



Universiteit
Leiden
The Netherlands

Performing musical silence: markers, gestures, and embodiments

Livingston, G.P.

Citation

Livingston, G. P. (2024, December 10). *Performing musical silence: markers, gestures, and embodiments*. Retrieved from <https://hdl.handle.net/1887/4172020>

Version: Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/4172020>

Note: To cite this publication please use the final published version (if applicable).

Chapter 7. Conclusion

The central aspect of my research has been the creation of an open archive of performed silences. This ever-expanding Noisy Archive has transformed my understanding of silence, giving me the tools to identify and compare silences, explain them, and perform them.

Performed silence is little documented in music studies and is often poorly understood by musicians, even when skillfully played. By examining different eloquent silences in performances of composed music, I have illustrated and tried to open up new options for understanding and engaging with silence.

Notated rests communicate very little information in and of themselves. But within the printed score, multiple options for interpretation arise from these rests: “The communicative rest almost always has more than one potential function, which the performer is at liberty to reveal or create” (Potter, 2017, p. 168). Often more so than the notes, the rests in a score give the performer the liberty to reveal or create, and affordance to communicate via gestures and embodiments.

How can performers engage with the multiple dimensions of silence in composed music? This research question, arising from the act of performing, investigates and unpacks the relationship between notated rests and “audible” silences by focusing on the role of visible, audible, and notational markers. Early in the research process, it became clear that the means of expressing silence are diverse, complex, conflicting, and overlapping. Musicians will not find this surprising. But what was surprising was how much of this diversity was tacit knowledge. This knowledge is commonly shared amongst musicians but is tacit in the sense of not being studied and documented more systematically. Moreover, it is tacit in the sense that the common means of expressing silence are not notated, as traditional notational symbols overlook the multidimensional contingencies and potentialities of performing silence.

This became the motivation for my archive: creating an open catalog of techniques and inspiration and making it available to other musicians to further their knowledge of performing silences. The archive became more and more multidimensional as I made links between performed silence and other disciplines and engaged with a great variety of composers and performers. My archive became both a tool for analysis and a means of generating new embodiments of silence in my practice and in my teaching.

The Noisy Archive’s examples underscore a pivotal point within this research: understanding and considering what silence represents is crucial for the engaged

performer. By discerning the role that silence plays and how it functions (how it acts and *what it does*), new ideas on how to perform silence emerge. Conversely, delving into the actions and modes of execution in performance leads to a nuanced comprehension of the function, role, and position of silence in music.

My exploration of silences was furthered through the analysis and embodiment of three canonical works (*4'33"* by John Cage, opus 111 by Ludwig van Beethoven, and *Ballet mécanique* by George Antheil). I studied other performers and used reflective imitation videos as a technique for investigating manners of performing silence. Research methods further included reading, teaching, graphic analysis, field recording, interviewing, video analysis, auto-ethnography, storytelling, and reflective imitation of other pianists. The outcomes included radio shows, podcasts, a mini festival of silence, piano performances, student artworks, published articles, and a collaboration with dancers. The cross-networking of these methods attests to how this artistic research has helped me find ways to work from practice to theory and back to practice.

As I explored the case studies and archive examples, I developed responses to the research question:

- There are many **markers** (especially audible and visible) that a performer can use which lead the audience to expect or experience silence. They are signals that the performer employs to embody silence or make it eloquent. Frequently, silences are multidimensional, communicating information about temporality, function, and emotion. The use of markers by the performer can shape the audience experience of these dimensions;
- Some silence markers (including architectural, ritual, and iconic ones) may exist outside of the notated music as **meta-silences** that stem from the performance (context) of the work, impacting the audience's experience and potentially framing the composition. The audience itself can collectively create markers for silence with a ritual, spiritual, or behavioral component;
- Performers embody silence through a rich vocabulary of **gestures** that has no notation and which is not widely documented;
- Performed silence often highlights the visual, as I have shown in traditional performances of opus 111 or experimental videos of *4'33"*. Indeed, the **visual component** of musical silence can often be stronger than the auditory, taking precedence in shaping audience awareness of silence;
- Silence serves a connective as well as a disconnective function in musical experience, sometimes simultaneously, a phenomenon I refer to as the **not/knot**. Whether connecting or disconnecting, silence is often felt as tangible by musicians.

My results are intended for all musicians, not just pianists. It is true that many of the examples included here focus on the piano and its resistances and affordances. In most of

the examples, the performer (whether myself or others) is in profile, seated at a bench, in the customary stance of a classical pianist. But in the Cage examples, other attitudes for silences are revealed. These possibilities can extend back to the confines of the piano itself, or forward to other instruments and other musical disciplines. A vocabulary of markers can offer performers many new ways of interpretation and can be applied equally to the classical repertoire and new experimental works. Composers can also benefit from these tools in that they can better label, strategize, and comprehend their use of silences.

7.1 Conceptual Contributions

- **Markers for silence** are visible or audible signals used to shift attention and thus *impose* silence, *summon* silence, or *shape* the perception of silence. They can also have a ritual characteristic, or they can arise from cultural norms.
- I have drawn from conversational theory to suggest the term **eloquent silence** based on its rhetorical component and its potential for communication. Eloquent silence, which is usually thought of as a purely acoustic experience, is more often indicated to us by performed gestures and visual markers than by actual silence.
- **Gestural markers** were explored with contrasting examples from Beethoven's last sonata, in which concert pianists deploy exaggerated gestures to embody performed silence. Although constrained by their instruments, their clothing, and their training, their embodiments seem to represent an outlet.
- In my performances of Antheil with the Zürich Ballet, rapid gestures and agitated choreography were effective in communicating the hectic pulse of the silences which arose from **notational markers**. Our experimentations on stage revealed a plethora of gestural possibilities both for the embodiments of the silences and the effects thereby created.
- The performances of Cage's *4'33"* highlighted the complexity and interest of visual attitudes and postures for silence. But the sounds created by the performers, and the sounds around the performance are **audible markers** for silence, which help the audience parse and comprehend the artwork.
- As discussed in Chapter 2 and the Noisy Archive, **meta-silences** are silences that usually arise from rituals, norms or other contextual matters. They play an important role in framing works of classical music and in shaping our experience of contemplation.
- **Visual markers** refer to an important suggestion—that silence in live performance is often reliant on the visual. They seem to play an outsize role, often taking precedence over the other senses, a multimodality of perception. In live performance, the performative aspect of silence is often more seen than heard, reinforcing the theory that the visual experience is integral to the emotional and interpretative depth of eloquent silence.
- This dissertation proposes silences as multifaceted entities within the performance space, capable of delineating and blending musical phrases and invoking a reevaluation of their performative function. As such, silence offers the capacity for delimitation and assemblage, positioning the performer as the one who navigates these dualities in each singular event. This

model of “**not and knot**”—its capacity to serve simultaneously as connector and separator—challenges the conventional binary perspectives that typically categorize silence as either presence or absence or as either active or inactive. These co-existing dualities are, for example, present in the silence that separates the fanfares of Beethoven’s opus 111. Some pianists emphasize the separation (Richter); others emphasize the connection (Pires). This emphasis is created by the use of markers, both audible and visible.

- One question that often arose in my discussions with other musicians was a search for the **motivations** behind embodied silence. Some pianists are overtly seeking to communicate specific emotions through their embodiments of silence. Other pianists use gestures to illustrate the sound of silence, perhaps just for themselves. Their gestures stem from the practice room as a type of self-conducting. Or pianists gesture through the silences to retain the audience’s interest. In my own practice, I often try to articulate the breaths, the phrasing, or the structure of the composition. All of these are valid reasons for embodying silence, and many of them can exist and function simultaneously, even in the shortest rest.
- **Silence and time** are intricately related. The pauses or spaces afforded by rests help performers feel and process the present. Some silences let the audience listen backward to the past (the silence at the end of Anton Bruckner’s *Te Deum*) or forward to the future (the opening of Beethoven’s Fifth Symphony). Still others (Morton Feldman’s *Intermission 6*) seem to be without reference to time or duration. Gestures and embodiments of silence can be rapid or slow, overlapping or discontinuous, or any combination. The silences of 4’33” might be assumed to be timeless, but many of the videos in Chapter 4 demonstrate a strong dialogue between silence and time. The members of the band Dead Territory beat time quietly with their heads. Pianist David Tudor marks multiple time scales: a slow one of turning pages (a visual marker for time) and a fast one of a clicking stopwatch (an audible marker for time). Markers for time and silence can overlap, as in my performances with the Zürich Ballet. Antheil hoped for an audible sensation of time running through the silences without being touched. The choreographer in the Zürich performance experimented visually with abrupt falls during the silences. As the dancers collapsed, they were marking both time and the drama of the silences. Several time scales, marked both visibly and audibly, were thus present in the finished performance of the silences.

7.2 Practical Contributions

Another aspect that came out of my research project is **an improved vocabulary of silence**. Although silence is notated unidimensionally (duration), there is much evidence for a multidimensionality of silence. These dimensions could include intentionality, source, direction, emotion, remembrance, and even speed. These dimensions easily mesh with techniques and theories that most musicians use in their practice. Although performed silences are often intuitive, unlabeled, or uncategorized, the very attempt to define performed silences through an archive has provided insight, building fluidity and

potential into dimensions and offering new performance opportunities. A future step may be to create **new notations for silence** (see below), which could be helpful to performers and composers.

My **Noisy Archive** offers a chance to rethink silence, not simply as an absence of sound, not simply as a rest, and not simply as the spaces between notes. In each of the pieces I performed, silence took on a different shape, a different role, a different meaning, and a different position, and hence elicited a different approach, a different way of playing, a different ethic, and a different way of communicating to the audience.

The silence examples illustrate a **“heterogenizing” of silence** in and through music-making. As such, they may open new ideas, vocabulary, and gestures that, together, can add to this Noisy Archive: an archive *of* silences, *for* silences, found *through* silences. The archive reveals that each musical performance of silence gives rise to a distinct interplay of diverse elements, including markers, notations, framing techniques, and performative strategies. In some instances, only a single marker may manifest, or a dominant marker may prevail, while in other examples, a dynamic interplay of multiple markers influences the performance and/or the audience’s perceptions. The variances in silences in the musical examples can be attributed to a number of factors. These include the acoustic properties of the performance space, the choice of instruments, the guidance provided within a musical score, the autonomy exercised by the performer, the responsive behavior of the audience, and the role assigned to silences within a specific musical piece.

Silence is not a singular, homogeneous entity. Instead, **silences exhibit substantial diversity**, as was demonstrated through comparative examinations of 4’33” and opus 111. Furthermore, the contextual aspects of silence, which are influenced by both non-sounding and sounding elements, especially markers, highlight silence’s complex and often visual nature. My own research only begins to touch on the expressive possibilities of this diversity. Moreover, musicians are constantly inventing new modes of performed silence. The archive will get noisier, more alive, and perhaps more flexible as it opens up to further silences.

By working with many composers (in teaching and through the archive), I have influenced the amount and kind of repertoire related to silence by encouraging new possibilities. This can originate through my piano practice as a concert performer or through my teaching practice, encouraging students to experiment. I plan to continue creating **new works around silence**. (Some student examples and a commissioned example are discussed below.)

From Cage, I learned about intricate layers of embodiment, silence, gesture, and listening. Watching and listening to the YouTube performances of *4'33"* underscored how silence can be embodied through the performer's gestures. Gestures, whether they be the poised stillness of a pianist or the deliberate turning of a page, served as visual cues to communicate the character of silence. I realized that my earlier interpretations, based on Cage's ideas, were not effectively communicating to the audience. This embodied silence is a performative act that shapes the listener's perception, creating a reflective space for listening that magnifies the music's expressive potential. My attempts to encourage active listening from the audience were not always successful, but experimentation on radio and in hospitals removed the artwork from its foundation and transformed it into a shared experience of attention and awareness. I began to "play" with the artwork more, deliberately destabilizing performance expectations to create more unexpected outcomes. By incorporating the lessons I learned from YouTube, I moved the foundation of the artwork again. By no longer focusing on "success," "tradition," or the "classical frame" in which the piece is anchored, I could make the artwork more playful and more responsive to the audience.

From Beethoven, I learned that silence can be descriptive when it punctuates musical phrases, creating a canvas upon which the music's emotional and thematic textures are accentuated. It invites a reflective pause, enabling both performer and listener to inhabit the space between notes, thereby magnifying the work's expressive capacity. Illustratively, silence guides the listener's journey through the piece and highlights certain structural and emotive contrasts within the composition. Silence becomes a critical narrative tool that performers leverage to convey complexity, tension, resolution, and the inexpressible.

From Antheil, I learned that silence stands out as a radical and abstract structural component framed by various visual and physical markers that enhance its impact. Mechanical instruments and the sounds of airplane propellers, bells, and sirens serve as theatrical markers; their abrupt cessation of sound leaves a lingering black noise that intensifies the ensuing silences. In the Zürich performances, choreographic elements further embody these silences, with frenetic gestures shaping the audience's perception. I learned to what extent these silences are used: not as interludes but as deliberate, structural voids that highlight Antheil's strategy of using silence to disrupt and disconnect, creating a radical quiet amidst the chaotic noise. This transforms the "absence" of sound into a dynamic presence, a "noisy silence," amplifying the preceding and following sonic chaos. Antheil's integration of silence thus redefines it as a profound disruptor and an avant-garde structural element within the musical narrative. This experience, and the

study of it, profoundly changed my knowledge of silence and increased my silence-performing skills.

How to Use Markers in Practice: A Guide to Performing Silences

From the Noisy Archive and the three case studies, I conclude that markers for silence are a multifaceted and complex phenomenon, integrating audible, notational, and visual elements that significantly shape the audience's experience and interpretation.

The archive especially illustrates how heterogeneous, contingent and interconnected markers are and shows the potential artistic choices that they offer to the performer for communicating silences. A few main themes can be used very practically by performers:

- Dramatic gestures can summon, signal, or prepare silences. The performer's choice of gesture, such as fingers hovering precisely above the keys or a head thrown back in a magisterial posture, provides visual cues that shape the silence, making it eloquent and communicating emotions to the audience.
- These gestures can intertwine with the architecture of the performance space, where the design of the hall, lighting, ambient noise levels, or the layout of the stage can emphasize or summon silences.
- Amplification, traditionally used to project sound, paradoxically can serve as a marker when turned off, leaving a resonant void.
- The contorted face of a performer in anticipation or a paused immobility can describe silence. The experience of silence can be informed by the performer's deliberate poise and slow or motionless posture, ingredients that might describe breaks in the musical narrative.
- Audience (mis)understanding can add to the landscape of silence in performance, depending on awareness of the notated silences or the story behind the artwork.
- Sometimes, dramatic historical events can have an effect on silence perceptions and affect the performer/performance, such as the fall of the Soviet Union or the lockdowns of the pandemic. Events like these can force the performer to confront unexpected audience reactions or react to unfamiliar contexts. See for example how artists like Sis Leyin adapted *4'33"* to a lockdown situation by embracing social media as a performance tool; or see my broadcast in Moscow (Chapter 4), during which exterior contextual markers completely overshadowed my own performed markers.
- Audience behavior itself can become a marker. When they yell instructional commands or refuse to applaud they can collectively reshape the performance. In these situations, the performer must make reactive decisions on how to behave (see my Checklist in Chapter 4).
- The performer's unsuccessful efforts can serve as inadvertent markers of silence, where moments of hesitation or technical failure draw attention to the absence of sound.
- Silence might also be delineated by external actors like traffic sounds or a ticking clock, elements that frame the silence audibly, temporally, and spatially. In outdoor performances, natural elements, from birds to rocks to weather, can also create markers evoking silence.

Many of these markers offer options for performing silence and making it eloquent. Whether they summon, describe, or impose silence, these multifaceted markers afford performers a rich palette of artistic choices to communicate and enhance the silences within their music, transforming them into expressive, dynamic elements of the performance.

How My Performing Practice Has Changed

► EXPLANATORY VIDEO: <https://www.researchcatalogue.net/view/1712958/2936417#tool-2936775>

By embracing the audible, visual, and gestural aspects of silence, my performance has evolved to incorporate a broader range of expressive tools, enabling me to convey the music's narrative depth more strongly. I began the project because I felt that there was such a lack of understanding about the role of silence in the field and that it needed attention. It is not so much how my performing has changed as how my attitudes and approach have changed. I suspected the importance of silence but did not foresee the importance of gestures. I saw many visible silences but did not realize the impact until studying them. As a performer, I became more aware of my fictional body and persona onstage, especially by copying other performers.

This dissertation has given me the language to explain what I assumed was behind and around the silences. Now, I am extremely aware of when I am creating a connection or a disconnection in performance. Now, I think through every silence I play in terms of its not/knot potential. New questions evolved that I did not ask myself before: what is being connected, what is being separated, and how should silence function on this sliding scale of connectivity?

Reflecting (both in thinking and playing) on other performances has proved rewarding. In Beethoven, tradition and ritual affect the performance of silence considerably, yet I discovered remarkable freedoms of movement and interpretation. Tradition and ritual also played a major role in performed silence in videos of Cage's *4'33"*, and my analyses of these embodiments led to new understandings of silence, which informed my own performance. In examining these performed renderings of silence, an intriguing dichotomy emerges: the ostensibly constrictive tradition around Beethoven's compositions catalyzes a plethora of creative, balletic, interpretative embodiments of narrative silence. Conversely, the supposedly liberating role of Cage's musical philosophy seems to find its strongest expression within structured, formal representations of

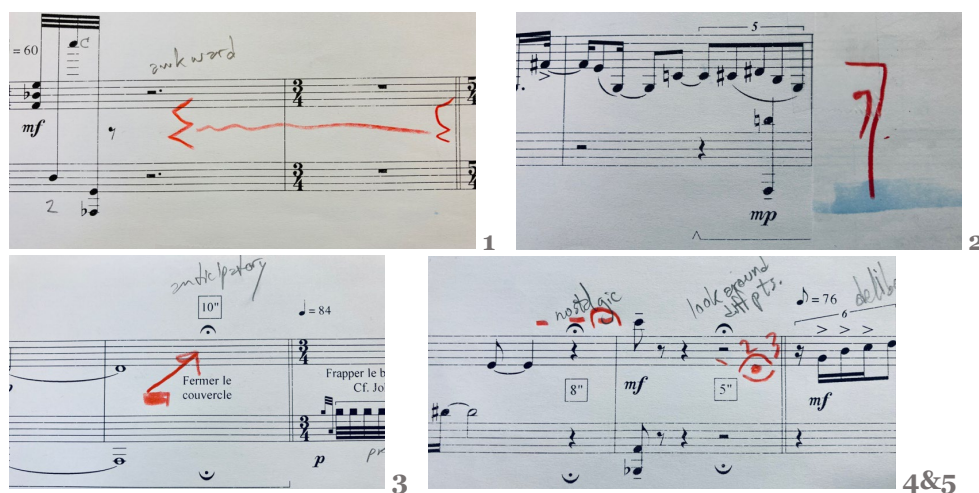
stillness in which attitudes and gestures are codified and formalized. This contradictory result underscores the multifaceted nature of silence in musical performance, challenging performers to navigate the interplay between the (supposedly) prescriptive notational directives of classical composers and the conceptual freedoms afforded by Cage.

In order to experiment directly with new kinds of performed silence, I asked the Lyonnais experimental composer Jean-Charles François to write me a new piece. François created a composition that consists of fragments in alternating musical styles separated by silences. The work is deliberately conceived to highlight the possibilities of silence. The musical fragments are meant to recall the practice sessions of students of “Aunt” Phoebe, John Cage’s earliest piano teacher.

▶ FRANÇOIS EXPLANATORY VIDEO: <https://www.researchcatalogue.net/view/1712958/2936417#tool-2936756>

The process of learning this artwork was difficult. At first, I had no plan to illustrate the silences through gestures, but after a few test performances, I began to do so. I chose embodiments for each big silence and performed them as theatrically as possible. These silent exaggerations were drawn from the Beethoven case studies. The current result (see video) is more experimental than finished, more contingent than conclusive.

Here are examples from my performance score, showing some experimental silence notations in red pencil.



1. The first notation is for an *awkward* silence, which is quite easy to recognize but difficult to communicate in performance. Planning or projecting an awkward silence (*shin* in Japanese; see Chapter 1) is somewhat self-defeating without a second person to share the awkwardness with.

2. The second red rest is a *surprising* silence, which is prepared by the notes that precede it and draws from Richter's opus 111 performance, in which he rips his hands off the keyboard like a reverse boxer. This gesture works so well for me that I also incorporated it into my Antheil performances.
3. The *anticipatory* silence of the second line is self-explanatory, though it might counter the composer's indication to close the fallboard over the keys. While embodying anticipation, I also must complete a conclusive gesture: closing something as if ending the performance. And I chose to do that silently, making sure not to bang the cover as it descended.
4. The next silence is *nostalgic* and inspired by Chopin's yearning silences (see Nocturne in the Noisy Archive). I was trained at the conservatory to perform this type of silence with a soulful look in my eyes or at least a downcast head. One might alternatively look off into the abstract distance, miles beyond the end of the piano, as in Trifonov's performance.
5. The last rest seeks to counteract classical conventions of performed silence. This is a rest in which I *look around*. The red symbol indicates to me that I must look consecutively at three different points in the room, from left to right, in sequence. The audience perceives immediately that I look around, and then they also look, trying to follow the logic, examining the space around the performance. This particularly experimental notation is *not* meant to communicate something. Rather, this is an abstract and performative silence—inspired by the Sis Leyin performance in Chapter 4.

By shuffling the gestures around, I was soon able to create an entirely new interpretation of the piece, in which the silences came to the foreground. The piece does not specifically call for gestural silence. However, the gestured version is more performatively successful and communicative to the receiver. Indeed, some audience members said without irony that they had enjoyed the silences more than the notes. Like many experimentations, it did not lead to final or conclusive results. But it opened new doors to performing silences at the piano, especially suggesting that 1) anything can be a marker for silence, 2) even very subtle gestures can be effective, and 3) gestures play a large role in whether the silences seem connective or disconnective. All these subtleties will be explored further in my practice as I continue to work with composers on new works for understanding silence.

How My Teaching Practice Has Changed

During my five years compiling an archive for silence, I developed and taught new courses on silence for musicians and for architects.⁵⁵ As part of the process, I often presented my ongoing research to the students for feedback. The classes I taught became laboratories

⁵⁵ The examples mentioned here are drawn from a singer-songwriters course on silence in musical composition, which I team-taught with Ned McGowan in the Musician 3.0 program of the Utrecht Conservatory (HKU) in 2021; and an architecture Master's studio on creating spaces of silence, which I taught in The Hague at The Royal Academy of Art (KABK) with Michou Nanon de Bruijn in 2022.

for experimentation with the dimensions of silence. They are also promising results of my research because they illustrate how a new generation of composers and artists could use the vocabulary I suggest to create original experiences of silence.

Prior to this dissertation, my teaching practice focused on contemporary performance techniques and composition. I had never taught a class on sound or silence. Updating my teaching interests also encouraged me to update my teaching skills. I created toolkits for silence and for sound. These toolkits consisted of mind maps of dimensions, affects, functions, and motivations for silence, categorized by the students themselves into areas of interest. These informal and constantly changing toolkits were of great help in guiding my students through questions of tangibility, the sound object, the ineffable, hearing, listening, absence, presence, anticipation, resonance... and onwards.



Figure 80: images from brainstorming sessions on silence with interior architecture students (INSIDE, KABK, 2022)

I tried to guide students in isolating separate components of silence and understanding the complexity and interrelations of those components. The students brought their ideas and criticality, offering new directions and perspectives to add to my research, as well as completely new functionalities for and implementations of silence.

The following example is particularly compelling because the student engaged with the multidimensionality of silence (as mentioned in Chapter 2) to create new knowledge, not by duplicating my ideas but by challenging common preconceptions about hearing/perceiving silence in a vacuum.



Figure 81: preparing the vacuum machine for *untitled* by Mees van der Smagt, scored for piano four-hands, vacuum bell jar, coke can, motorized music box, and punched tape (HKU, December 17, 2020)

► VAN DER SMAGT VIDEO: <https://www.researchcatalogue.net/view/1712958/2936417#tool-2939423>

Having been told (by me) that we cannot experience silence in a vacuum, this composition student set out to prove me wrong. Here is his scenario: the lights go up in a darkened room, and a blanket is pulled away to reveal an inverted glass bell. Inside the glass bell is a mini robot that turns a music box. The music box uses a long roll of punched paper that is curled around a metal can and gradually rotates in a sort of clumsy way, making music steadily. Two pianists sit at a grand piano, stage-left of the vacuum table and its operator. They begin playing a sort of lullaby, which becomes a moving duet between wonky machine and piano. The contrast is heightened by the loud noise of the vacuum, which is switched off once the air is evacuated from the bell. Of course, by then, we cannot hear the sound from the music box anymore because without air to transmit the waves, we only hear “silence” (or, in this case, we hear different levels of quiet sounds: the room tone, the hum of amplifiers, the sound of the two pianists still performing).



Figure 82: revealing the vacuum machine

Littlefield’s examination of the framing elements that begin the musical work is given repeated substance in this example, as the composition seems to begin several times: at the vacuum installation, at the piano, and inside the jar.

There was a temporal and gestural symmetry to the performance—a rising tension as the air pressure decreased and then a lowering of tension as the air returned to the jar. This mix of the visible and the

audible created sensorial confusion and conflation, as if the inaudible was made audible and the invisible was made tangible.

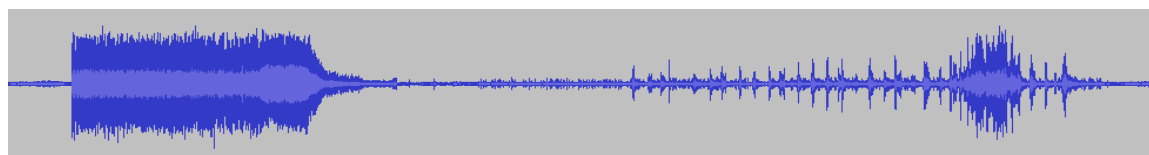
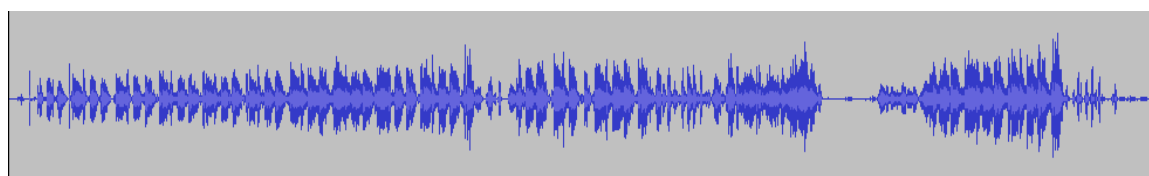


Figure 83: waveform of the performance

The composition and scenography were highly innovative: The machine seemed to have a life of its own, transmogrifying into a non-human embodiment of silencing, barely surviving a sort of asphyxiation, an apparent strangulation of the music box. And seeing the machine cranking away with no sound was impressive—our eyes and ears were transfixed. The composition successfully proved that audiences *can* experience the silence of a vacuum and that this particular silence can be personified and expressed in very understandable terms at a human scale.

The performances that originated in this class showed a great diversity of approaches to silence. Singer/songwriter Finja Verhoef, for example, wrote a layered composition that repeated loops of her voice over a light background of sometimes overlapping electric guitar chords. The main text, endlessly repeated, is: “*een dag, niet mijzelf, wil ik wel....what the hell.*” Verhoef explains that her text tells first of a struggle with insecurities and then of waking up one morning feeling more positive. What is fascinating to me is her use of stutter, delay, and other glitches. The silences seem to arise naturally from these glitches. That is her innovation: silences that are born from something else, from the glitches of Zoom and Facetime. The endless repetition, familiar from lockdowns, and the “what-the-hell” attitude also reflect pandemic anxiety. Her voice is closely-miked, and her breathing (as an expression of silence) increases the sensation of intimacy and vulnerability.



► VERHOEF AUDIO LINK: <https://www.researchcatalogue.net/view/1712958/2936417#tool-2936746>

These examples of experimentation, available on the [Research Catalogue](#), show the potential of my updated approach (listening, brainstorming, toolkit creation) to interest emerging artists and songwriters in innovative uses of silence. The enthusiastic responses from the students seem to represent a general increased interest in silence. Students have approached me in the last years with projects that evoke silence through meditation, shamanic practices, repetition, political censorship, conversational or social situations, and many more creative directions that I would not have anticipated but which are continually influencing my own ideas on performing and creating silence in music. The diversity of approaches and solutions amongst this generation of new artists suggests the potential of further exploring performed silence from a variety of perspectives and shows that the topic resonates with young musicians.

7.3 Ideas for Future Research

A first idea that can be further investigated is what music can suggest about the political and societal implications of silencing. The concept of silencing, which is important for my work, is too large a topic to explore fully here and would require many separate research projects. Silencing in a political or societal context includes genocide, racism, and many other horrors. These societal silencings are not musically performed, but their impact can be felt personally, locally, and globally and can be musically documented or commented upon. Indeed, the ineffability of performed silence can be used as a unique and interdisciplinary opportunity to voice the unspeakable elements of societal silencing. Or the role of music itself as a method of silencing or torture can be critically investigated.

Politicized/performed silences are important to me in my own practice, and in the Noisy Archive I give a few examples from my own pianistic experience (see my performances of the works of T.J. Anderson, Mauricio Kagel, Pamela Z). But there are many more to be studied, such as the Los Angeles queer collective UltraRed and their albums of silence which used Cage's music for political engagement. There is also research being created in international law that comments on silencing. For example, Elizabeth Schweiger's dissertation "Listening to Silence: 'Targeted Killing' and the Politics of Silence in Customary International Law" uses Cage's *Lecture on Nothing* as a framework and draws parallels between listening in diplomatic/political circles and listening in music (Schweiger, 2018). Other commonalities exist; perhaps studies of performing musical silences can also influence the understanding of political and societal silences.

A second idea that can be developed in future research can depart from the question of what the possibilities are for new silence notations. An important area for future research is the creation of new symbols for silence, which could become a silence alphabet useful to composers and performers alike. Such a potential alphabet would contain new symbols for silence beyond common musical rests and could encode some of the multiple dimensions of silence that are missing from standard western music notation. Is it possible to create a series of notations for silence that are open enough to offer composers new paths but specific and practical enough that performers will find them useful? Admittedly, the very idea of an alphabet offers challenges (such as an implied hierarchy) that would have to be addressed. Musicologist John Potter offers a caveat about such an alphabet:

In theory, it should be possible to propose a taxonomy of rests. While this has a certain academic appeal and might also resonate with a composerly control of the music, reducing such powerful communicative devices to simple functions would be to deny the ambiguities involved in the creative performer's role of storyteller. (Potter in Brooks et al., 2017, p. 168)

I believe Potter's hierarchical concern is but one of many possible outcomes. The academic appeal and the composerly control he refers to can lead to compositions like Boulez's third piano sonata, in which every note seems over-notated, and every event is circumscribed by rules, accents, and extra markings. Boulez's hyper-difficult sonata is an extreme example of composerly control and one I do not want to overly promote, for it removes some freedoms from the performer. Nonetheless, the result for the pianist is rewarding, as I know from personal experience. With time and extensive practice of this sonata, new freedoms arise for the interpreter; new sounds are experienced, and new effects are achieved.

A more influential and more accessible example can be found in composer and pianist Henry Cowell's extensive attempts to update musical notation in his book *New Musical Resources* (Cowell, 1930). Prior to this work, no reliable notation existed for playing clusters of notes on the piano. Cowell championed a simplified new notation for clusters—designating the white keys, the black keys, or both; and playing with the fist, the hand, the forearm, or the whole arm. Cowell's instructions were widely adopted by publishers and, eventually, other composers. As a pianist himself, he had tested all the cluster techniques in the bombastic piano miniature *Tides of Manaunaun* (1912), so pianists and publishers appreciated the tried-and-true practicality of these new notations.⁵⁶ The shift in attention

⁵⁶ Other proposed notations in the same book (for polyrhythms, new note-shapes, etc.) were more complex and did not have the same impact.

that resulted from a precise notation of the physical engagement with clusters freed the pianist for other tasks. In this situation, encoding a complex and multidimensional phenomenon in accessible notation was worthwhile and unlocked new compositional and performative potential. Like all historical developments in music notation, new symbols will be adapted, updated, and gradually repurposed by performers, thereby creating new performance practices.

The discovery of communicative functions and the understanding of ambiguities afforded by practical, performer-tested new symbols for silence would benefit performers and composers alike. I see this as a promising future project that could begin with the highly heterogeneous silences in the Noisy Archive.



Figure 84: As I explored and performed silences over the last few years, I was constantly jotting down notations for new kinds of musical silences as well as new notations for existing silences.

A third new research project could start from the question of how silence can be experienced in non-neuro-typical situations. Silence experiences for non-neurotypical and differently-abled persons deserve further consideration. Many researchers have attempted to understand Beethoven's deafness and its implications for his music, as well as for the audience's understanding of it. How do deaf persons experience performed silence, and how do blind persons experience the visual markers I have presented here? My research suggests that musical narratives can be partly communicated through visible gestures, a finding which may also be relevant in some cases for communicating sounding music to deaf persons.

In an example from fiction, Jennifer Egan wrote a story within a story in her novel *The Goon Squad*. Chapter 12, narrated as a series of PowerPoint slides, documents the work of a child on the autism spectrum who obsessively analyzes the silences in rock songs (Egan, 2010, p. 242). The author describes this silence inspiration as “pause power,” and it becomes a means of communication for the child.

In an example from performance art, Deaf artist and activist Christine Sun Kim has transposed Max Neuhaus's famous 1970s New York City silence walk. Her version of

LISTEN is a (silence) walk along the Lower East Side neighborhood, including American Sign Language narration, and thus accessible to those with differing levels of hearing (Eppley, 2021, p. 102). Indirectly, her walk is a response to Neuhaus's own response to Cage's 4'33".

And in an example that arose from my own pedagogical practice, one of my students at HKU created an artwork that introduced his audio world to the rest of the class.

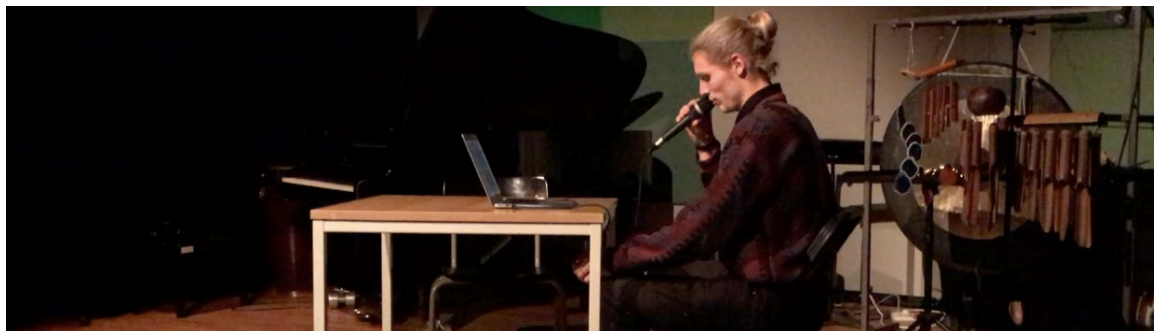


Figure 85: Stach Platenkamp performing *untitled* for voice and electronics (HKU, Utrecht, December 17, 2020)

Platenkamp's composition reflected his daily experience with tinnitus. The music featured a complex layering of found audio, everyday sounds, beats, and the bells of the Utrecht Cathedral. It was a gripping performance that was just at the limits of being painfully loud, offering a remarkable insight into his musical habitus and new understandings of silence and listening, the shared and the personal.



► PLATENKAMP AUDIO: <https://www.researchcatalogue.net/view/1712958/2936785#tool-2936823>

7.4 Coda

Through the lens of embodied silence, this research has demonstrated the importance and complexity of markers for performed silence. That the visual markers for performed silence often speak louder than the auditory components does not negate the importance of the audible. In many situations, sounds are the only way the audience knows that “silence” is happening. The silence gestures of performers, their physical presence and movements, and the deliberate and inadvertent sounds onstage do not merely accompany silences but become a critical text in themselves, recounting stories of pause, anticipation, memory, and continuation that are essential to the musical narration.

I equally hope that this dissertation and its outcomes create an improved discursive and interactive understanding of performed silence. By explicating on and through silence, I move between and around intangibility, absence, breath, pause, and gesture, between the *not* and the *knot*, thus finding new ways—often through my own instrument—of picturing silence.

Linking white spaces (*les blancs*) and structure in relation to his own poem “Musicienne de Silence,” the French poet Stéphane Mallarmé “evokes a singular silence, which is not the opposite of music, its negation, nor its absence, but which plays the same role as white space on the sheet of paper” (Margel, 2018, p. 30). Mallarmé himself advanced this argument in a letter to Charles Morice in 1892:

*L’armature intellectuelle du poème se
dissimule et tient—a lieu—dans l’espace qui
isole les strophes et parmi le blanc du papier :
significatif silence qu’il n’est pas moins beau
de composer, que les vers.*

The intellectual armature of the poem hides
and holds—takes place—in the space which
isolates the strophes and amongst the white
of the paper: significant silence which is not
less beautiful to compose, than verse.

(Mallarmé, 2003, p. 659)

Despite the intervening years and the disparities between composing text and performing music, I suggest that Mallarmé’s evocation can hold for contemporary sound experience and that it coincides with many of my conclusions. He feels the visible space around the strophes and the whiteness of the paper to be as beautiful as the audible/inaudible text. Moreover, the white space is not ornament nor decoration; it is the intellectual framework (*armature intellectuelle*) around which the poem forms. Mallarmé’s term “*significatif silence*” corresponds well to my concept of eloquent silence. The markers of the silence are signifying, signing the communication of the silence, and pre-echoing Barthes.

I have focused in this research on captions/markers which reveal the dimensions of silences. But silence remains *slippery* (Bataille), *ineffable* (Jankélévitch), and *indeterminate* (Busoni). In the wake of all these examples, there are still so many approaches, and so many models to choose from. Silence can be regarded as the *canvas* on which musical notes become audible. Littlefield focusses on the *frame* that silence forms around the music. But for Cage, the canvas of silence *becomes/is already* music. Jankélévitch mostly considers silences as untouchable, ungraspable. As a kind of implicit response, I often approach silences as *thingy* (Voegelin), *multidimensional* (Margulis), and *tangible*. In yet other examples, silences arise from music, as something apart or spiritual, which may be felt as *behind* (Picard) or *beneath* (Merleau-Ponty) the music. Cobussen describes Pärt's music as orbiting *around* a silence that it can never reach. There is no one model of silence that can match all the examples presented here.

From the viewpoint of my own artistic practice, Barthes's model, though perhaps imperfect, supports my suggestion of markers for silence and seems to describe many of the silences I have performed. More poetically, the "significant silences" of Mallarmé map onto the artistic research I undertook in this study. Mallarmé's evocation of white space, his interest in the hidden and the revealed, and his recognition of silences as an embodiment of structure, as both glue and isolation, as both *hiding* and *holding*, as *knot* and *not*, illustrate the audible and visible knowledge(s) revealed by the musician through silence.