HARD BOILED WONDERLAND

A QUEST INTO THE RABBIT HOLES OF SOUND DESIGN FOR LIVE PERFORMANCES



Master Thesis in Sound Design

Joel Gilardini / +41 79 731 12 24

Mentorship – Vivian Wang

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hdk
Zürcher Hochschule der Künste
Zurich University of the Arts

ABSTRACT

What is the meaning of sound design in a live performance, and can it play a central, engaging role in contemporary theatre and dance? In challenging its frequent relegation to a secondary or supporting role, this thesis investigates how sound can transform narrative, aesthetic, and spatial perception. Could this enhancement foster deeper interaction between performers and audiences?

In this thesis, I present a historical overview that traces the evolution of sound design starting with early theatrical sound operators and radio drama to musique concrète, experimental theatre, and the emergence of digital tools, to highlight the ongoing expansion of sonic practices and their development in live performance.

The study combines this contextual analysis with practice-based inquiry, reflecting on the author's artistic progression. Selected projects before and during the MA Sound Design program at ZHdK are therefore analysed. The final case study, *Hard Boiled Wonderland* (2025), created in collaboration with choreographer Dong Manning, exemplifies sound's potential as both dramaturgical and performative force. Built entirely from recordings of trash and scrap materials, the project employs live performance techniques and collaborative processes to shape choreography, scenography, and audience experience. Sound becomes an interactive presence. It guides movement, intensifies atmosphere, and enables a real-time dialogue between dancers and sonic space.

The reported findings demonstrate how sound designers can operate as an equitable partner and co-creator. The thesis emphasises rethinking sound design as a creative pillar of live performance. Sound has the capacity to redefine collaborative processes and open new channels for interactive performance workflows.

Table of Content

1.		Intro	oduction	5
	1.1.	A	pproach to sound: methods, craftsmanship and philosophy	5
	1.2.	P	ersonal aesthetics: improvisation, found sounds and guitar pedals	5
	1.3.	G	oals and objectives: approach and development to the thesis	7
2.		Past	experiences: own perspectives on sound design for performances	9
	2.1.	In	itro and background	9
	2.2.	E	xample 1: House of Pain and Feeding Crocodiles - First steps into performance	11
	2.3.	E	xample 2: Wäre das Wetter nicht umgeschlagen - The voice is a storm	13
	2.4.		xample 2: Der Spieler - The stage is a spinning roulette	
			inal thoughts	
	2.5.			
3.			a sound designer's rabbit hole	
	3.1.	T	he evolution of sound in live performance practices	
	3.	1.1.	Sound-stage operators	22
	3.1.2.		Theatrophone	23
	3.	1.3.	Radio drama, Brecht and Artaud	24
	3.	1.4.	Musique Concrète	26
	3.	1.5.	Beckett and the acoustic stage	27
	3.	1.6.	BBC Radiophonic Workshop	28
	3.	1.7.	Influence of John Cage and Fluxus	29
	3.	1.8.	1980s to now: MIDI samplers and immersive performances	30
	3.2.	T	he light at the end of the rabbit hole?	31
4.		Har	d Boiled Wonderland	33
	4.1.	С	ollapsing buildings and rising ideas: the sounds of trash & scrap	33
	4.2.	M	lanning's proposal and first steps into the collaboration process	34
	4.3.	C	reative approach to composition and sonic design	35
	4.4.	R	ehearsal phase	37
	4.5.	Li	ve performance	38
	4.6.	D	ancer's feedback	40

5.	Conclusion	12
6.	Bibliography4	13
7.	List of Illustrations	16
8.	Appendix: Dancers' opinions	! 7
8.1.	Manning Dong4	! 7
8.2.	Marta Allocco4	19
8.3.	Vanessa Spörri	50
8.4.	Lucio Volcov	51
8.5.	Simon Thoeni	i3

1. Introduction

1.1. Approach to sound: methods, craftsmanship and philosophy

I always saw myself as a self-taught musician (boldly forgetting that many moons ago, I had indeed taken some years of classical and electric guitar training). Curiosity and the eagerness to push myself outside the boundaries of what "a guitar player has to be" shaped my attitude toward music and sound. I have always walked on parallel paths, working on different and sometimes totally opposite projects. For example, I enjoy playing both ambient and noise music, or creating pure harmony against total chaos. I have this constant urge to experience and experiment in different contexts; to find out various ways I may use guitars and other music devices and gain knowledge in sound manipulation. When around 2002, I moved to Zurich, the exposure to squats (occupied houses), underground and DIY-culture further opened my mind to new territories and sonic possibilities, which pushed my will to think outside the box even more.

Due to the way I approach creative work and my DIY skills, I have always felt a certain physical approach to how I shape music and sounds, a craftmanship driven by curiosity, the inner child in me who frequently asks himself "what happens if?", followed by an instant action. Time goes by and aside from the label of guitar player (often spiced up as "experimental guitarist"), I became aware of the term Sound Design. The term resonated with me as I felt it fit exactly with what I was in pursuit of.

Another important driving force is an attraction towards collaborative projects. As an artist, it's very important to share, exchange and engage with other people. It opens the mind to new ways of thinking and interacting, pushes one's own creativity (often into uncomfortable zones) and gives a certain degree of gratification when a project comes to an end or a premiere takes place, and when it's finally shared with the world and an audience. This has been a very important part of my studies at ZHdK too. I always took advantage of every opportunity I was given to work with collectives and new people, and this has helped to expand my knowledge and craftmanship. I got involved in projects touching almost all realms a sound designer could possibly work within (theatre, movies, video games, dance, and so on).

1.2. Personal aesthetics: improvisation, found sounds and guitar pedals

I have always had a very musical approach to sound design. Since my roots as a sound designer are to be found in playing guitar, when I started to use effect pedals very early on. I understood these devices to be simple but effective tools that could modify and enhance the sounds I could produce. Then in opening Pandora's box of DIY electronics (having a background in mechanical engineering made it very easy to access more of this kind of wizardry), I was then able to build my own devices as well as modify existing pedals, so that their morphing capabilities were further enhanced and fine-tuned to my liking and needs, which often meant, pushing their capacities way over the standard

factory limits. This evolved to such a degree that at some point I considered the guitar as a sound generator, much like a synthesizer's VCO (voltage-controlled oscillator), something that could be seasoned and spiced with a chain of pedals.



Figure 1 Guitar and selected pedals in my studio

Over the years, the desire to experiment grew and it felt quite natural to start using electronic devices, noise makers and synthesizers too. These had such an impact, as sometimes, I would try to recreate and replicate synthesizer sounds by merely using guitar and pedals.

The introduction of field recordings and sampling into my workflow was yet another step toward sound design. I started to collect sounds from nature and human made found objects. Whenever I take an object in my hands, I love to shake it, hit it, and pluck it to listen to its hidden sounds. This practice has opened a new universe of sonic possibilities. By using these sounds inside a sampling groove box (I use an Elektron Digitakt), I can generate sounds and "instruments" that have their own aura and character, while still retaining an organicity or rawness intrinsic to the original found object. Since years now, this is a praxis that I pursue whenever the possibility presents itself. For example, in Autumn 2022, at the beginning of my course in MA Sound Design, while working on a documentary film project, I created sounds and music based solely on field recordings I collected in the mountains around Kandersteg BE (Sound Example 1 & 2).

SOUND EXAMPLE 1: Kandersteg Drones Take Nr.4

https://soundcloud.com/jgilardini-music/stereo_kander_drones_4_passing

SOUND EXAMPLE 2: Kandersteg Drones Take Nr.20

https://soundcloud.com/jgilardini-music/stereo_kander_drones_20_gps_st

These are sounds that afterwards get implemented in my daily routine, so the potential of doing this regularly allows for a continuous evolution of one's sound vocabulary and experimentation with sound design techniques.

Another influential factor on my approach to sound design is the use of improvisation and instant composition techniques. This aspect proved to be quite important and evolved while taking part in countless jam sessions. I learned to be present in the moment and open to react to whatever is thrown at me. As a sound designer, this disposition can be essential. It hones faster problem-solving skills and allows for more effective interaction with new partners. Furthermore, being used to working in parallel on different projects, I can easily switch from one to the other.

1.3. Goals and objectives: approach and development to the thesis

When first dealing with this thesis, I initially struggled to understand what directions I could take. Being a hands-on musician and someone who likes to craft sounds, I must admit that I never really took time to stop and think, much less try to analyse, write down my thoughts and contemplate the more philosophical matters concerning my musical attitudes and choices. I have now taken this opportunity to review and analyse a selection of my own works, based on my experiences as a sound designer for live performance in the fields of theatre and dance, while considering the pivotal points of my studies in the MA Sound Design degree at ZHdK.

I would like to address certain important and exciting questions that surfaced while carrying out this investigation. Sound Design is often considered a secondary, supporting element in various arts disciplines and commercial work, such as dance, theatre, even film. I am keen to delve deeper and assess the artistic potential and functions of sound design. By looking closely at the historical evolution of sound design and its role in different media as well as the expansion of sound in experimental and performative contexts, I investigate some key questions. Can sound design become a key, integral player in performative contexts? How can it enhance and transform the perception of narrative, aesthetic and spatial elements?

Based on this query, what are the possibilities for deeper engagement and interaction with audience as well as between performers?

When examining my creative output, how do these questions reflect and resonate? How did I act before entering ZHdK and what has happened after this pivotal point? What changed, and how did I implement and develop new methods in my creative output? How will these collected experiences and analyses be filtered and considered in my final master project and my development as a sound designer?

This thesis is also a wonderful opportunity to consider some of the diverse research and sound practices beyond my own horizon and discover what else is going on in the realm of sound design for performance. I am eager to find out more about developments and new paths available to sound designers in similar contexts. Am I able to draw inspiration and new ideas from the works of others?

Finally, I will analyse in detail the routes and decisions I've taken with respect to the dance-performance project *Hard Boiled Wonderland* (2025) by choreographer Dong Manning. I outline and reflect on several aspects of this project, starting from the first embryonal idea to use only a certain type of sound, my encounter with Manning and the dancers, and how we developed the project together. I aim to assess the impact these critical perspectives have had on the development for my MA final project.

2. Past experiences: own perspectives on sound design for performances

2.1. Intro and background

In the realm of sound making, my journey started as a musician and live performance has always been an essential aspect. Since 2012, I have a residency gig every Monday in Zurich's Exil Club, where I perform live improvised ambient guitar sets before and after the evening's main act. While this is not directly related to my role as a sound designer, I find this experience important. It has given me a platform to learn how sound can influence a room, and vice versa. The effect happens at a subconscious level. It's there and you can feel there's a reaction happening. It influences the mood of an audience or also the music performer, creating a sort of feedback loop that can be felt in the music too. While doing my research, I found similar observations expressed by Ross Brown in the paragraph "The Aesthetics of Atmosphere", whereby he underlines that:

"The word atmo-sphere (ball of vapour) [...] is also associated with the feel of place. [...] We talk of the mood of a place, but environments do not have moods, people do. People somehow project mood into an environment."

The subjective interaction between performer and audience is what makes a performance space come alive, giving it a distinct character. This in turn, influences how we perceive space and sound.

There are several factors which affect how we as humans, experience sound in a space or in certain aspects of everyday encounters. Victoria Deiorio writes that "human beings are naturally inclined to ritual and repetition". I have an interest in how music plays a part in ritualistic practices, particularly in different cultures around the world. I am fascinated by Buddhist mantric traditions and the repeating sounds and aura of instruments used in Tibetan rituals have always held a strong appeal to my ear. Ritual music transports me to another state of mind.

Years ago, on a small Greek island on an early Sunday morning, I happened upon a small orthodox church by chance. I was enchanted by the voices of priests coming out of the church's door. The sonic resonance was mesmerising. All this while, the world outside seemed to continue on its own rhythm. This listening experience was also amplified by the fact that I was in an unfamiliar environment (Sound Example 3).

→ SOUND EXAMPLE 3: Field recording Orthodox Greek Church, October 2015

https://soundcloud.com/jgilardini-music/orthodox_ritual_greece_2015

These may be single examples based on my own experiences. However, if we consider them all together, an important deduction about sound can be drawn. Sound is an element that strongly influences how we experience and connect with different cultures, space and rituals, all in the realm

¹ Brown, Ross. Sound: A Reader in Theatre Practice, p.143

² Deiorio, Victoria, *The Art of Theatrical Sound Design*, p. 11

our daily lives. It is not merely a medium, it is a carrier of memory for the experience of culture, society, space and self-discovery.

Sound is always present, an element we can't really shut off. If we consider sub-bass frequencies (from 60Hz and below) and all that's below the human hearing range, we know that this can physically be felt as vibration in our body and flesh. About these phenomena, Brandon Labelle states that "the movements of sound, as an immersive acoustic, also exist below the line of audibility, in the shape of vibrations. Sound and vibration are intimately linked [...] as frictions and tactile feeling. [...] Vibration is then a primary base of sound, a fundamental material event perpetuating the movement of sounds and extending, as an elaborate network, the connective elemental force of auditory events.³

Sound is therefore an important sensorial aspect in life, and a significant means to exchange and acquire information about our surroundings.

The first instance where I could confidently call myself as a sound designer was for a theatre play I did with a Zurich theatre company in 2015 called *Gloria*, a drama about two young scientists, their present life and their wounds from past experiences. The staging and props were very minimalistic: black background and stage, a pair of chairs and a tiny table. For this reason, lighting and sound were crucial elements in creating the setting and mood of each scene. As a sound designer facing my first theatre project, my main role was to play live music and trigger cued sound effects but there were also some opportunities to experiment and create simple (but effective) sound scenography to support certain scenes, such as looping the actors' voices to create an ascending chaotic climax (Sound Example 4), or a slowly evolving ambient piece to recreate the feel of a mad science laboratory. In retrospect, without any precise knowledge of sound design tools and workflows, I was able to enhance the content of the story. Sound became a tangible element and created a new dimension, previously not available on that black stage.

SOUND EXAMPLE 4: *Gloria*'s voice climax

https://soundcloud.com/jgilardini-music/gloria_voice_loops

This experience delivered some interesting results. From this point on, I was keen to continue pursuing sound works within the field of theatre and dance performance. Besides my task as a sound designer, what has drawn me to working within this environment is the collective structure of these projects. Each crew member has their own tasks and responsibilities, and everybody works together to achieve the same result. This aspect of teamwork is a significant element and deepened the personal push to pursue this path.

One of the biggest challenges is how we can communicate our ideas about sound collaboratively. It is impossible to objectively discuss this topic, even among musicians and sound designers. Therefore,

³ Labelle, Brandon. *Acoustic Territories.* p.94-95

it's important to establish a way to understand each other during the initial meetings. To approach this matter, I have two methods. The first is to ask for examples, be it music, soundscapes or whatever sound materials from which inspiration could be drawn. This way, I can better understand what the producer's vision or expectations about sound could be and establish a starting point.

Although at times, I find it also very interesting to do the contrary. I might deliver a sound draft to the producer based on my own taste. This happens if the people I work with are already familiar with my aesthetic, or if I am in a rush and in urgent need of more information. This was the case when working on a short animation movie in 2025 called *OUAIS*, together with Della Miranda at HSLU (Hochschule Luzern). I completed a first draft based on my gut feeling, without asking any specific input from Della as she was totally immersed in the stop-motion animation process and couldn't find time to chat. Her response to the draft was very enlightening and allowed me quickly to understand her vision regarding the kind of sound environment she was seeking for this project, and mostly what not to do.

Of course, the best possible scenario is to develop total empathy. This transpired when I worked together with Swiss dancer and choreographer Benoît Favre in 2017. With him, I curated sound and music for three performances (*Disrupted* with Junior Zürich Ballet, *Spin of Impermanence*, and *Out of place* with Bayerisches Staatsballett). When we worked on *Disrupted*, we became so comfortable and familiar that we could predict each other's needs just by eye contact.

SOUND EXAMPLE 5: *Disrupted* Soundtrack

https://joelgilardini.bandcamp.com/album/disrupted

What is also very intriguing is the developmental nature of these projects. Unlike working on a film, where mostly, one would work on a picture-lock video (or finalised video edit), rehearsing for a live performance project means coping with changes and fine-tuning until the very end. So, flexibility and quick intuition are very welcome as working mindsets.

In the following sections, I plan to highlight and reflect on some of my past works in this specific context to give more insight into my process and methodology. The selected works are highlighted in chronological order. This will give me a chance to critically analyse the evolution of my role as a sound designer. How was sound used to enhance these projects? What kinds of interactions were created and developed?

2.2. Example 1: House of Pain and Feeding Crocodiles - First steps into performance

Working with House of Pain gave me a platform to learn how to make sound stand out in an overloaded live performance.

Based in St. Gallen, Switzerland, the creative collective was formed by Jasmin Hauck, Cecilia Wretemark and David Schwindling. As highly experienced dancers and choreographers, they were interested in the borders present between dance, theatre, conceptual art and performance. The collective took dramatic physical and aesthetic risks to transport feelings and ideas in a pure and honest way and by doing so, often pushing the limits of perception, both mentally and physically.

I first met Jasmin and Cecilia in May 2017 at the Tanzfest in St. Gallen. We were performing on the same evening at Grabenhalle and after the show, we warmly exchanged praise about each other's works. You could say it was love at first sight! I enjoyed working with Jasmin and Cecilia a lot, as every project would feature a new assemblage of creative minds and bodies. Following this exchange, in 2019 we worked together on the dance performance *Feeding Crocodiles* (2019).

We had a simple but effective workflow. As soon as Jasmin and Cecilia had a first draft, they would send me a list of scene sketches as the starting point for sound design. I would be given a brief description of each scene (2-3 sentences), some keywords describing its mood, notes about the sound and often examples of pre-existing music. Following this, I would develop the music and soundscapes for each scene. This allowed me to quickly understand what was needed in each scene. Of course, the rehearsal phase was crucial to further develop the music and tailor it to fit each scene. When the music was finalised, I would deliver the tracks which were then cued and played by a theatre operator.



Figure 2 Feeding Crocodiles stage, Theater am Gleis, Winterthur, September 2019

Working with House of Pain was an inspiring and challenging process. *Feeding Crocodiles* was centred around the concept of pain: what is it, what does it mean and how do we deal and cope with this state? The dance performance explored life-controlling processes of fear and their consequences. On paper, this was a very strong statement and promised a very intense performance.

I had to consider the strong visual elements used on stage. Brittle chalk plates hung from the ceiling were used as a scenography element and as screens on which videos would be projected. The performers' bodies were an even more important consideration, often moving around in almost epileptic, mad states, and at times, slowed down to intensify the agony in each single movement. There was an extensive sensorial bombing happening on stage. In this scenario, sound design and music had to deliver the right balance to intensify and support the mood of the performance, guiding the performers and audience from one scene into the other.

With this project, I learned that sometimes you need to take a step back to look at the full picture. You understand it's not only about sound. It's about the full effect of sound, visuals, and performance as a whole. When you find the right balance, sound becomes the glue that holds together the entire performance. The right sound helps audience and performers enter a new narrative dimension.

SOUND EXAMPLE 6: Feeding Crocodile Soundtrack

https://joelgilardini.bandcamp.com/album/feeding-crocodiles

2.3. Example 2: Wäre das Wetter nicht umgeschlagen - The voice is a storm

Wäre das Wetter nicht umgeschlagen (trad. If the weather hadn't changed) gave me an unprecedented opportunity to work with human voices.

This is a theatre piece inspired by the original text *Die Bergbahn* (1929) by Ödön von Horváth (1901-1938). Carried out during the Autumn Semester of 2023, the project was part of the "ZHdK BA Theatre Level 3 Final Staging" program within the departments of dramaturgy, stage design, and direction. My involvement started in November that same year, roughly one month before its premiere in December.

The piece was one continuous act. In this sharp social satire, we follow the (mis)adventures of a group of construction workers who are building a railway in the mountains. When the weather suddenly changes for the worse, the workers must not only face the impending disaster, but also the stubbornness of their leading engineer, who is under pressure by the local leading party to finish the works as fast as possible. The ending is brutal. The mountain becomes a hostile place, and everybody loses their lives in the heavy winds of the final storm.

When first reviewing the work-in-progress script, I saw plenty of cues for wind sounds, from very faint breezes to stormy tempests. It sounded like a classical theatre project, with sound being a secondary element in support of the narrative. My first step was collecting sounds to create a library to work with, but I wasn't happy about the material I first gathered.

Here, I must reiterate, how important and crucial it is to take part in the rehearsal process (regardless of whether sound is part of the rehearsal or not). During one rehearsal session, I found out that the

director had decided to start the play with all four actresses whistling wind sounds into microphones! This was a revelation to me, and I quickly decided that the all the wind sounds had to be made solely using the actresses' voices!



Figure 3 Main rehearsal in a round stage setup and minimal props

I organised a studio session and invited the actresses to record their voices. It was very rewarding as each actress had their own distinct wind vocabulary and nuances. The resulting recordings were more than enough material to generate all the sounds needed for the play, and with further processing using reverbs, delay and distortion, I was able to generate everything from subtle up to dramatic wind sounds.

Rather early on, I decided to perform the cues live. I chose to use a peculiar combination of tools: MAX MSP and FMOD. These are programs that I learned during my first year at ZHdK, but until this project, I never really found a reason to use them practically. Thanks to this work, I started to appreciate MAX MSP, as it enables us to create customised patches, play and trigger sounds with an external MIDI controller. This facilitates complex audio routings to manipulate audio levels in real-time before going out to the main theatre's PA.

The MAX MSP patch I devised (see Figure 4) was used to trigger sound effects (sudden blowing of wind, thunder and explosions), playback of intro and outro music, and randomised sequences of wind sounds. But what is unusual is the external input that was routed from the other program: FMOD, which is normally used to implement music and sound design into video games. I never heard of anybody else using this program for theatre. I was curious and wanted to test the program outside its normal function.

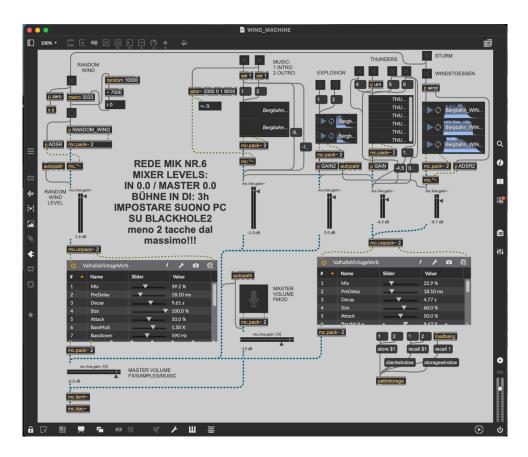


Figure 4 MAX MSP patch used for Wäre das Wetter nicht umgeschlagen

Working with FMOD meant that I could quickly use a player with 5 different layers of wind (calm inside the cabin, calm outside the cabin, moderate, light storm and heavy storm), one that I could crossfade with one knob. Also, inside FMOD, I could apply additional effects to the wind loops to further process the sound, and control effects parameters (distortion gain, reverbs levels, EQ sweeps) with the very same knob used to crossfade the layers. I could have done this part inside MAX, but being under a time crunch, I needed a quick solution.

I used these 'wind' voices in a few different ways. This first track (Sound Example 7) is a composition I put together to test the sounds I had collected right after the recording sessions:

SOUND EXAMPLE 7: A composition made out of wind voices

https://joelgilardini.bandcamp.com/track/kannst-schier-nimmer-schnaufen

This example was not used for the live performance. It was simply an early experiment done to understand the collected sounds. This way, I could experiment with plugin effects, like delay, reverb and distortion. It was also helpful to test which sounds were better for a calm mood, and how to merge these together to create a significantly large storm.

After further processing and treatment, I was able to generate five textures and intensities of wind that I implemented in the FMOD patch. The next example (Sound Example 8) is the overview of the

five moods used for the live performance, played using the FMOD patch (see Figure 5), which could allow for crossfades between each of them. The running order is as follows: calm inside the cabin, calm outside the cabin, moderate, light storm, heavy storm, calm outside the cabin.

SOUND EXAMPLE 8: FMOD Wind sweep

https://soundcloud.com/jgilardini-music/die_bergbahn_windmachine

This project had a very positive outcome. The methods used and implemented proved very effective. If I had any criticism for myself, there would be a few points. First, I wouldn't use FMOD again in such a context. Despite being very intuitive and straightforward to use, the current software lacks the possibility to be controlled via MIDI (which is a shame), and similar results can be also programmed directly inside MAX MSP.



Figure 5 FMOD patch used for Wäre das Wetter nicht umgeschlagen

The play was staged in a theatre in a circular setting ("theatre in the round") with the audience around the performance stage, but we only had a stereo set of speakers coming from one half of the round! Nevertheless, the sound was functional and filled the room well. If I had used a quadrophonic system, the whole experience would have felt more immersive.

As a result of the choices made, the wind became a fifth character on stage. It was a lurking presence, even in the quietest scenes. It was always there, waiting to ascend into a roaring climax in the final storm. For the heavy storm moments, we decided to push the volume as loud as possible, which had the effect of intensifying the actresses' performance even more in these tragic moments. Sound design proved to be a vehicle for varying the dramatic intensity in this play, enhancing both the actress' performance as well as the narrative climax.

2.4. Example 2: Der Spieler - The stage is a spinning roulette

Sounds found in everyday objects can make a big difference and can radically change how we perceive an ambience. And it is even more peculiar when your found object of choice... is a roulette table!

Conceived by director Andreas Storm, *Der Spieler* (trad. *The Player*) is a play about gambling games and casinos based on the novel *The Gambler* (1866) by Fyodor Dostoyevsky (1821-1881). It was produced and performed in February 2024 at the Kurtheater Baden. The play had a very minimalistic cast and stage scenography were on the minimalistic side: 2 actors, black stage, a dozen of suitcases in different sizes.



Figure 6 Der Spieler's actors Miriam Japp and Antonio Ramon Luque on stage

Andreas had a precise idea about the sound. He wanted a quadrophonic sound system. Up to that point, I had never used multichannel systems in a theatrical context. Therefore, this project would be a fantastic opportunity to experiment with immersive audio.

For the sound design, the director had another wish. Roulette, gambling chips and casino sounds had to be a central part of the play's universe. This was a very good starting point. I already had some ideas, and this production gave me the possibility to research and sample sounds that I had not yet encountered.

To collect all the specific sounds, we booked a roulette table at the adjacent Grand Casino Baden so that I could record my own sounds, particularly the chips and their manipulations as well as the turning roulette itself (Figure 7). This recording session at the casino was a special experience. The casino ambience felt like the middle of the night even though we were there during the early afternoon. Despite the "early hour", there were already a few visitors playing at various gambling machines. It was indeed a unique space. My goal was to recreate a similar feel and illusion on stage.

The casino was not a studio environment and hence, there was quite a bit of background noise. By using shotgun microphones, I was able to counteract most of the casino's hum. Also, we had a croupier assisting us and performing all the actions under my direction, since for security reasons I wasn't allowed to touch the chips. Sound Example 9 captures the manipulation of different chips performed by the croupier.

SOUND EXAMPLE 9: Roulette Chips' manipulations

https://soundcloud.com/jgilardini-music/der_spieler_chip_manipulations



Figure 7 Foley recording session at the Grand Casino Baden

All the sounds were edited and prepared using Pro Tools. This process resulted in a selection of 85 sound samples that I loaded into a digital sampler. These were further manipulated to create all the ambiences and atmospheres. For example, the following Sound Example 10 was used to add suspense, when the main character first enters the casino.

SOUND EXAMPLE 10: Sound design track composed for *Der Spieler*

https://soundcloud.com/jgilardini-music/der_spieler_zweite_mal_casino

It made a difference being able to record these sounds. The gambling chips have a very peculiar sonic character, which I couldn't recreate by using other props. From an aesthetic point of view, in using such sounds, we created not only the illusion of being in a casino's environment, but also some highly intense atmospheres that amplified the dramaturgy of the scene.

As previously mentioned, this project was the first time I was able to utilise a quadrophonic sound system in a theatre context. The room where the play was performed was not so big (about 93 square meters). Speakers were set in the following array:

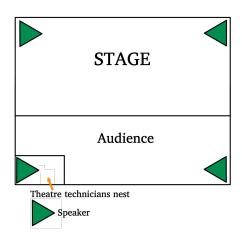


Figure 8 Der Spieler's speaker setup

Preparing the quadraphonic tracks in Pro Tools helped a lot, since I could visualise the single channels and find the right balance to upscale and bounce the final audio into a quadraphonic wav file (Figure 9). By working directly in the theatre space, I could quickly access the room and conduct my tests and sound checks. It was an intensive work in progress and prior to the premiere, I spent every day of the week in the theatre, following the rehearsals and working on the sound design.

Despite the quad array, a large part of the live show used only stereo tracks. It was only at the peak moment of the narrative that the quadrophonic system was used in its full dimension and power. The result was a sound scenography (Sound Example 11) in which the room was transformed into a spinning roulette bowl with the actor playing in the middle, while ball sounds would spin around the room and chips falling from all four corners of the room.

SOUND EXAMPLE 11: Stereo remix of the original quadrophony sound scenography

https://soundcloud.com/jgilardini-music/der_spieler_quad_scenography_d

Sound design was an important element to enhance and support the story's narrative and atmosphere. But when compared to *Wäre das Wetter nicht umgeschlagen*, it was not quite as powerful a key element. Nonetheless, it was a good platform to experiment with a quadrophonic system and immersive sound. It helped me get accustomed to working with it and get a better grasp of its immersive potential. It was, however, a bit of a missed opportunity because full quadrophony was used only once. The audience placement in relation to the speaker setup was also not ideal, especially for the people sitting very close to the speakers. The room was not that large, and we needed to find the simplest solution, which in the end, limited the options for speaker placement.

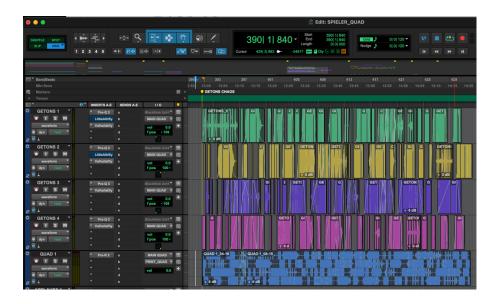


Figure 9 Pro Tools Mono to Quadrophony rendering

2.5. Final thoughts

These three projects shed some light on the approaches and aesthetics of sound making that I value when dealing with live performance projects. My methods are malleable and often change during a production. There is no fixed recipe that works for every occasion. Creativity, adaptability and thinking out of the box are crucial, useful tools in these situations.

Despite the different approaches illustrated, sound has always a meaning and a precise function. It's the glue that holds together all the different elements on a performance stage. At times, sound can have a bigger impact and be as tangible as the wind in *Wäre das Wetter nicht umgeschlagen*, but it can also serve on a secondary level as support. It can create an additional platform on which the performers can better interact, like in the House of Pain works, creating more striking contrast against stronger performative or stage elements. It is a key element not because of a hierarchical importance but because it is an integral part of a bigger picture.

While pursuing my path as a sound designer, my sound aesthetic evolved. *Feeding Crocodiles* had a more musical approach. The project occurred during a phase where I was not yet dealing with field recording and found sounds. I was working only with "real instruments". I still use instruments nowadays. I love the tactile feel of plucking strings, stomping pedals, turning knobs and pushing keys. That's why I often call myself a crafter of sounds. My hands are an important tool in the process of making sound.

Later works increasingly feature sound design and music based on found sounds specifically collected and manipulated for those projects. More than just something I do for productions, it is a daily practice that I value, as it gives me access to sound which would otherwise be unreachable. The endeavour and drive to develop my vocabulary and sonic aesthetics is an ongoing process.

The experiences and knowledge collected throughout the MA Sound Design degree have given me new understanding of this craft. I started using tools such as MAX MSP, which allows me to have a more flexible workflow, one that I can adapt and tailor to my needs.

What is pertinent in my current development is to learn how to work with sound placement in a space and how to immerse an audience in a different dimension. This was something I had not considered before and will pursue in my future works.

In order to grow, it is essential to closely investigate sound design practices that have been developed throughout history for inspiration and clarity. What does it mean to craft sound design for different media applications as well as for live performance? How did it evolve, where are we now and are there any clues about its future developments?

3. Into a sound designer's rabbit hole

When I first started my research process, I struggled to find sources that were more specifically related to experimental sound design in performative contexts. The focus seemed to be limited to the topic of sound design as used in rather conservative ways that mostly described its functional role in theatre contexts. I couldn't find clear evidence that connected sound design more toward experimentation. Coming from a certain amount of experience in experimental music, I wanted to examine how sound design has evolved and been applied within other fields of live performance such as dance, for instance. I felt there was more to uncover beneath the surface. Experimentation and unorthodox techniques should have had a role in sound design development. Where and in what fields has experimentation in sound design taken place? Have there been substantial methods employed to expand the boundaries of live performance or perhaps also in the live manipulation of sound for recordings?

3.1. The evolution of sound in live performance practices

3.1.1. Sound-stage operators

For a long time in theatre, sound design seems to have played a secondary role. It was recognised as a piece in the puzzle that could be used to enhance the mood and meaning in a play. But the predominant focus stayed on the acting and the script. Nonetheless, sound in theatre performance has a longer story to tell.

Until the 1960s-70s, sound designers were not credited in theatre productions. What happened before this turning point?

Before this, the default definition of the role was Sound Operator. I am fascinated by this term. When going back in time even more (starting from 1900-1930s), sound operators were stage or live performers. In my view, I think of them as stage artisans because they were technically proficient persons who created sounds manually or by employing self-built machines.

A wonderful description about this early role of the sound operator can be found in the introduction to Napier's *Noises Off: A Handbook of Sound Effects* (1936, London: Mueller)⁴:

"[···] for a good effectsman we have to find a person of the auditory type, having a sense of rhythm, as much stage sense and experience as possible combined with acting ability, sympathy, and sensitiveness. Add to these utter dependability and handiness with tools, and season the whole mixture with patience and humour. If he is also a singer, a harpsichord-player and a certified plumber, so much the better. When a company has discovered such a god-like mortal, their only other difficulty will be to resist the temptation to cast him for the leading part and let the noises 'go hang'."

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⁴ Brown, Ross. *Sound: A Reader in Theatre Practice*, p.105

Note that Napier is the very first to fully credit the role of sound operators in theatre, but it is safe to assume that sound operators had been around even long before.

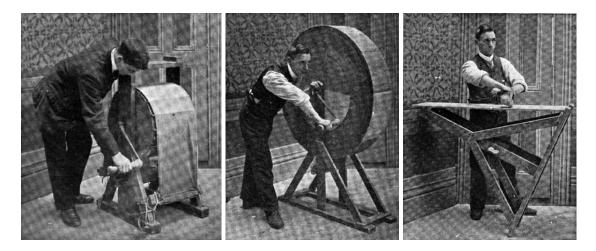


Figure 10 Theatre sound machines, from Stage Sounds (1904) by Harley Vincent, photographs by George Newnes, Ltd. Left to right: Wind Machine, Rain-barrel, board to imitate horses' hoofs

3.1.2. Theatrophone

I went back further in time and stumbled upon a very interesting discovery related to an invention – the telephone. The first successful telephone transmission was achieved in March 1876 by Alexander Graham Bell. Now, something extraordinary happened in 1881. At the Paris Electrical Exhibition, French inventor Clement Ader (1841-1925) presents a new invention, the Theatrophone!⁵



Figure 11 Théâtrophone, 1896 lithograph from the Les Maitre de L'Affiches series by J. Chéret

As the name suggests, this was a first attempt to broadcast a show to the masses by using the newly invented telephone. People could now enjoy a theatre show "live streamed" directly to their homes.

⁵ Marvin, Carolin, When Old Technology Were New, p. 209

I find it exceptional that this theatrical experiment took place so early on, even before the twentieth century. You could say that this was an equivalent to live streaming of our times. Most notably, the Theatrophone pioneered the very first attempt at stereo sound reproduction. Ader arranged about 80 telephone transmitters in front of the stage, which resulted in a primordial form of binaural stereophonic sound. But it remained a luxury novelty and by the 1920s, was terminated by radio broadcasting. Radio offered free and more accessible live audio.

3.1.3. Radio drama, Brecht and Artaud

At this point, radio broadcasting became an interesting field for theatre praxis. Theatre plays or radio dramas were the very first form of cultural programming and radio entertainment. It was clear that radio offered a totally new "stage" experience through sound. Radio drama was considered the theatre of the imagination. Many plays were written specifically for the radio and relied heavily on the use of sound design to evoke an invisible imaginary stage. Sound becomes the stage. And the listener imagination is an intrinsic part of the performance as well.

A Comedy of Danger (1924, refer to Sound Example 12) by Richard Hughes (1900-1976) is considered the first radio play, commissioned by the BBC. The plot follows three people stuck in a coal mine collapse. The play relied heavily on sound effects, such as dripping water, shifting rocks, and distant echoes to immerse listeners. It demonstrated how radio could use sound alone to create tension and environment, something stage theatre could not replicate as easily.

SOUND EXAMPLE 12: Extract from A Comedy of Danger (1936)

https://youtu.be/nuUjk6VoM7A?si=WUmdutgSTEua-7QP&t=693

I can understand how evocative the power of the radio could be. In 1938, Orson Welles (1915-1985) even caused mass panic with his radio adaptation of H.G. Wells' novel *The War of the Worlds*. Many, who tuned in the middle of the show, thought aliens were invading planet Earth for real!

As a child, I used to listen a lot to the radio and to broadcasts of ice hockey matches. In my mind, I could totally picture the players sliding on the ice and it was immediately palpable how the stadium ambience was, cold but lively. A television for the mind.

In turn, radio drama's experiments with sound effects and soundscapes became an important factor that pushed the development of sound on physical theatrical stages. In 1935, Bertold Brecht (1898-1956), in his notes for his play *Die Rundköpfe und die Spitzköpfe* (trad. *Round Heads and Pointed Heads*), referred to the advent of phonographs and gramophones as the start of the industry in

"supplying the stage with records of real noises. These add substantially to the spectator's illusion of not being in a theatre". 6

Brecht used the term 'illusion' and in relation to sound, this is what sound designers often try to achieve. We try to give the audience the illusion of being inside the scene, and not the theatre space. This is an illusion we create in movies too. No matter the context, sound is a powerful tool that can shift and amplify the perception of reality. Brecht is a very important figure in the history of theatre. He didn't want to entertain. He wanted to engage and challenge the audience with his critical views about world order and social injustices. He used music and sound to disrupt the realistic flow of the story. Cabaret-like songs were played during dramatic moments and characters would sing directly to the audience as though they were delivering political messages. By doing so, Brecht estranged the spectator, compelling them to actively engage in the quest for truth.

Brecht considered radio a powerful tool. He envisioned a radio that could both talk and listen to the people. Together with theatre, radio was a medium that could become a new platform for people to share and sharpen their awareness⁷.

Another relevant figure in this age is Antonin Artaud (1896-1948). Originally part of the Surrealist movement, he is better known for his *Theatre of Cruelty*. His theory and philosophy on theatre performance integrated a broad range of sound practices. His pieces included sudden loud noises, screams, cries, groans and all kind of dissonant sounds from the body. He would also often use glossolalia (speaking in an unknown language) in ways that disrupt human voice and make words a vehicle for subtexts and meaning. In short, the bodily noise becomes a language in Artaud's works. It is my view that to a degree, his avant-garde approach to sound foreshadows what later would become power-electronics and noise music.

His last work, the radio play *Pour en Finir Avec Le Jugement de Dieu* (trad. *To Have Done with the Judgment of God*, 1947, Sound Example 13), mingled narrative voice with guttural sounds, percussive instruments and glossolalia. It's a mixture that creates a sort of "musique brute". As described by Allen S. Weiss,

"His screams became poetry and his noises became music, in an attempt to express the inexpressible, profound, chaotic essence of human existence."

SOUND EXAMPLE 13: Extract from Antonin Artaud, POUR EN FINIR AVEC LE JUGEMENT DE DIEU (1947)

https://youtu.be/EXy7lsGNZ5A?si=8E2tjLAeZilyLuGd&t=1152

⁶ Brecht, in Bentley, *The Theory of the Modern Stage*, 1978, p. 103

⁷ Berthold Brecht, *Der Rundfunk als Kommunikationsapparat*, in Bjitter des Hessischen Landestheaters Darmstadt, No. 16, July 1932

⁸ Kahn, Douglas & Whitehead, Gregory, Wireless Imagination, Sound, Radio, and the Avant-Garde p. 295

Pour en Finir Avec Le Jugement de Dieu was scheduled for airing on February 1948. But due to antireligious and anti-American statements in the text, the French radio banned its airing. Artaud would die a few weeks later after a stay in a psychiatric clinic in Ivry-sur-Seine F.

These historical observations are important because we start to feel something shaking the foundations on which the traditional role of sound in theatre and performance had been built. This unconventional use of sound, noise and music sowed the first seeds of a growing experimental scene.

After World War II, there was a boom in how sound was being used and implemented. In this post-war period, there is a slow shift in the knowledge background of stage sound operators. Reel-to-reel recorders became more common and accessible, making it possible to record, cue and play prerecorded spot-effects. It meant that sound operators must now be technicians and not merely craftsmen and actors. Technical knowledge of sound equipment became a must and technology, a creative instrument. The post-war advent and rise of television and movie industry took over radio broadcasting. Television and movies were the natural evolution from the medium of radio, one that brought the visual element back into the equation (Video Example 1).

VIDEO EXAMPLE 1: Old Walt Disney Sound Effects

https://www.youtube.com/watch?v=20UISl1e81U

Did the development of film and television signal the end of radio drama? On the contrary, radio drama continued to flourish well into the late 20^{th} century.

In addition to these developments, what I find amazing about this post-war period is the explosion of emergent art movements, which opened new ways of creating sounds and music. In the period between 1950-1960, *musique concrète*, BBC Radiophonic Workshop and Fluxus were the driving forces in this sonic (r)evolution and greatly influenced the way we deal and think about sound until today.

3.1.4. Musique Concrète

What may seem like a decline of radio broadcasting subsequently became a fertile ground for avant-garde music and experimental theatre. Douglas Kahn and Gregory Whitehead described musique concrete as something that was borne out of the studio environments of Radiodiffusion-Télévision Française, within which Pierre Schaeffer (1910-1995) engaged in a "continual perfecting of recording techniques" which "permitted the high-quality reproduction of everyday sounds". According to Kahn

and Whitehead, "Schaeffer utilized these possibilities to create a sort of sound object, not a musical composition but a musical drama of sound effects".

To simplify, we could suggest that *musique concrète* are sound effects used to compose music. But if we dig deeper, there is a lot more happening. Schaeffer aimed at disrupting the purpose of the sounds he used. It was only when the manipulated material lost his original meaning could it then become material to generate music. This is a step forward from traditional music. Everyday objects become the instrument, and their texture, timbre and rhythm engage and form new compositional techniques.

Etude aux Chemins de Fer (1948, trad. Railway Study) is one of the first compositions by Schaeffer (Sound Example 14). Perhaps nowadays, it can be perceived as being somewhat raw and not yet entirely distorted, sonically speaking. If we take each sound alone, we can distinguish these are trains. But they form a composition of patterns and drones. There is a rhythm that almost invokes the ritualistic aura of a mantra. In this early work of Schaeffer's, we can perceive the seeds of what would later become sampling, looping and sound manipulation techniques.

SOUND EXAMPLE 14: Pierre Schaeffer Etude Aux Chemins de Fer

https://www.youtube.com/watch?v=N9pOq8u6-bA

In some ways, it is comparable to the use of sound in radio drama. The difference here though, is that sound no longer retains its original characteristic or meaning. Reconfiguring sounds to this extent was unprecedented, when compared to the radio dramas of the 1920s. If we then apply this approach to theatre practice, sound is no more a mere element to depict an imitation of life. It can also become a destabilising element, one that can be abstracted from reality to depict inner states.

3.1.5. Beckett and the acoustic stage

A quote by Miles Davis (1926-1991) states, "It's not the notes you play, it's the notes you don't play". This quote resonates well when we consider the works of Samuel Beckett (1906-1989). Up until this moment, we have discussed sound a lot, but have yet to consider the importance of silence. Specifically, radio plays that Beckett wrote for the BBC such as *All That Fall* (1957), *Embers* (1959), and *Cascando* (1962) are striking examples of how Beckett was able to control words/voice, sound, music, and more importantly, silence. The balance of sound and silence has a huge impact on the pace and perception of the narration. These works demonstrate Beckett's masterful understanding of the radio genre as a stage, and a consummate command of possibilities that had never been attempted before.

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⁹ Kahn, Douglas & Whitehead, Gregory, Wireless Imagination, Sound, Radio, and the Avant-Garde p. 298

Beckett understood how to use silence, not as a break in narration but rather, a moment of high meaning and tension. It was used to depict doubt in the minds of characters but more importantly, the silence was employed to create an immersive pause, to allow listeners to take a moment to think and digest the plot.

A clear example is how the sound effect of the sea is used in *Embers* (1959, Sound Example 15). It is a constant murmur in the background, but after a while, we notice that it interacts with Henry's inner dialogue. At certain moments, the sea becomes a disturbance element disrupting Henry's thought process and leaves all in a moment of silence.

SOUND EXAMPLE 15: Extract from *Embers*

https://www.youtube.com/watch?v=hRFSAHMaX8U

This precise technique in how silence or sparseness in sound is employed shows how a minimalistic approach can deliver strong results. Every element is stripped down to the core. The voice at times becomes a pure sound, an effect that interacts with the others. This can be traced in later works like *Not I* (1972, Video Example 2). The stage is only represented by the mouth of an actress. And her lines have a rhythm and a sharpness, like how it would be in a radio play. But this was conceived for the stage.

VIDEO EXAMPLE 2: Not I

https://www.youtube.com/watch?v=16rSsThMDiU

This is an amazing example of how thinking in an unorthodox manner while understanding the medium used, can deliver impressive results. The minimalistic approach is unparalleled. Beckett had such a lasting impact that influenced not only theatre and radio drama, but also minimal music (Steve Reich, Philipp Glass, and Morton Feldman) as well as the visual arts (Robert Morris, Donald Judd, Richard Tuttle, Anne Truitt and Robert Smithson).

3.1.6. BBC Radiophonic Workshop

Made for the BBC, *All That Fall* (1957) by Samuel Beckett could be regarded as the first radio play that pushed the production limits of sound effects in radio drama. You could say that Beckett sowed the seeds for what would eventually become the BBC Radiophonic Workshop.

Unconventional methods were also applied to another radio play, *The Disagreeable Oyster* (1957, Sound Example 16) by Giles Cooper (1918-1966). In this case, being a comedy, a more cartoonish touch was needed but the experimental approach can be attributed to Beckett's legacy.

SOUND EXAMPLE 16: Two Extracts from *The Disagreeable Oyster (*1957)

https://soundcloud.com/jgilardini-music/the-disagreeable-oyster-1957

Other experimental productions followed. A growing demand led to the foundation of the BBC Radiophonic Workshop in 1958. It soon became one of the most influential studios for experimental sound design and electronic music. Workshop members included Daphne Oram, Delia Derbyshire, David Cain, John Baker, Paddy Kingsland, Glynis Jones, Maddalena Fagandini, Richard Yeoman-Clark and Elizabeth Parker. It pioneered innovative techniques in producing sound effects and incidental music for both radio and television productions. First following the groundwork laid by musique concrete, the early Workshop's productions relied heavily on found sounds and tape manipulation. Their experiments in this field were very widespread and even influenced music engineers and producers of the 1960s, people like Eddie Kramer who became famous for working with acts like Jimi Hendrix, the Beatles and David Bowie.

Working mainly for BBC productions, the Workshop achieved the unintentional result of spreading experimental music to the masses. Of this, the most iconic example is the opening theme for the television show *Doctor Who* (1963, Sound Example 17).

SOUND EXAMPLE 17: Delia Derbyshire – Doctor Who (1963)

https://www.youtube.com/watch?v=75V4ClJZME4

The approach used by BBC Radiophonic Workshop remodelled the way people thought about sound. In theatre, it legitimised sound design as an art form, and made it part of the storytelling. It expanded the sonic vocabulary available to productions, by layering natural and synthetic sounds.

An example of this is to be found in production of the *Macbeth* by the Royal Shakespeare Company (Stratford-upon-Avon, 1967) where members of the BBC Radiophonic Workshop under the moniker *Unit Delta Plus* were involved:

SOUND EXAMPLE 18: Unit Delta Plus - Extract from *Macbeth* (1967)

https://wikidelia.net/images/9/91/Macbeth_%281967%29_clip_1.ogg

3.1.7. Influence of John Cage and Fluxus

Concurrently, another important personality on another continent arises, John Cage (1912-1992). First known as a composer for dance performances, he later becomes known for inventing the prepared piano. Cage's ideas had a great influence on how sound could be used in theatre and live performance. First, he challenged the distinction of what constituted music and what constituted noise. This is evident in his approach to theatre. He considered theatre the kind of art that better represents life, as it engages both visual and hearing senses, as denoted by Natalie Crohn Schmitt in

her paper about the role of Cage in theatre.¹⁰ Thus, Cage's inclusion of noise and silence besides music is an expansion of this concept.

The Fluxus artists had a similar approach and further developed ideas introduced by Cage. They popularised the idea of Concept or Performance Events, where anybody could take part, artists as well as members of the audience. This is a big leap forward. It democratised who can perform and removed the need of any kind of virtuosity. This democratisation also applied to what could be used to perform. From the sound designer's perspective, everyday objects have become legitimate performance tools!

There are many examples of these sonic theatrical practices in *The Fluxus Performance Workbook* (Friedman et al., 2002, Swinburne). For example, George Brecht's *Drip Music* (1959) proposed the sound of water drops dripping into an empty vessel as an integral part of the performance. What is remarkable here is how a trivial object instantly becomes the central element of a theatrical performance.

What I find admirable is how both Cage and the Fluxus movement had the sheer will to drive these new attitudes and approaches towards sound and art and bring them closer to the masses. These new concepts of how to interact with sound were already introduced by the many avant-garde artists before but were still quite niche.

3.1.8. 1980s to now: MIDI samplers and immersive performances

After this phase of rapid evolution and great experimentation, the 1980s and 1990s are, in my opinion, a period or harmonisation.

The most advanced innovation of this period was the introduction of MIDI keyboards and the first digital samplers. Borrowing from devices commonly used in rap music, sound designers were now not only able to playback sounds and trigger spot effects, but also play these chromatically and polyphonically. Paul Arditti was a pioneer of this new craft. In an interview together with Ross Brown, he recalls how these machines gave him new possibility to morph and modify the sound materials¹¹. It had become possible to treat sonic ingredients both as musical elements as well as sound effects. This gave rise to a lot of possibilities and in the 90s, evolved to the point that "musicians and sound designers were quite happily working together, mixing up each other's worlds, and doing musical sound effects, music made from sound effects [···] having a very open mind about it **12*. This mash up of sound design and composition tools is understandable and shows how the impact of Fluxus helped this transition and convergence of music and sound effects.

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¹⁰ Crohn Schmitt, Natalie, So Many Things Can Go Together: The Theatricality of John Cage, 1995

¹¹ Brown, Ross. Sound: A Reader in Theatre Practice, p.106

¹² Ibid, p.109

Around the early 2000s, we start to see the use of more immersive sound systems in theatre practices. The introduction of more compact and powerful computers also allows for better control of such systems. The lessons learned from acousmatic music developments introduced new possibilities of how we could understand and use sound.

Another observation is the re-evaluation of what it means to use sound as a stage. The best example of this is the so called "theatre in the dark". This is a kind of theatre practice where the staging of the piece is done mostly by using sound, with the help of binaural or immersive audio systems. What stands out is that these performances are mostly staged in dark rooms. I had the pleasure of witnessing such a performance myself.

In the Beginning by my fellow sound designer Lara Wedekind, was performed in January 2025 at ZHdK as her final MA project. I am not aware if the concept of "theatre in the dark" was known to Lara, as she presented this performance as a sound installation. Her story was told by combining a picture book together with a Dolby-Atmos sound installation. While listening to the sound, one could freely follow the picture book, creating a personal interplay between these two mediums. At some point, I stopped browsing the book and simply immersed myself in the sound installation. It was a story told with just the sound moving around the room, which allowed oneself to picture new unseen worlds in one's mind. This is reminiscent of what Brecht referred to as "the spectator's illusion of not being in a theatre", something I mentioned earlier.







Figure 12 Stills from Lara Wedekind's In the Beginning¹³

3.2. The light at the end of the rabbit hole?

During my research, it took a while to inform myself how the role of sound design in live performance was perceived outside my own creative borders. It was always an important element in many theatre plays, but mostly used as a supporting, secondary element, one that served to amplify or underscore emotional content, or merely to recreate a natural environment. I pondered why these limitations

31

¹³ Photo source: https://www.zhdk.ch/studienprojekt/eed543f3-02a0-4cd9-95ab-9c46489cb6d4

and expectations exist. Therefore, the decision to investigate the provocations of movements like Dada and Fluxus proved to be a noteworthy undertaking.

This tangent showed that I am not alone on this path. There were and are people out there who seek to use sound as a creative means. Sound is a powerful medium to immerse both performers and audiences into new worlds and interactions. It can create an invisible stage that moves and expands our imagination.

Furthermore, it was important to recognise how new technologies had an important impact in this evolution. First, radio shook the ground and tickled people's imagination, then the introduction of tape machines and later, digital samplers, gave new tools to sound designers who now could manipulate and create spectral and unthinkable novel sounds. At some point, I felt the proliferation of TV and movies could have endangered the development of sound in theatre and radio drama. But conversely, it pushed people's ingenuity to find new solutions and methods to engage the audience's imagination.

The key insights of this examination point to the pivotal role of the individuals and art movements involved in the evolution of sound design. Their ingenuity and willingness to challenge the limitations of their time has significantly influenced contemporary approaches to sound perception and production. Furthermore, both the BBC Radiophonic Workshop and the Fluxus movement have contributed substantially to the democratisation of these new ways of thinking about sound.

When analysing musique concrète and the works of BBC Radiophonic Workshop, I found remarkable similarities in relation to my own approach to sound aesthetics. Additionally, in examining Beckett's works, I found his economy and the adept use of silence particularly intriguing, as it presents a radically different take on sound and is a power tool I would like to explore in future works.

Naturally, the next step in this progression is the usage of immersive sound systems. Be it multichannel installation, Dolby Atmos or simply binaural headphones, all of these can greatly expand the possibilities of how one experiences a live performance. This spatial aspect does indeed warrant further investigation but perhaps is a topic that is more relevant for future research.

With all this in mind, I take an in-depth look at my own realm of performance in relation to the sound design and live execution for the dance performance Hard Boiled Wonderland. How will the analyses and research I have so far encountered resonate in my own work?

4. Hard Boiled Wonderland

4.1. Collapsing buildings and rising ideas: the sounds of trash & scrap

For my final MA project, I decided to start with a drastic limitation and a specific quest; to solely use sounds collected from trash and scrap materials.

I'm not new to the practice of using found sounds. But I never enforced such a strong concept on myself from the very beginning. This posed a challenge. As a sound designer, how do I deal with materials of this nature? What are the opportunities that can be extracted with these kinds of sounds? How can they be transformed into an integral part of a live performance?

The spark of this idea can be found in my appreciation for Einstürzende Neubauten. What is exceptional about the seminal German band is their use of DIY instruments made from junk materials, found objects or parts of dismantled machines. Some their inventions are instruments like glockenspiel made from rotating small turbine propeller, or metal plumping pipes as percussion instruments (Figure 13).





Figure 13 Einstürzende Neubauten live on stage with their DIY instruments¹⁴

https://alivereportsmag.com/einsturzende-neubauten-lament-live-ancienne-belgique-brussels-28-may-2015/

33

¹⁴ Photo sources: https://freq.org.uk/reviews/einsturzende-neubauten-live-at-koko/
https://thequietus.com/interviews/strange-world-of/einsturzende-neubauten-history-biography/

What is intriguing about Neubauten's DIY instruments is not only the sound palette these create but also the physical intensity of the sounds themselves. When these elements are used in their live shows, they are like protagonists. They move on stage, change from one song to the other. Evidently, musical elements can become performative tools, and they can enhance and intensify a stage performance.

What I had in mind was not to build my own instruments. Instead, I envisioned recording sounds using such materials and then process them digitally. Therefore, I had set a solid starting point, but I didn't yet know where or how to apply the concept.

4.2. Manning's proposal and first steps into the collaboration process

In December 2024, I received the following message from MA dance choreography student Dong Manning:

"My MA graduation work will explore issues about power structures, instability, inequality, migration. Thinking about them as relationships that exist and act between people, in space and in society, presenting and re-intervening physically and choreographically to find different possibilities of expression and breaking out of frameworks. [...] I am looking for a sound artist/musician who is interested in this theme and who is open to exploring combinations of sound in relation to the body, the environment and the possibilities of different languages and vocals."

This request made me feel like going back to my live performance roots! I was captivated by her project concept. Inspired by a book by Haruki Murakami, the title drew my attention as well.

Manning's decision to seek help from a sound designer is also uncommon and rather brave. For her project, she wanted an experimental twist, and a completely abstract take on sound.

Upon agreeing to collaborate with Manning, I began to recognise several exciting aspects her project had to offer.

It is a collaborative project. Over the years I have had many collaborative experiences. Before being approached by Manning, I was working on post-production's sound design for some movies, but Manning's project gave me the opportunity to be on board from the very beginning. It meant I could be an integral part of the development and use my sound designer skills to enhance the performance we were about to create.

My first task was to create a linear composition to support and interact with the dance choreography. I introduced Manning to the idea using sound based on junk material. She was very agreeable to the idea of using this kind of sound palette. She also quickly envisioned that junk could also be an element of the costumes and scenography.

The scenography foresaw the use of some props like seesaw, car wheels and cloths. I considered these elements in my first sketch. These performance props had the potential for sound design interaction. For example, the seesaw retrofitted with some sensors could become a means to control and interact with the music.

Hard Boiled Wonderland was conceived together with dancers Marta Allocco, Vanessa Spörri and Lucio Volcov, stage designers Linus Jacobson and Peiran Wang, and costume designers Samuel Bachmann and Prisca Grandi. The piece performance was scheduled to premiere on the 9th and 10th May 2025 at The Valley in Kempthal (CH).

4.3. Creative approach to composition and sonic design

Working with trash opens a lot of interesting quests and possibilities.

For example, It can be seen as a political statement. Nowadays, ecology is an important theme, with repercussions on our own future as a society and living beings. But this was not my main objective. My approach was to research the sonic textures hidden in these materials. How can I transform these objects into sonic elements to create a linear composition? What are some manipulative techniques I could conjure up to give these elements a new meaning and context? But first and foremost, where do I find these sounds?

Initially, I thought of being methodical and compile a list, order everything scientifically in categories like organic or inorganic, material type and texture (metal, wood, plastic), and so on. Subsequently, based on this systematic list, I could then start the hunt for sounds.

The DIY-improviser in me never compiled such list. I simply started to collect the sounds each time I had the occasion to. It felt more natural and allowed more flexibility. This eventually delivered very rewarding results. The raw sounds were collected at three main locations: a junkyard close to my home in Wallisellen, the trash collection/recycling point at ZHdK (Figure 14), and various trash bins around ZHdK's studios.

It was a cool hunting process. Every new visit to these locations yielded new discoveries. It was a constant evolving biotope. It reminded me of when, as a child, I visited the electrician company my father worked for. There was a big box in the workshop, always full of all kinds of rubbish, broken parts and old telephones. I would spend hours digging through that box, fascinated by each item I would find.

To record the sounds, I used a Zoom H5 Handy Recorder, often combined with a Geofon and a contact microphone. It's a simple but effective setup to capture the natural sound of the objects as well as close ups. I would mainly handle the object either with my bare hands, or by using sticks and mallets. In this process, for each found item, I would record a few takes of the different sound textures

I was able to generate on the spot. Most of the sounds were recorded outside. This is also part of my aesthetical approach. The surroundings where these objects are found, are an important part of their sonic identity.



Figure 14 ZHdK's recycling point

For example, a metal box can simply be played like a percussion instrument. But if instead, it is rubbed with the palm of the hand, textures and drone-like sounds can be generated. This part needs a lot of ingenuity and many trials and errors! The easiest sounds to find were percussive and textural sounds. I had a tougher time finding tonal and harmonically interesting sounds.

A total of about 30 minutes of recording were collected. This may not seem like a lot, but the subsequent editing phase created about 225 individual sound samples. I did simple editing to remove unwanted clicks and background noise. Some textural sounds were cut so that they could be played as continuous loops. I barely processed the samples during this phase. Everything is kept as clean and close to the original as possible. I believe this approach gives the best foundation for manipulation and processing. The material retains its own character and liveliness. In my approach to field recording, the sonic fingerprint intrinsic to these materials is what makes this practice so appealing. It allows me to collect sounds that are otherwise impossible to find with any other means.

All these samples are then fed into my trusty Elektron Digitakt, an 8 voice digital drum computer and sampler device. Here is where I start to manipulate the original material into new sounds, which is used to create music and soundscapes.

The Digitakt is a powerful device which allows me to manipulate sound samples in many different ways. It can simply change pitch (with a range between +2 octaves down to -6 octaves), forward or reverse play (with a loop option, which is very handy, so that Digitakt can be transformed into a sample-based synthesizer). Also, the device allows me to internally resample any sound (or also more

sounds at once), so this gives a lot of potential to modify even further any kind of sounds that are already transformed.

SOUND EXAMPLE 19: Few examples of junk sounds before and after manipulation

https://soundcloud.com/jgilardini-music/junk_digitakt_manipulations

One could argue that this very same processing could also be done with a laptop, by using programs like Ableton Live or MAX MSP. These means may deliver more drastic results. But there are some reasons why I favour the Digitakt. As soon the samples are loaded into the device, it allows me to work without the need for a computer. It's a compact device I can take everywhere. For rehearsal purposes, I can connect it to whatever PA is available. And while rehearsing with the dancers, I can instantly rearrange sounds and tracks and come up quickly with new results.



Figure 15 Field recording junk

4.4. Rehearsal phase

The rehearsal process began with a research phase. Manning and the dancers developed the movements as a group. They also created movement in relation to the props (seesaw bench, car wheels, cloth).

My research was about sound manipulation. Beside generating sounds, I created as much material and sketches as possible. My sound aesthetic must consider and fit what the others are doing. It's a dialogue that can unlock the full potential of the creative process. Manning and the dancers can have an overview of what's going on and begin to interact with the prototype proposed, and vice-versa. In this initial phase, I delivered a collection of about eleven sketches, each with a length between 2 and

10 minutes. A full palette of possible scenarios, ranging from ambient-drone textures to more danceable and rhythmical pieces.



Figure 16 Manning and Marta rehearsing on the seesaw

At this stage, I was working solely with a stereo setup. But many sounds had already a quality and the potential to function very well in a multi-channel/immersive setup. Therefore, I was contemplating the idea of using a quadraphonic array of speakers for the live performance. This project would be the perfect occasion to work with a full immersive audio setup. And I felt that this was an opportunity to use sound design to unlock another dimension in the performance. As usual, I took part in as many rehearsals as possible. I played and tested the music together with the dancers. I also fine-tuned sounds to adapt to the dramaturgical structure that slowly started to materialise.

The slowness of Manning's chorographical process soon became worrying however, not just for me, but also for the dancers. For quite some time, nobody was able to predict what the structure of the choreography would be. This was a challenging part of the collaboration. I decided to skip the idea of sensors on the props because I needed to simplify and counteract the apparent uncertainties. I could concentrate only on the score and prepare the immersive quadrophony. More time passed. Finally, two weeks before the premiere, we were able to achieve a clear running order of the performance's dramaturgy. This further delay totally blew the timeline that I needed to record a structured piece; hence the quadrophony plan was also gone. I took this turn of events as a challenge and an opportunity. The only possible way to enhance this performance while keeping its format captivating was to play live together with the dancers!

4.5. Live performance

The decision to play live felt very natural. Having followed the full rehearsal process, I already developed a solid bond with the crew. I also had a profound knowledge and feel of the movements

and the piece as a whole. It was just a matter of solidifying the choreography structure and clearly understanding the points for interaction with the dancers.

The sound setup was kept as simple as possible, and I used the same devices I was already using during the rehearsals. I wanted to able to trigger and mute single sounds at will and to be able to create textures and drones.



Figure 17 Live setup with the Digitakt, a stereo looper and my performance notes

Performing together with the dancers was a wonderful and intense experience. We mapped out a plan to communicate, agreeing on precise cues to be followed. This was creatively rewarding. It was an open collaboration and dialogue between the dancers and me. So, we came up with two types of cues: music and dance cues.

The final performance turned out much more interactive than we expected. The interplay between dancers and sound became a very intricate exchange. It was an engaging dialogue. At times, sound would lead the dancers, but also vice-versa. There was a wonderful synergy and the connection we developed during months of rehearsal paid off. The fact that everything was played live gave the choreography a certain spontaneity and lift, something that otherwise would have been lost with a structured recording. It was elastic. We could interact and take things as they came along.

It's not the first time I had performed live in this context. But it is more of a novelty than a regular occurrence. Often, producers expect music and sound design to be ready made. It's a simple solution but it lacks that warmth and touch a human hand can provide.

Live performance of sound design has a lot of potential. It introduces many layers of interaction and can unlock new solutions. What I cherish the most, is that it can have a certain level of unpredictability, as not always are the results completely replicable. The two live performances of

Hard Boiled Wonderland, though sharing the same structure and dramaturgy, were slightly different, as the interaction between myself and the dancers was not exactly the same both times (in a good way).

VIDEO: *Hard Boiled Wonderland's* premiere, 9th May 2025, The Valley, Kempthal (CH)

https://youtu.be/0fWz16slies

4.6. Dancer's feedback

Since this work was conceived collaboratively, it makes sense to finish this chapter with thoughts from my fellow dancers and to include their viewpoints (for the full questionnaires see Appendix). I asked Manning, Marta, Vanessa, Lucio and Simon to share their experience. Simon was involved at the beginning of the project but due to an injury, was substituted by Lucio.



Figure 18 The dancers during the performance

The first (and obvious) question I posed was how important sound and music are in a dancer's daily routine. Everyone agrees that sound is a very important part of their life and craft. It inspires and helps shape timing, atmosphere, and presence on stage. Manning goes further in greater detail, stating how much she specifically wanted to work with a sound designer for this piece, one who would be willing to experiment with ambient and texturized soundscapes, something that conventional music may not fully achieve. The soundscapes created for the piece did indeed have a focusing effect on the dancers. Already during rehearsal, these sounds helped the collective understand which direction the choreography was to take. The organicity and dynamics of the soundscapes translated emotions into movements. Sound and rhythm were also effective catalysts to understand how the different props used on stage could be interacted with.

For Manning, it was very assuring to know I already had experience working in collaborative contexts. Everyone on the team approached the project with an open mind towards experimentation and more importantly, establishing a kind of shared language and dialogue across disciplines. In this regard, my involvement and understanding of everybody's ideas and needs were a decisive element, one that undoubtedly enriched the collective creative process. My vision and choices were significant for the process of developing the piece. Thanks to the trust and openness by all contributors, we were able to foster a creative synergy that made it possible to achieve a cohesive artistic outcome.

The music and sound design conceived for *Hard Boiled Wonderland* were also crucial for the performers to focus and connect to the flow of a live performance. We were all genuinely in sync because there was an open channel of communication between all of us while performing. This flowing exchange also meant that tiny differences occurred each time the choreography was performed. But it is exactly these nuances that kept the performance fresh and lively. Furthermore, the industrial setting of the venue in Kemptthal seemed to reinforce the aesthetics of the piece and underscored its emotional impact.

The aftereffects of the months spent together rehearing and the consequent interactions between performers, sound design and space resulted in a live performance that was immersive in every sense. Sound, an equal partner, was unmistakably a palpable presence.



Figure 19 Hard Boiled Wonderland crew on stage after the premiere in Kemptthal

5. Conclusion

This thesis started by questioning whether sound design can become a key, integral player in live performance, and how and if it can enhance and transform the perception of narrative, aesthetic, and spatial elements in this context. The reflection and choice of the thesis centred around my experiences, practices and artistic philosophy and trying to connect these with forms of experimentation in sound and key art movements throughout contemporary history.

The historical research in this thesis revealed that there is a legacy which resonates with my creative processes. It is important to sometimes look at the past and take inspiration from earlier genre developments and sound innovators. I am confident this awareness of my predecessors can act as a further push in pursuing unorthodox, sonic explorations.

Reflecting on *Hard Boiled Wonderland* (2025) provided a concrete insight of how my artistic aesthetic and sound design decisions can shape a performance outcome. Sometimes, we must confront limitations while working on productions such as this one with dexterity and a willingness to pivot. Limitations are opportunities that can fuel problem solving and galvanise new ways of (re)thinking about sound implementation and methodology. Furthermore, live performance introduces a valuable malleability, that can make each iteration unique and alive.

Having this fluid mindset is an essential attribute in my path as a sound designer. I value a readiness to experiment and collect sounds. It helps to expand my sonic vocabulary by listening to the world and harvesting found sounds and site-specific recordings. Furthermore, using innovation and technology to manipulate these sounds helps to contour and define a clearer sonic sensibility. This evolves and transforms my creative thinking.

But malleability also means the ability to interact with peoples. Collaboration has played an important part throughout my entire career. I am therefore committed to a strong interaction between all stakeholders in a production. Taking part in countless rehearsals is evident of my belief that these exchanges build creative connections between performers that, in return, unlock greater awareness of the potential to use sound design in innovative ways.

I consider this thesis not so much as an arrival point but more a starting platform for future endeavour. It has shown how sound design is not simply an enhancement of a performance. Sound has the capacity to function as an equal partner within a performative ensemble and to transform creative direction. Sound design can certainly be a performer in its own right too.

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7. List of Illustrations

Title Figure: Still with stage props from Hard Boiled Wonderland performance	1
Figure 1 Guitar and selected pedals in my studio	6
Figure 2 Feeding Crocodiles stage, Theater am Gleis, Winterthur, September 2019	12
Figure 3 Main rehearsal in a round stage setup and minimal props	14
Figure 4 MAX MSP patch used for Wäre das Wetter nicht umgeschlagen	15
Figure 5 FMOD patch used for Wäre das Wetter nicht umgeschlagen	16
Figure 6 Der Spieler's actors Miriam Japp and Antonio Ramon Luque on stage	17
Figure 7 Foley recording session at the Grand Casino Baden	18
Figure 8 Der Spieler's speaker setup	19
Figure 9 Pro Tools Mono to Quadrophony rendering	20
Figure 10 Theatre sound machines, from Stage Sounds (1904) by Harley Vincent, photographs b	y
George Newnes, Ltd. Left to right: Wind Machine, Rain-barrel, board to imitate horses' hoofs	23
Figure 11 Théâtrophone, 1896 lithograph from the Les Maitre de L'Affiches series by J. Chéret	23
Figure 12 Stills from Lara Wedekind's In the Beginning	31
Figure 13 Einstürzende Neubauten live on stage with their DIY instruments	33
Figure 14 ZHdK's recycling point	36
Figure 15 Field recording junk	37
Figure 16 Manning and Marta rehearsing on the seesaw	38
Figure 17 Live setup with the Digitakt, a stereo looper and my performance notes	39
Figure 18 The dancers during the performance	40
Figure 19 Hard Boiled Wonderland crew on stage after the premiere in Kemptthal	41

8. Appendix: Dancers' opinions

8.1. Manning Dong

When discussing our collaboration, I wish to return to the perspective of exploring the relationship between music and dance, or sound and movement. How has this multi-dimensional collaboration influenced my creative process?

Whereas pairing a complete piece of music with a complete dance might yield a wondrous synergy, the collaboration with Joel and Linus on this work has been more like a woven fabric. From the initial conception of the work, rather than relying on a complete piece of music or melody, I sought to collaborate with a sound designer to undertake experimental explorations. The inspiration drawn from my interactions with Joel during the creative process and the resulting content cannot be overstated. This approach has imparted distinct textures to the visual presentation of the dance piece and the design of its movements.

In our collaboration, the initial conceptual discussions and exchanges proved as vital as our physical presence during production. Even before meeting Joel, his work style greatly intrigued me. His compositions seemed to cultivate expansive, unfolding soundscapes, immersing me in a sense of reverberation or stillness within a particular space. I also learned of his prior experience collaborating with choreographers, suggesting our partnership would likely proceed smoothly. During the conceptual phase, I shared my ideas with Joel - this was a preliminary discussion stage. I wished to express a sense of uncertainty: the uncertainty inherent in the relationship between humanity, social systems, and power structures. My conception of the stage was sparked by the installation 'Seesaw'. I find the expression of the body within machinery or installations utterly captivating. Subsequently, we settled on the idea of assembling the stage installation from diverse materials: planks, tyres, silk, towels, and so forth. This symbolises the collision between mechanical, industrial qualities and soft, malleable ones. After exchanging these ideas, the fundamental tone of the work began to crystallise.

Joel's contribution to this piece evoked a sense of remoteness, shadow, and even weightiness. During the initial movement exploration phase, we began using music demo. This creative process also saw me incorporate significant personal emotions and experiences into the work. The connection between mood, memory, and the body is profoundly individual. Consequently, the integration of music and sound during movement exploration had a more immediate impact on each dancer, manifesting tangibly in their physicality and discovery - akin to an unconscious influence. Through this exploration, they gradually defined personal themes, subsequently revisiting these with the composer. I greatly appreciate Joel's consistent participation and observation throughout our rehearsal process. As the dancers further developed their movements, the composer could derive more concrete information from initially abstract concepts, enabling us to discuss further framing and adjustments. For instance, the ping-pong ball sequence at the work's conclusion emerged from our improvisational attempts, using sound to render the visual effect more three-dimensional. These newly incorporated

or potentially added elements require constant testing. The decision-making between choreographer, musician, and stage designer occurs almost simultaneously in this work, which I believe is essential. Specific sound elements-metallic, sometimes heavy, sometimes light-impart a more dynamic and uncertain quality to the movement. This resonates with the tyres on stage and the dancers' attempts to control their bodies' movements within the installation. Our communication during rehearsals unfolded directly through movement and music, a process of constant giving and receiving, of perpetual inspiration. The work's language thus became increasingly clear and visible.

The personal experience evoked by the music - for me, perhaps 'darkness', for another, 'tranquillity' - provided another perspective when shared with the dancers. It wasn't merely the dancers' movement exploration; as the choreographer researching, conceptualising, and selecting movements, the music's presence would guide or amplify a, intense feeling within me at that moment. If this constitutes an internal observation, then in subsequent stages, I can revisit the choreography from a relatively objective standpoint. At this point, I can view the interaction between music and dance from a more complete or macro perspective, proceeding with the choreography accordingly. This transition between different states is challenging.

Our trio possesses a distinct experience from the dancers. This exchange of information and sensations between observer and participant strikes me as profoundly remarkable. At numerous junctures, our thoughts and opinions proved remarkably aligned - a 'chemistry' forged through our ongoing collaboration. The performance structure was finalised in the concluding phase. Prior to entering the theatre, concerns lingered that the spatial transformation and technical additions might drastically alter the presentation from its classroom iteration. Yet, the stage visuals and sound design ultimately proved strikingly coherent with the work's essence. Concurrently, the industrial aesthetic of the Kemptthal venue lent itself to the piece. Here, concrete and steel became integral to evoking a sense of loss within the work. Even within choreographed sequences, the dancers' direct interaction with the installations revealed subtle tremors and precise coordination, demanding their full concentration throughout the performance. This was not a "re-created" physicality, but something genuinely unfolding. The composer's live presence extends beyond technical sound operation; he is also an arbiter of aesthetic decisions. We hear improvisational passages flowing organically with the evolving mood and spatial dynamics. Though Joel does not perform on stage, his presence is palpable - he sensitively captures the live information and responds accordingly. The audience's emotions resonate with the music's fluctuations, embodying the organic resonance between improvisation and the energy flow of the immediate space.

8.2. Marta Allocco

Mindset / expectations / result:

When starting *Hard Boiled Wonderland*, I was curious and motivated. I expected it to be a space of experimentation and dialogue across disciplines, and I am happy with the way it grew into a strong and layered performance by May 2025.

Sound and music in my practice:

Sound is very important in my daily work - not only as rhythmic or emotional support, but as a partner in creation. It shapes timing, atmosphere, and presence on stage.

Expectations before working with you:

I didn't have fixed expectations but was curious to see how your sound design would influence the process. I hoped for something immersive and surprising, which it was.

Working together with you:

I felt it was a truly collaborative and generous exchange. You not only stayed open but actively took care of our needs as performers and contributed extremely valuable ideas that enriched the creation.

Likes / dislikes:

I especially appreciated the richness of textures in your music - it created both intensity and subtlety. The transitions felt so smooth and organic that it was almost a pity there wasn't even more material to flow on. Overall, the sound world felt complete and inspiring.

Did the music help focus the choreography?

Yes, it provided a clear structure and a layer of energy that supported our timing and commitment.

Interaction between movement and music:

I often felt a dialogue, almost like a push-and-pull - at times leading, at times following. That exchange made the performance more alive for me. Trust - I trusted you completely; I knew you were there, and I felt you knew I was too.

Sound/music in Kemptthal stage:

The music filled the space impressively. Its spatial qualities enhanced the experience, creating a strong immersive environment.

8.3. Vanessa Spörri

How was your mindset when working on Hard boiled wonderland?

I was very curious about how Manning wanted to transform her idea on stage. There were multiple players involved in the project (dancers, musician, props…) and I was interested in how she managed to put everything together.

What did you expect from the project?

I had no expectations. I felt very thankful to be part of the project and to embrace whatever I will face.

Are you happy with the live performance?

I was very enjoyable to work with all different artist together. This was a very nice experience for me.

How important is sound and music in your (daily) practice as dancer/choreographer?

It is crucial for me. When teaching classes or warm-ups for my projects, I enjoy creating a playlist that guides us through different intensities. When I am alone in studio, I do research or improvisation, or preparing a choreography, I let myself very much inspired by the music. I try to listen to what this piece of music wants to tell and give it a visual voice through my dancing body.

Prior getting to know Joel, did you have any expectations about the music/ sound for HBW?

No. As I was not the artistic leader, I did not have expectations. I am open to what will be proposed and the impact this music has on the piece.

How was working together with Joel?

It was very pleasant. He is a very calm personality. I think, looking back, I would have wished to have more direct exchange with Joel, while rehearsing. For example, to work more specific on one part and talking about how he is creating the music for this part and why. I always like to have background information from different brains/ points of view.

What did you like (and dislike) about Joel's sounds and music?

I loved the part of the ping pong balls (end). This was my favourite music part of the piece. I also loved that he reacted on what was happening on the scene. This created a dialog between the dancer and the musician, what felt very enjoyable for me as a performer. It is never the same, each performance is different, what keeps it fresh and lively.

Did the music help you to focus on the choreography?

Yes definitely. I could hear some of our props in the music, like the balancing of the seesaw or the falling of the Ping-Pong balls.

How did you feel like in the interaction between music and performance? Was there a dialogue?

See answers above

How felt the music on the big stage in Kemptthal?

AMAAAZINGG! It was so great to hear the music loud and with this technical equipment. I could hear even more details of the different sounds.

Other remarks, feedback?

Thank you for bringing your sounds to this project. I would be very happy to work with you again in future.

8.4. Lucio Volcov

How was your mindset when working on Hard Boiled Wonderland? What did you expect from the project? Are you happy with the live performance (May 2025)?

I jumped into the project already started, so I missed the bigger part of the research. This said, for the period I worked on Hard Boiled Wonderland I was focused on understanding the aim of the project and the mind of the choreographer, like this I was able to give my input. I expected to gain something different than my usual, and as I thought that was the case. I know Manning's style is very particular and unique and this made me see certain things from a different perspective. The final result was good, I would never say I'm happy about it because i believe this project could evolve into something more, it has a lot of potential.

How important is sound and music in your (daily) practice as dancer/choreographer?

For me as a dancer music is like my heartbeat, it lives inside of me always. So, when I practice, I rely on it a lot, sometimes too much. I think I use it as inspiration, like a conversation between me and the music, and the results of it can either be the same as always or something different. Music is a focal point for me, because I believe music is everywhere.

Prior to getting to know Joel, did you have any expectations about the music/sound for Hard Boiled Wonderland (HBW)?

Knowing a bit of Manning beforehand I was expecting something Ambiental, for sure electronic and maybe without a rhythm.

How was working together with Joel?

It was fun and inspiring. How he used the sounds he sampled was amazing for me. He was clever with what he needed and even when the information he needed wasn't delivered, he still put up many ideas from which we could choose.

What did you like (and dislike) about Joel's sounds and music? Would change/enhance anything?

I liked how he managed to make every section familiar if something was already seen (seen in the performance I mean), but at the same time different. Maybe something I would have wished more from my side was a part more energetic, where the music was at his fullest.

Did the music help you to focus on the choreography?

The music helped me get in the emotions of the choreography and as I said before about music, I liked that I could speak with Joel while performing just by listening to the music.

How did you like/feel the interaction between movement and music? Do you feel there was a "dialogue/exchange" while performing?

For me there was, maybe not in every section, but that's more than normal.

When final rehearsing and performing on the big stage at Kemptthal, how did the sound/music feel inside that room?

The music filled the space very well for me, I could immerge in it from everywhere, I have to say that I like the music very loud when I dance, so I would have put it louder, but that's just my taste, for the space and the audience it was perfect.

Any other remarks, thoughts or feedback?

When do we work again together?

8.5. Simon Thoeni

How was your mindset when working on Hard Boiled Wonderland? What did you expect from the project? Are you happy with the live performance (May 2025)?

I was happy to work with a team I was very much looking forward to work with. I knew that in the project movement research with scenography was a major part and I was very curious about it. Unfortunately, I got injured during the rehearsals and I could not participate in the performance. I enjoyed watching the show from the outside. There were different objects used on stage. A curiosity that I had when watching from the outside is seeing how the different movement materials coming from the research with the different objects could influence or interact more with each other. Or to see individual movement materials developed more over time.

How important is sound and music in your (daily) practice as dancer/choreographer?

Very important. I feel that music can strongly support or inspire my work and movement research.

Prior getting to know Joel, did you have any expectations about the music/sound for Hard Boiled Wonderland (HBW)?

I started into the project without having a lot of expectations of the music and sound since I didn't know how the role of music and sound would be and what it's function would be.

How was working together with Joel?

I enjoyed working with Joel very much. I felt that he was very open to the development of the process and at the same time made strong propositions that allowed us to build on them and get inspired by them.

What did you like (and dislike) about Joel's sounds and music? Would change/enhance anything?

I liked the fact that they used elements of noises that could be connected to the objects. It was fitting to the universe created on stage that was also strongly based on the presence of the objects. Would I change anything? This is difficult to answer, because the question is connected to the approach of choreography and the style of the piece. Different music and would open different possibilities but for the given process I think that the approach that was chosen by Joel gave a good support.

Did the music help you to focus on the choreography?

I felt that the music of Joel created a specific atmosphere which gave a clear direction to the piece. It was supporting the choreographies and not dominating them. I think that this was useful for the process which was starting from movement research with object research where movement patterns and movement rhythms where strongly guided by the agency of the objects.

How did you like/feel the interaction between movement and music? Do you feel there was a "dialogue/exchange" while performing?

It was supporting the choreographies and not dominating them. I think that this was useful for the process which was starting from movement research with objects where movement patterns and movement rhythms were strongly guided by the agency of the objects and where the choreographic approach was searching for making this agency visible. I felt that the music was giving support in inspiring and sharpening the atmosphere and the quality of the movements that developed from the research with the objects.

When final rehearsing and performing on the big stage at Kemptthal, how did the sound/music feel inside that room?

I felt that the sound (and the objects) worked very well in the industrial setting of the big stage in Kemptthal.

Any other remarks, thoughts or feedback?

It was a pleasure working with you! Good luck with your thesis!

Zürcher Hochschule der Künste Zurich University of the Arts

Declaration of Autonomy Master-Thesis

I hereby confirm that I have written this Master's thesis entitled "Hard Boiled Wonderland - A Quest Into the Rabbit Holes of Sound Design for Live Performances" independently and without outside help.

Any content taken from other sources such as texts, images, audio, graphics, software, etc., whether verbatim or analogous, is correctly cited with full attribution of authorship and source. In addition, all passages created with the help of Al-supported programs are clearly marked and provided with the exact name of the program used and the prompt applied. It is declared how AI tools were used for the translation of my own text, idea generation, brainstorming or similar.

Furthermore, I confirm that the thesis has not yet been published and has not been submitted in an identical or similar form as an examination or final project at another university, educational institution or in another degree program.

I acknowledge that a violation of these requirements may have legal and disciplinary consequences in accordance with § 26 Regulatory Framework for Bachelor's and Master's Degree Programmes at Zurich University of the Arts in conjunction with §§ 8 ff. Ordinance of the Universities of Applied Sciences Act.

With my signature I confirm the accuracy of this information:

First name: Joel

Last name: Gilardini

Swiss matriculation number: 02-915-395

Date: 7th October 2025

Signature: