage, Steve Reich, Iannis Xenakis and Hildegard Westerkamp have pioneered different movements within contemporary music, from chance operations to electronic and process-based compositions to field recordings *(Truax, 2001).* Therefore, contemporary music has expanded to include many experimental music forms such as electroacoustic music, sound installations, algorithmic composition and soundscape composition works, reflecting a growing interest in the interaction between music, technology and the environment *(Schafer, 1994).*

Turning our ears to **sound art**, we see that it is also an umbrella for many experimental music practices. More specifically, according to *Licht (2007)* is "art that

is primarily concerned with sound but that exists outside of the traditional structures of music composition and performance". It is an interdisciplinary field that explores sound as a primary medium, while also intersects with visual arts and technology to create immersive, experiential and conceptually driven works. Unlike traditional music, it often emphasizes spatial, environmental and phenomenological qualities, challenging the listener's perceptions of space, time and materiality. Artists like Max Neuhaus and Janet Cardiff are great examples as such. Installations such as *"Times Square" (1977)* and *"The Forty Part Motet" (2001)* respectively, engage audiences in multisensory, site-specific experiences. Furthermore, Scholars like Brandon LaBelle *(Background Noise, 2006)*, Christoph Cox *(Toward a Sonic Materialism, 2011)* and Douglas Kahn *(Noise, Water, Meat, 1999)* highlight also the aspects of spatiality and materiality, positioning sound art as a transformative practice that often expands the boundaries of simple artistic expression. As it is therefore understood, sound art is frequently tied to visual elements, whether through paintings, objects, or the environment itself. Negative Space reimagines this connection, by temporarily or permanently replacing these visual components from the artistic practice and instead emphasizing the actual listener's immediate surroundings as an integral part of the experience.

4. Negative Space in Sound Art, Zen Buddhism & Cognitive Science.

Negative Space aligns with the aesthetics of several sound artists and artistic movements that emphasize absence, reduction and perceptual awareness. Amongst many, these include artists like La Monte Young, Molton Feldman, Max Neuhaus, Bill Fontana, Zen philosophy, the Wandelweiser movement, the Fluxus movement and Soundscape Composition through the lenses of Acoustic Ecology. As such, it identifies as an aesthetic framework to create contemporary music, therefore sound art and soundscape compositions. In the following chapters, a discussion is made connecting the concept of Negative Space with other artistic practices in order to support the contextual adaptation of this paper's proposal to the broader Sound Art movement.

I. Negative Space as Soundscape Composition

Negative Space has largely been inspired by the practices of Soundscape Composition. Therefore, and as my PhD research is closely related to it, there is a need to elaborate further on this connection. The field recording traditions emphasize capturing authentic acoustic environments to preserve, document, or recontextualize them as artistic compositions *(Wrightson, 2000).* Soundscape composition, as pioneered by figures such as Hildegard Westerkamp, Barry Truax, Chris Watson and Francisco Lopez more recently, treats the environment as a musical resource, structuring field recordings into coherent and expressive works of sound art *(Truax, 2008),* while blending artistic, ecological, political and social dimensions. These works often highlight the inherent musicality of found sounds, enhancing

environmental sonorities through techniques like processing, layering and sound spatialization *(Westerkamp, 2002).* Whether aiming to faithfully document an acoustic environment or to creatively reimagine it, Soundscape Composition typically foregrounds the presence of sound, shaping it into a narrative or aesthetic experience.

Considerations however, emerge from many artworks that defy a clear genre classification. For instance, pieces that fit well into the category of Soundscape Composition may instead be identified as sound art simply just because they are exhibited in galleries. Similarly, works presented at electroacoustic music festivals could just as easily be reimagined in other contexts as sound art. As we can see through various following examples, context plays a crucial role not only in conveying an artistic message, but also in fulfilling a work's aspiration to be recognized as art. Furthermore, beyond the significance of context, many compositional techniques are shared across different musical genres, making it even harder to classify an artwork to a specific genre. Additionally, the accessibility of sound recording technology has facilitated the integration of field recordings into a broader spectrum of contemporary music. Based on these, the identification of an artwork as Soundscape Composition, is mostly driven by context rather than the techniques used for its accomplishment. Therefore, does a precise genre classification of Negative Space hold a significant value beyond a theoretical discussion on contemporary music aesthetics?

Negative Space is a framework aiming to alter the listener's perception by editing his acoustic environment through an interplay between sound and sometimes what is intentionally left out. Instead of a fixed music suggestion added to the listener's soundscape, it carefully creates a complementary sound curation, while allowing only the most essential sounds to emerge. While Soundscape Composition per se transports us to a place whether real or imagined, Negative Space transforms our experience of the place we are already in. Together, they offer complementary ways of engaging with the auditory world - one through abundance and the other through essentiality - while sometimes could intersect within a blurred music framework. One key distinction lies in the fact that Negative Space treats the environment as a malleable sound field, placing the role of the composer more as a curator and orchestrator of the acoustic presence and lesser as a performer (although this is also possible). In doing so, it opens new pathways for engaging with the auditory world in a more intentional and reflective way.

Echoing all previous thoughts, does it eventually hold any value to include Negative Space within the Soundscape Composition framework? Probably not a practical one, but as having a discussion about the aesthetics of sound art, it should be addressed. Therefore, if hypothetically considering whether Negative Space fits within the framework of soundscape composition, I believe it not only aligns with it but also extends beyond it. It is deeply convoluted with the broader concept of sound art and being inseparable from the listener's acoustic environment, while maintaining a

profound engagement with it, reinforces the principles of acoustic ecology (Schafer, 1977). As such, works based on this concept can indeed be defined as soundscape compositions as long as the core criteria of the Negative Space framework are met. Whatever the aesthetical framing is, it is undeniable that it possesses specific artistic qualities, as it suggests precise control over the creative process.

II. "What is the sound of one hand clapping?"

In Zen aesthetics, the concept of ma (間) - the space between elements - is as important as the elements themselves *(Suzuki, 1959)*. Drawing a connection between the concept of negative space and the famous Koan used on the title of this section, a suggestion can be made that the act of listening is shaped not only by the presence of sound but by its absence, contrast and positioning *(Rothenberg, 1999).*

In Zen philosophy, sound or the absence of it, is not just an auditory phenomenon but a gateway to understanding the nature of reality, the self and the interconnectedness of all things. It is also an ephemeral experience that serves as a tool to anchor the mind in the present moment. John Cage's *4 '33 "* remains a pivotal example of how silence (or its framing) can define an entire auditory experience *(Gann, 2010).*

In Zazen meditation, the core meditation practice of Zen philosophy, all sounds are accepted equally, even those that could easily be characterized as noise *(any unwanted sound)*. However, in a Zen monastery, garden or space of meditation, the environment is acoustically designed to promote deep listening, mindfulness and a connection with the presence. From open spaces that absorb and diffuse sound gently, reducing harsh reflections and promoting a sense of calm, to the wind chimes and water fountains, the meditation spaces are acoustically curated with minimal, however essential sounds. The careful balance between natural sounds, structured silence and ritualized sound events deepens the connection between listener, environment and presence. Although not typically regarded as art, at least according to many Western artistic traditions, this acoustic design serves as an excellent example of the concept of negative space.

The idea that art is deeply integrated into life rather than being separate from it - like in a Zen monastery - has been explored by several scholars. What is considered as art, is also rooted in cultural traditions and education. Lev Vygotsky, in *The Psychology of Art* (1925), emphasized that art serves as a method for shaping reality, underscoring its essential role in constructing our understanding of the world *(Vygotsky, 1925).* Additionally, Joseph Beuys argued that art is not an isolated practice but an integral part of daily life, highlighting the idea that artistic expression extends into all aspects of human experience *(Bookey, 2025).* Art can be as effortless as a humble way of living, just like a Zen adaptation is.

III. Negative Space and the Fluxus Movement

The Fluxus movement, which emerged in the 1960s, provides a compelling artistic and philosophical parallel to the Negative space Concept proposed in this paper. Fluxus artists, such as George Maciunas, Yoko Ono and Nam June Paik, seek to blur the boundaries between art and life, emphasizing simplicity, everyday experiences and audience participation. As *Kahn (2001)* notes, Fluxus aimed to *'stage the imperceptible and insignificance,'* radically isolating everyday details to provoke a shift in perception *(p. 266).* This philosophy resonates deeply with the proposed concept, where minimal, essential sounds - such as the barely perceptible introduction of waves in an urban flat - are used to transform the listener's engagement with their environment.

Many important artworks have encapsulated the simplicity of the Fluxus aesthetics, by using simple materials and actions to create profound experiences. For example, Yoko Ono's *"Cut Piece" (1964)* involved nothing more than a pair of scissors and an audience, to provoke a deep reflection on vulnerability and participation. Similarly, this paper's approach to sound art strips away excess, focusing on the interplay between presence and absence to create clarity and intentionality. By doing so, it invites listeners to perceive their auditory environment in a new way, much like Fluxus invited viewers to see the extraordinary in the ordinary.

Furthermore, Fluxus challenged traditional artistic conventions by rejecting the idea of art as a fixed, finished product. Instead, it embraced process, impermanence and the ephemeral nature of artistic experiences. This aligns with the dynamic, context-dependent nature of Negative Space, where the final artistic work is ideally inseparable from the listening environment. By integrating carefully selected sound elements into the listener's immediate surroundings - rather than imposing a detached auditory experience - Negative Space blurs the line between art and life, much like Fluxus did.

IV. The Wandelweiser Movement Connection

Negative Space also aligns closely with the Wandelweiser movement, as both emphasize silence, reduction and enhanced perceptual awareness. The Wandelweiser Movement is a collective of composers and performers that emerged in the early 1990s, centered around an approach to music that emphasizes silence, space and extreme minimalism. The movement was co-founded by Antoine Beuger and Burkhard Schlothauer in Germany and its aesthetic is often associated with the work of John Cage. Wandelweiser composers, such as *Jürg Frey, Eva-Maria Houben* and *Michael Pisaro*, treat silence not as emptiness but as an active force, to shape the listening experience *(Pisaro, 2009).* Similarly, the Negative Space framework is based on intentional subtraction, allowing absence to define presence, much like Wandelweiser works where long stretches of near-silence encourage deep

listening *(Gann, 2010).* Both approaches rely on minimalism and reductionism, with carefully placed sounds fostering a deep engagement with the auditory field, reinforcing the idea that listening is an active, participatory act rather than passive reception *(Rothenberg, 1999)*. Furthermore, the relationship between sound and the environment plays a vital role in both frameworks - Michael Pisaro's *Transparent City* is serving as a particularly representative example. Wandelweiser compositions are often performed in natural or resonant spaces, integrating environmental sounds into their music, similarly to the Negative Space approach that curates the listening experience by subtly modifying or blending with the surrounding acoustic environment. Ultimately, both approaches prioritise the listener's perceptual transformation through subtle intervention and deep attention to auditory space.

V. Neuhaus, Takis, Eno

The following artworks are closely linked to the Negative Space concept and I had the pleasure of personally experiencing them.

Max Neuhaus' Times *Square* installation uses a hidden resonating sound beneath a subway grate in New York City 45th Street, blending subtly into the urban soundscape. It is a permanent installation, still active in 2025. There are no signs pointing to the artwork and it requires a prior knowledge or an attentive listener to notice it. If it gets noticed, it offers a moment of deep internal pause within the busy center of New York city. The composer's intervention is minimal yet perceptible, altering how an environment is experienced without dominating it, thus aligning with this paper proposal.

I also had the chance to experience Taki's installation **Musicales** at the Goulandri Museum in Andros during the '90s and it still resonates in my head. Takis used magnetic fields to generate subtle, unpredictable sounds from metal rods and strings, transforming the basement of the gallery into an immersive auditory environment. Similarly to Neuhous' work, timeless personal moments were generated within the space of the gallery. Like Takis, who used minimal mechanical elements to create profound sonic experiences, Negative Space relies on subtle, intentional adjustments to the auditory environment. Importantly, Takis's work also highlights the importance of context - his Musicales are inseparable from the space in which they are installed, much like works based on this paper's proposal are inseparable from the listener's environment.

Additionally, I had the opportunity in the late '90s to experience the installation of **Brian Eno** and **Mimmo Paladino** at the catacombs of the Roundhouse space in Camden, London. This was also a profound personal experience and largely shaped my perception about sound art. This collaborative work, which combined Eno's ambient soundscapes with Paladino's *sleeping* crocodile sculptures, has created a dark, eerie environment where sound and space interacted in intense ways. This is

another fine example of context - dependent work, with carefully curated sounds *(generated by an array of hidden cd-players playing 99 tracks each in random mode)* seemingly blending with the listening environment without overshadowing.

VI. Feldman Space

The music of Morton Feldman is rooted in the concept of Negative Space, as being one of my favourite music artists. I have spent countless hours listening to his music in many different environments and the soundscapes created by Feldman's music are heartfelt, unique and immediately recognizable. Additionally, it is almost enigmatic how his music blends seamlessly into completely different environments, either the quiet space in my village or the noisy urban space of my apartment in Athens. In a radio conversation with John Cage, Feldman once said about Varese, "He knew how long the sounds need to speak…" (WBAI radio, 1967) a notion Feldman accurately implemented in his works. His music provides an acute example of Negative Space and how this concept can be used to shape auditory perception. Feldman's compositions, characterized by their sparse textures, extended durations and use of silence, create a meditative, almost architectural quality that invites deep listening. In works like *"Rothko Chapel"* and *"For Philip Guston,"* silence is not merely the absence of sound but an active, structural element that shapes the listener's experience of time and space. This approach resonates with the Negative Space framework, where the careful curation of presence and absence transforms the listener's perception of their auditory environment. Like Feldman's music, Negative Space emphasizes the beauty of simplicity and the importance of active engagement, creating a dynamic interplay between sound, silence, and perception.

VII. Perception in Negative Space

As a novel concept to sound art, it is important to establish a connection between the proposed concept and the cognitive functions of the human brain. Cognitive science suggests that the way we experience sound is not merely a passive act but an active, deeply psychological process shaped by selective attention, cognitive framing and perceptual adaptation *(Bregman, 1990; Deutsch, 2013).* Our ability to tune into specific elements of an acoustic environment while filtering out others - often referred to as the *cocktail party effect* - demonstrates how our minds sculpt the auditory world in real time. The cognitive functions of the brain are supporting the framework of Negative Space, which rather than overwhelming the listener with dense layered sounds, works in tandem with the brain's natural tendencies, curating presence with minimal sound interventions rather than imposing it.

In contrast to induce a specific sound narration through a completed music piece - thus creating an acoustic environment sometimes detached from the listener's immediate soundscape - Negative Space is modifying or blending with the existing environment subtly, making the listener's perception an integral part of the piece

itself. This transforms the listening process from passive reception into active engagement, as the auditory field becomes something the listener co-creates through attention. This is particularly evident in the *recursive "Always the Present"* idea (and respective track accompanying this paper) discussed later in this paper, where a soundscape is recorded, played back in its original location and then re-recorded in a continuous loop. Over time, the past and present blur, creating a layered auditory experience in which the original soundscape remains intact while its past iterations dissolve into abstraction. This process mirrors the way memory and perception interact - how we constantly reconstruct the present based on past sensory experiences. It also invites a deep listening approach, akin to Pauline Oliveros' philosophy *(Oliveros 2005),* where enhanced awareness of subtle sonic variations gradually transforms the act of listening into a meditative experience (a technique used in *La Monte Space* track, also accompanying this paper) .

From a psychological perspective, the Negative Space framework has likely a profound effect on cognitive load and emotional state too. Research suggests that dense auditory environments can increase mental fatigue and lead to detachment from one's surroundings *(Sweller, 1988; Kaplan, 1995).* Of course, music generally relies on dense layers of sound, but it is not necessarily tiring. This brain function is mentioned here simply to support the proposal of this paper. Therefore, a carefully curated soundscape - whether through subtraction, selective reinforcement or subtle intervention - can provide clarity and focus, enhancing the listener's engagement with their environment *(Juslin & Västfjäll, 2008; Schafer, 1977).*

Ultimately, Negative Space proposes a shift in the role of the composer - from someone who constructs external auditory worlds to someone who sculpts perception itself. It creates a bridge between composition and cognition, allowing soundscapes to exist not as static reproductions but as dynamic, living environments shaped by attention, presence, and interaction.

VIII. Synopsis – Three basic Characteristics.

Sound Art based on Negative Space relies to three fundamental characteristics:

- **Intentionality.**
  Precise control over the creative process.

- **Inseparability.**
  From the listening environment.

- **Minimalism.**
  Study the listener's capacity for auditory transformation and stay within perceptual boundaries.

5. The Role Of Perceptibility & Context

While the concept of Negative Space suggests exciting possibilities for sound art, its effectiveness depends on finding the right balance between minimal intervention and perceptibility. Minimalism in sound art remains effective as long as it alters perception in a meaningful way, but it reaches its limit when sound interventions become imperceptible or fail to engage the listener. Therefore, the effectiveness of such an approach depends heavily on the threshold of perception. If a sound (or method) is too faint, it risks being physiologically undetectable *(Bregman, 1990)*, drowned out by ambient noise *(Truax, 1996)* or disregarded as a result of the listener's *auditory habituation*.

Thus, if a sound intervention is so minimal that no listener perceives it, can it still be registered as sound art? From my perspective, and it should be logical, if an intervention fails to register with a listener in any form, it ceases to function as an artistic experience. This question echoes a famous philosophical inquiry, "If a tree falls in a forest with no one around to hear it, does it make a sound?" While some will argue that it does, some others will argue that sound only exists when it is perceived by a conscious mind. As sound artists, if we choose to work within the concept of negative space, our challenge lies in finding a balance between selecting the minimal possible material while ensuring perceptibility for the audience. This can be achieved through many means like, a weighted use of sounds, a clear artistic7 framing or with gradual material transformation. There are instances however, where at first listening, imperceptible music works, hold artistic significance provided their conceptual intent is clear enough to resonate with the listener**.** For example, *La Monte Young's Dream House* employs psychoacoustic effects that may initially go unnoticed but reveal themselves over time. The continuous, unchanging nature of the sound encourages auditory adaptation, where the brain filters out repetitive stimuli, allowing subtler aspects to emerge. This can induce a meditative or hypnotic state, a key psychoacoustic effect in Young's work.

As briefly mentioned earlier, context plays a crucial role in shaping perception, as we have seen in the previous examples *Eno and Takis.* A subtle intervention might be perceptible in the quiet environment of a gallery but could be entirely lost in a bustling urban soundscape. Besides the use of space, and as in many occurrences in conceptual art, context is also about the overall presentation of the artwork, from program notes to the visual stimulus of a poster.

Furthermore, cognitive and cultural factors influence how listeners engage with organized sound. While deep listening techniques can intensify awareness, untrained listeners may struggle to perceive such an extreme sound environment. Artists like John Cage *(4'33", 1952)* and the Wandelweiser collective have explored

near-silence, however their works remain anchored in the act of framing auditory perception rather than dissolving into non-existence.

To ensure therefore, that the concept of negative space retains its meaning and impact, the following suggested techniques can be employed:

1. **Gradual Change**: *Introduce minimal interventions slowly, so listeners detect transformation over time.*

   As an example, over a long duration, harmonic overtones may naturally shift, altering the texture of the sound. A tone might also slowly drift in frequency or intensity, creating an evolving perception of presence and absence. Slow-moving transformations can be used to keep the listener engaged and avoid *perceptual habituation*.

2. **Contrast & Framing**: *Use brief moments of presence to highlight absence, ensuring that subtle changes remain perceptible.*

   A sudden, brief tone in an otherwise silent environment draws attention to both the sound and the silence that follows. A nearly inaudible sound might go unnoticed in a busy city, but if framed within a quiet gallery space, it becomes a focal point. The audience's awareness can also be directed through context, program notes or performance settings that highlight the importance of the negative space concept.

3. **Context Awareness**: *Design interventions based on the acoustic environment, making them dynamic rather than static.*

   Sound art performed in natural environments might need a different selection of frequencies or dynamics for its accomplishment than in an industrial setting. Perceptibility can also be maintained when sound shifts are based on movement, time of the day or the listener's cultural background and prior exposure to experimental music. The latter can shape how absence or near-silence is interpreted.

4. **Multisensory Integration**: *Combining minimal sound changes with spatial, light or haptic cues can enhance perceptibility.*

   As an example, the positioning of speakers can frame listening perception. Subtle sound shifts in different parts of a room encourage active exploration by the listener. Low-frequency sounds can be felt through large sound speakers rather than heard. A great tool is also temporal synchronisation - by coordinating changes in sound with changes in another sensory domain (e.g. lights) subtle sound shifts can be more noticeable.

5. **Psychophysical Triggers**: *Use sounds that naturally draw attention even at low volumes.*

   Slight changes in pitch, timbre or amplitude keep a listener engaged, while high-pitched tones stand out because the human ear is highly sensitive to them. Additionally, binaural beats for example (slightly detuned frequencies in each ear) can create an immersive psychoacoustic experience, while sudden or unexpected sounds can naturally engage the brain's alert system.

6. Implementing Negative Space In The Creative Process.

Some creative implementations based on the Negative Space framework are presented below, demonstrating the practical aspect of this concept to the creation of sound art. The following proposed ideas, combined with the previous section's techniques, are not constrained to any particular sound materials or method. Found or synthesized sounds, fixed media or sound installations, can all be integrated as long as the composer esteem the relationship between sounds and the performance environment.

1. **Environmental Looping - *Always the Present*** **(Composition)**
   - Record a soundscape in a specific location.
   - Use a speaker to play it back subtly in the same space at a low volume, allowing it to blend naturally with the real environment.
   - Re-record the mixed soundscape and repeat the process many times.
   - This iterative layering creates a spectral and temporal displacement effect, making listeners aware of the acoustic past, while leaving intact the acoustic presence. Use many microphones and speakers for an immersive experience.

2. **Additive Minimalism** **(Composition or Installation)**
   - Introduce a single keypoint sound to an existing soundscape.
   - The selected sound could be based on the balance of the frequency spectrum of the soundscape (using a spectrum analyzer to identify peaks and dips) or on emotional considerations to provoke a specific psychological effect.
   - Could be any sound, within a fixed media composition or directionally reproduced by a single or multiple speakers in a public or home sound installation.

3. **Subtractive Field Recording** **(Composition)**
   - Record a natural or urban soundscape and identify key sound elements that contribute to the space's identity.

- Use spectral editing, masking or phase cancellation, to remove distracting, unwanted or artistically decided elements.
- The final result is a refined version of the original soundscape, but altered with artistic intentions.

4. **Acoustic Camouflage** **(Composition or Installation)**
    - Identify a sound already present in an environment.
    - Introduce a barely perceptible version of the same sound, time-stretched or subtly altered, reinforcing the natural rhythm or spectral characteristics of the space.
    - This approach enhances an existing acoustic environment, making listeners more aware of it.

5. **Quiet Composition** **(Composition or Installation)**
    - Design a composition where sounds are introduced only at the threshold of audibility.
    - Sound elements should be so quiet that listeners need to shift their focus to detect them.
    - This technique could increase awareness of the surrounding space and fosters a deep listening state.

6. **Tuning Spaces** **(Installation)**
    - Introduce a single, low-level ambient sound to a noisy environment.
    - The goal is not to mask the acoustic space but to slightly shift its emotional and perceptual tone, just like adding or subtractive harmonics to a complex sound wave.
    - This could work particularly well in urban soundscapes, subtly reshaping them without imposing an explicit compositional presence.
    - Use directional speakers to introduce the sound in localized areas, making the intervention feel like a natural resonance of the space.

7. **On the Spot** **(Installation)**
    - Using an array of spot microphones and a mixer to rearrange spectral and dynamic qualities of a soundscape.
    - The performer *sculpts* the acoustic environment, highlighting in real-time specific acoustic qualities and sounds of an acoustic environment.
    - Various dynamic or time based effects can be introduced in the mix, such as delays, gates and reverbs, to completely reimagine the acoustic space.

8. **Sonic Haikus (Composition)**

- Like a traditional haiku (which consists of 17 syllables in a 5-7-5 pattern), a sonic haiku could be a short, 17 seconds in duration musical phrase.
- Sounds could be drawn from natural, environmental or synthetic sources, focusing on emotional or symbolic resonances. Pauses are as important.
- Arrange sounds following the structure inspired by the 5-7-5 haiku format. *Opening* (5s): Introduce the atmosphere. *Development* (7s): Add a variation. Resolution (5s): *Return to simplicity*, ending with near silence or a single sound.

7. Negative Space (Album)

The realization of this paper inspired me towards the completion of this album. It features seven tracks mostly based on the framework and concept of Negative Space and some of the creative ideas and techniques explored. *The ideal playback volume is low, just above the lower limits of acoustic perception.*

1. La Monte space.
   Using the gradual change technique discussed in the paper, an LFO is applied to modulate specific frequency bands of a cello sound, inspired by the music of La Monte Young.
   10:00”

2. Always the present.
   Environmental looping at my favorite spot in Chania’s Venetian harbor. Recorded with a pair of Primo microphones and played back on an Anker Mini speaker, the loop consists of seven consecutive recordings.
   13:17”

3. Camouflage.
   Based on the concept of acoustic camouflage, Izotope RX was used at the same favorite spot in the harbor to isolate a seagull sound. This sound was then repetitively added to the recording, giving the soundscape an intentional steady rhythm.
   03:00”

4. Out of the Cage.
   Based on the suggested technique of contrast and triggers, a slow-motion binary tree sequencer generates a sparse soundscape, consisting of phrases from John Cage’s A Lecture on Nothing and percussive-style sounds.
   09:10”

5. Dissolve into non-existence.
   A combination of gradual change techniques with contrast and triggers.
   09:55”

6. I watched him playing below the sea.
   Based on the Camouflage (3) recording of the Venetian harbour, chimes were added to the mix, In a relatively low volume, beautifully blending to the serenity of the environment.
   03:00”

7. The place you are already in.
   Not reliant on a specific method or proposed concepts.
   09:50”

Download Link:

https://drive.google.com/file/d/15LU8nG-gU2oe-iQoBVjG3G0gN95W2Lte/view?usp=sharing

8. Conclusion

This paper presents a concept and a framework in creation of sound art, that prioritizes the act of curation, reduction and integration over excess augmentation and layering. It proposes a way of engaging with sound that deepens the listener's awareness of their environment, rather than enclosing them within a predetermined music statement, thus leaving space for perception and presence to shape the final experience. By engaging with the listener's immediate surroundings rather than constructing a detached auditory world, it encourages a deeper connection with the present moment in space. Simultaneously, it demonstrates how minimal interventions, if placed within an clear artistic context, can profoundly shape acoustic perception, leading to a heightened sense of acoustic awareness and engagement. It does not advocate a method that has never been used before to write music, but proposes a framework within which this music can resonate more deeply with the listener.

Additionally, it redefines the role of the composer, from an authorial creator of audio events to a *facilitator* of perceptual shifts. The act of composition becomes less about dictating an experience and more about curating the conditions for deep listening, allowing the soundscape itself to emerge as a dynamic and interactive entity.

In an era of increasing saturation, where sound is often used as a tool for control, branding or distraction, while music technology prioritizes on immense techniques, the concept of negative space offers an undertow alternative. It cultivates for both composers and listeners a more aware and intentional engagement with sound, pointing out that powerful transformations can emerge from simplicity and restraint.

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