

Resonant Relationality: Sonic Explorations of a Berlin Holocaust Memorial

by

Elli Bookhalter
BMus., MacEwan University, 2018

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of

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Supervisory Committee

Dr. Alexandrine Boudreault-Fournier, Supervisor
Department of Anthropology

Dr. Daromir Rudnyckyj, Departmental Member
Department of Anthropology

Abstract

This thesis examines how engaging with sound at Berlin's Memorial to the Murdered Jews of Europe (MMJE) can be used to broaden discourses of Holocaust commemoration. Situated in central Berlin, the MMJE is a massive public memorial that is approximately 19,000 square meters in size and consists of 2711 rectangular concrete stelae with space to walk in between. Opening in 2005, it has become a well-known site of contemporary Holocaust memory, as it is regularly visited by tourists from all around the world.

For this project, I spent 17 days in Berlin conducting fieldwork, recording sounds at various locations and times in the memorial. I also worked with 5 research participants, each of whom shared their own reflections and/or audio recordings displaying the different ways in which they relate to the sounds they encountered at the memorial. They were asked to walk around the space, actively listen and identify the sounds they heard, and share their thoughts on the experience. Each participant was invited to upload their contribution to a website (www.mmjesounds.org) where all of their work can be appreciated.

This project demonstrates that much of the current discourse surrounding Holocaust commemoration is lacking in how the modality of sound is engaged with at existing sites of Holocaust memory. Using sonic and musical metaphors as well as soundscape compositions, this thesis explores various ways in which Steven Feld's *acoustemology*, or knowing through sound, can be used to broaden these discourses. At a time where there are fewer and fewer Holocaust survivors to tell their stories, expanding our understanding of how public Holocaust memorialization is related to and engaged with is more crucial than ever before.

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From the bottom of my heart, thank you all.

Dedication

This thesis is dedicated to my late brother Josh. His passion for art, historical knowledge, and constant love and inspiration throughout my life have been integral to my pursuit and completion of this work. I wouldn't be who I am without you, Josh.

Introduction

Haunting echoes of the Holocaust continue to resonate in the collective memory of Jewish people all around the world. The Holocaust, known by many Jews as the Shoah, describes the industrial scale genocide of European Jewry during the Second World War (Krell 2019, 3). From 1941 to 1945, approximately 6 million Jews were systematically murdered throughout much of German-occupied Europe in what was termed 'the final solution' by the Nazis. Though it occurred within the span of 4 years, the Holocaust came as a result of centuries of systemic antisemitism in Europe, which was then exacerbated by Hitler's rise to power throughout the 1930s (Cesarani 1996, 2).

While the Holocaust is widely considered to be one of the darkest chapters in modern history, it can be difficult to comprehend its scale in conjunction with the individual experiences of those who have been impacted by its horrors. Collective memory, intergenerational trauma, and temporal proximity emphasize the closeness and immediacy Jews feel with the perceptually unimaginable pain endured during the Holocaust. In both the Jewish homeland and diaspora, commemorative spaces are attempting to bridge this gap by acting as "sites of community gathering in which the repertoire of memory is rehearsed, enacted and (re)produced" (Hughes 2018, 280). One such place is Berlin.

Once the epicentre of the Third Reich, Germany's capital city of Berlin is home to a multitude of memorial sites, commemorative spaces, museums, and art installations relating to the Holocaust. Such spaces include Jewish Museum Berlin, *Stolpersteine* (stumbling stones), and the Memorial to the Murdered Jews of Europe. Due to the multisensorial and spatial variability

of these spaces, tourists and locals alike are intended to be provided opportunities to “identify with other people’s pain, adopt their memories, empathize with their suffering, re-enact and work through their traumas” (Simine 2013, 1).

In such institutions and spaces that engage with historical and ongoing memory production, the modality of sound remains a largely undervalued sensorial constituent in academic and public discourses surrounding the Holocaust. Addressing the sonic in public memorials and art installations necessitates critical discussions of mediation, embodiment, and knowledge. It has become widely established that “individuals’ relation to sound in the everyday spaces of the city tends to be one of distraction rather than attention” (Tonkiss in Bull & Back 2006, 304). As such, by engaging in practices of active listening, people can rethink their relational experiences in places of public Holocaust memorialization. Doing so however, necessitates addressing ocularcentrism and how its phenomenological prominence has overshadowed sensorial engagement throughout history, as well as in academic and public discourses today.

Ocularcentrism: Deconstructing the Hierarchy of the Senses

As defined by the Oxford English Dictionary (2023), ocularcentrism is a term used to describe a “perceptual and epistemological bias ranking vision over the other senses” (Para. 1). In the social and natural sciences at large, this phenomenon is nothing new. In fact, many argue that ocularcentrism dates all the way to back Hellenistic thinkers of ancient Greece who planted the seed for what became known as western thought. The emphasis on sight is particularly evident in much of Plato’s writing. For example, in the *Timaeus*, he purports visual favoritism as

he distinguishes between “the creation of the sense of sight, which he grouped with the creation of human intelligence and the soul, and that of the other senses, which he placed with man’s material being” (Jay 1993, 26).

Fast forwarding to the 17th century, several precepts perpetuated by philosophers of the Enlightenment, such as Descartes, include reflection, observation, objects, and subjects. Evidently, these principles are profoundly couched in the visual, implicating a visually dominant sensory hierarchy and otherness. As such, with considerable justification, “we can characterize western culture as an ocularcentric paradigm, based as it is on a vision-generated, vision-centred interpretation of knowledge, truth, and reality” (Kavanagh 2004, 446-447).

Today, academic discourse remains overrun by visually exclusive metaphors and epistemologies. With their etymological roots remaining largely unacknowledged, terms such as ‘outlook’, ‘point of view’, and ‘insight’ are used without the slightest forethought and are evidently riddled with ocularcentric bias. As a result, overemphasis on the visual dictates, and by extension, limits intellectual and empirical sensory engagement within disciplines such as anthropology, sound studies, and Holocaust studies.

Michael Bull and Les Black (2003) state that “the dominance of the visual has often meant that the experience of the other senses has been filtered through a visualist framework” (2). As such, ocularcentrism, while prioritizing the visual sense, ultimately affects the ways in which the other senses are engaged with. Taking a critical stance on sensoriality in the context of memory performance can elicit the potential to rethink subjectivity as it relates to Holocaust memorialization. By attuning our ears to the multiple layers of meaning potentially embedded

in the same sound (Bull & Black 2003, 3), doors will open to the epistemological nuances of many different sounds.

By placing a strong focus on sound in this work, my goal is not to completely disregard the visual sense entirely, but rather provide a broader sensorial framework that can more completely encompass the ways in which people relate to Holocaust memorials. As such, I will introduce the notion of *acoustemology*, a concept first developed by anthropologist Steven Feld (2015) to address sound as a way of knowing (12).

Theoretical Framework: *Acoustemology*

Merging the words ‘acoustic’ and ‘epistemology’, acoustemology was first applied by Feld in his ethnographic fieldwork with the Kaluli people, who inhabit the Bosavi rainforest in Papua New Guinea (Feld 2015, 15). During his fieldwork, he learned that their environmental perception and basis of knowledge was grounded in sonic embodiment, dethroning the frequent western embedment of vision as the dominant human sense. The theoretical body of acoustemology is fully realized with relational ontology; “the conceptual term for the position that substantive existence never operates anterior to relationality” (Feld 2015, 13). For context, relationality “invites us to see the world as the movement of relationships between things rather than the things themselves as static or quasi-static structures, [echoing] the need of human agency to constitute and reconstitute itself out of basic existential condition of deferral, dispersion and unfoundedness” (Cooper 2005, 1708). As such, Feld stresses the necessity of a relational ontological framework to consider that actors and their environments are frequently in relation as opposed to functioning and existing separately. Acoustemology thus implies a

connectedness of being and knowledge as a means of an ongoing interactive process of participation and reflection (Feld 2015, 14).

To sonically enrich his research methodology, Feld incorporated the use of field recordings to come to many of his acoustemological conclusions. “It is this shift of perspective toward listening and recording that led Steven Feld to delve into the ‘anthropology of sound,’ and what he later called an ‘anthropology *in* sound’” (Boudreault-Fournier 2020, 159). To be able to conceptualize the notion of knowing through sound, it is imperative to position oneself within the sounds as opposed to standing outside and ‘looking’ in, as is implied etymologically by “anthropology of sound”. This was crucial to Feld’s ethnographic approaches to the acoustemological framework of the Kaluli people of the Bosavi rainforest.

The concept of acoustemology was initially proposed as a cultural phenomenon. However, recent critiques have brought Feld’s acoustemology into focus as something that warrants discussion at the individual level in addition to broader socio-cultural contexts. In an interview with fellow sound scholar Tom Rice, Feld is asked about the potentiality of broadening acoustemology beyond a culturally centered phenomenon. Rice’s critique to intersect individuality with cultural acoustemology affords more space for exploring the ways in which “individuals have their own personal tastes and their own acquired associations with sounds” (Rice & Feld 2021, 121). Feld admits that the idea of knowing through sound as a purely cultural model is where much of his early work with the Kaluli fell short, as it runs the risk of cultural homogenization and fails to accommodate the nuances of individuality. To summarize their discussion, they designate acoustemology as a phenomenon that must reside “at the

conjunction of anthropology and philosophy” (129), and as such, must evolve and reach beyond one specific disciplinary agenda.

Further critiques and new ideas surrounding acoustemology can be found in *Earshot* by Bruce Johnson (2023), a professor of music and cultural history at the University of Glasgow. Johnson applies acoustemology to conceptualize the seemingly imperceptible sonic links between the early modern period up to present day in the context of contemporary public policy in predominantly western countries. The overarching argument throughout his book is that “sound saturates and influences culture in ways that are often less obvious, but nonetheless decisive” (Johnson 2023, 9). Like Feld’s initial proposition of the term, Johnson’s acoustemological approach is one that engages knowing through sound as a culturally specific phenomenon, and less so about individuality as suggested by Rice. He does, however, put a stronger emphasis on sounds that are less likely to be given attention, as he claims it is “more revealing of power than ‘the usual suspects’ such as the impact of modern traffic noise or a noisy dance club” (9). To summarize, Johnson’s approach to acoustemology is one that seeks to address the nature of perception as it relates to the sounds we do and don’t turn our ears to in the modern world.

As demonstrated by these two examples, the ways in which knowledge is produced through sound are undeniably multifaceted. Such theoretical critiques and alternative approaches to acoustemology prove the potential for its interdisciplinary reach and adaptability. Building from Feld’s groundwork, where these ideas meet is how I will engage my research. There remains a clear gap concerning the intersections of knowing through sound and the relationality of Holocaust memory. To bridge this gap, this thesis applies an acoustemological

approach to sonic experiences of Berlin's Memorial to the Murdered Jews of Europe (MMJE).

Thus, my research questions are as follows:

- 1) How can an acoustemological engagement of the MMJE contribute to discourses of Holocaust commemoration and representation?
- 2) How can recording, editing, and listening to soundscapes elicit relational experiences of public memorials?

The concept of acoustemology brings with it the potential to explore the relationality of history, personal and collective memory, and trauma by way of sound as it is experienced at this memorial. The following section introduces the memorial, its history, its unique spatial configuration and positioning, as well as its complex sonic environment.

About the Memorial

The Memorial to the Murdered Jews of Europe (MMJE) is a massive public Holocaust memorial located in central Berlin. It is situated in the city's Friedrichstadt district east of the Tiergarten and south of both the Reichstag building and Brandenburg Gate (Young 2010). It is no coincidence that the memorial stands in a space of undeniable historical and political significance, as it is located within walking distance from where Hitler called for the eradication of European Jewry (Mommsen 1997, 156-157). Furthermore, the memorial is constructed on a stretch of land that for a long time was a no man's land between post-war East and West Berlin until reunification in 1989. The memorial is also located on one of the most travelled tourist routes in the city today (Gross 2006, 74).

The MMJE is approximately 19,000 square meters in size and consists of 2711 rectangular concrete stelae with walking space in between. The piece was designed by Jewish American architect Peter Eisenman in 2003. While the site itself has resulted in a multitude of interpretations, Eisenman has stated that “the stelae are designed to produce an uneasy, confusing atmosphere, and the whole sculpture aims to represent a supposedly ordered system that has lost touch with human reason” (2021). The site’s information centre is located on the east side of the memorial and includes a history of the Final Solution and holds the names of approximately three million victims of the Holocaust, which were obtained from the Yad Vashem World Holocaust remembrance centre in Jerusalem.



Photo 1: Outside view of the memorial – Photo by Elli Bookhalter



Photo 2: Inside view of the memorial – Photo by Elli Bookhalter

Based on its design and ways of public engagement, the MMJE has been widely recognized as a countermemorial, wherein the spaces between the stelae are as important as the stelae themselves (Niven 2013, 76). Countermemorials, which emerged out of West Germany in the 1980s, are “memorial spaces conceived to challenge the very premise of monuments – to be ephemeral rather than permanent, to deconstruct rather than displace memory, to be antiredemptive” (Lupu 2003, 131). With relationality, abstraction, and subjective interpretation as central tenets to their representation, countermemorials bring the nature of memory performance into question. Throughout Germany in particular, countermemorials have become entwined in debates on a new national identity and on the notion of ‘working through the past’ (Lupu 2003, 131).

The countermemorability of the MMJE emerges through the various ways in which visitors act in and around it as a site of memory. It is a living space in which memory comes

alive, while simultaneously conveying “the futility of attempting to represent the unrepresentable” (Gould & Silverman 2013, 793). Thus, countermemorials such as the MMJE inevitably challenge preconceived notions and dimensions of sensoriality in commemorative spaces.

The sonic implications of the MMJE’s location in the middle of Berlin speak greatly to the relations between a space of mediation, commemoration, and introspection and the plurality of sounds, silences, and noises of the city. Because of its lack of stated meaning and the relative impossibility of representing the scale and experiences of the Holocaust (Dekel 2009, 71), the MMJE instead provides visitors with the opportunity to consider sound as a sensorial dimension for its engagement. The following section introduces the methodological components of this project, and will address their significance in anthropology, sound studies, and Holocaust studies.

Methodology

Prior to addressing specific research methods, I would like to position myself in the work. As a musician with a Jewish background, my academic interests are undoubtedly inspired by the ways in which these aspects of my identity intersect. During the initial stages of my musical career, my experiences and education were largely shaped by institutionally embedded conceptions of music as an art form. Thus, I later developed an interest in the subjectivity of everyday sonic experiences in which “the ontological distinction between music and sound is disturbed” (Born 2013, 5). I became increasingly interested in deconstructing the culturally

cemented boundaries between the two, ultimately setting the stage for my scholarly pursuits in the world of sound-based anthropology.

As an Ashkenazi Jew, the events of the Holocaust have had a devastating impact on both my family and the Jewish people as a whole. Having learned about family who perished in the Holocaust was devastating and made me feel a strong sense of responsibility to contribute to my community. As such, I began turning to issues facing contemporary Holocaust education and memorialization in public and academic discourses.

Coupled with my newfound interest in anthropology, I began to think not only about what may have been lacking in terms of Holocaust education and memorialization, but about *how* these topics are engaged with in the first place. I became cognizant of significant gaps in the ways in which public Holocaust memorials are understood within the context of everyday sounds. Thus, to address these gaps, I will introduce and discuss the methodological components employed throughout the course of this project.

Fieldwork

Beginning March 2023, I spent 17 days in Berlin conducting fieldwork at the MMJE. During my time there, I used a Zoom microphone to record sounds in various locations around the memorial. Some recordings were done while standing still, and others while walking throughout the space. These visits to the memorial took place at various times and days of the week. The other half of the fieldwork involved working with research participants, each of whom shared their own reflections and/or sound recordings; demonstrating the ways in which they relate to the sounds they encountered at the memorial. Once each participant completed

their contribution, it was uploaded to a website where their work can be heard and engaged with (www.mmjesounds.org).

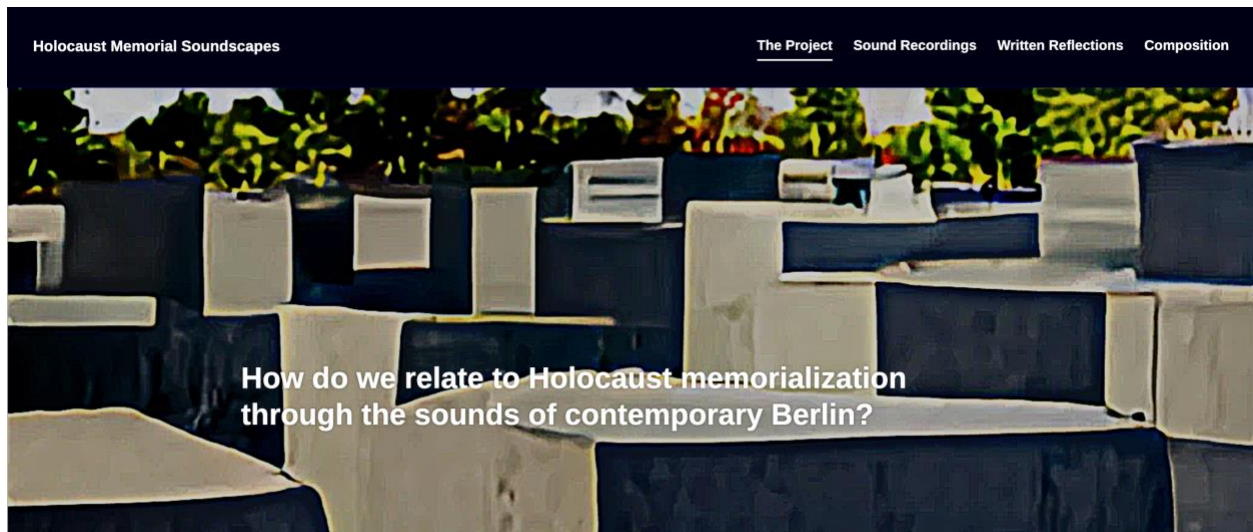


Fig. 1: Website home page – Screenshot by Elli Bookhalter

I created this website for the purpose of sharing project information and to collect recordings and written reflections of participants. Having a website also allowed me the convenience of sharing this project to various social media discussion groups, broadening the scope and diversity of potential participants.

Research participants included 3 locals (1 Jewish), and 2 tourists (both Jewish). They were asked to visit the MMJE, walk around the space, actively listen to the sounds they heard, and share their thoughts on the experience. With respect to anonymity, I will refer to each participant throughout this thesis as participants 1 through 5, in accordance with the date their contribution was uploaded to the website. I will now briefly introduce the various ways in which each participant chose to engage with this project.

Participants 1 & 3 were both tourists visiting Berlin. They both chose to accompany me on two of my visits to the MMJE. During these visits, I would wait on the outskirts of the memorial as they walked throughout the space for varying lengths of time. Since these participants wanted to focus on written reflections, recording was not involved in either of their visits. As such, once participant 1 completed their walkthrough, they chose to write their reflections on paper at a bench outside the memorial. Participant 3 on the other hand, waited until they arrived back at their place of residence to write their reflections. Participant 2 is a family friend, local Berliner, and second-generation Holocaust survivor. They decided that they wanted to write a written reflection based on their past experiences at the memorial. I had met with them to introduce the project, but their written contribution was done on a later date. Participants 4 & 5 had both lived in Berlin for about 8 months at the time of this project. I met with them at a coffee shop after they saw my project listed in a Facebook group. After our meeting, they uploaded several sound recordings with written reflections in the coming weeks, with participant 5 uploading a second time after a second visit.

By the end of my fieldwork, I received a total of 6 written reflections and 4 sound recordings. Some written reflections were as short as 2 sentences, while others were several paragraphs long. The audio recording lengths varied greatly as well, ranging from 3 to 7 minutes in length. Once every participant had submitted their contributions, I began the process of data analysis.

Data Analysis

My methods of data analysis were predominantly inspired by Alexandrine Boudreault-Fournier's work on the Echo project. Briefly, this project is an ethnographic initiative that aimed to unite Cuban musicians from both Montreal and Santiago de Cuba using pre-recorded video and audio with the goal of creating an original audio-visual piece; what Alexandrine terms a virtual "cartography of encounter" (Boudreault-Fournier 2016, 135-136). In the Echo project, she assumes the role of a creative agent, or producer researcher, critiquing the ethnographically frequented notion of research through observation as an exclusive methodological means of data analysis. Though the scope, context, and means of participant engagement in my work is vastly different, the website I created functions similarly as a digital space of encounter for myself and the participants of the project.

Having this space as a creative jumpstart, I was able to connect the thoughts and recordings of the participants with each other in relation to my own experiences in the field, eliciting the inspiration for each of the following chapters' theoretical framework and the creation of soundscape compositions as an auditory means of dissemination. As such, the analytic dimensions of this project have been engaged with through anthropological notions of sensorial and collaborative ethnography. I will now discuss how soundscapes have been used as an interdisciplinary research method and how they contribute to the acoustemological framework of this research project.

Soundscape

First popularized by composer and acoustic ecologist Murray R. Schafer in the 1970s, the term soundscape has come to be made up of numerous non-mutually exclusive definitions. Initially proposed as “an environment of sound (or sonic environment) with emphasis on the way it is perceived and understood by the individual, or by a society” (Truax 1978, para. 1), soundscape has also come to encompass composed, arranged, or orchestrated original sonic pieces based on auditory recordings of a particular place (Schafer 1994). Central to Schafer’s philosophy is the notion of natural sounds and manmade sounds, the former often associated with silence and non-human sounds and the latter usually referred to as ‘noise’. Broadly, Schafer has underscored a critique tracking humankind’s gradual aural descent from pure (natural, rural) to corrupted (industrial, urban) sound, from holy silence to unholy noise (Schafer 1994, p. 254).

Such an idea has undeniably influenced sonic ecological scholarship for the last 50 years, ultimately foregrounding the notion that sound is “an indicator of how humans live in their environment” (Boudreault-Fournier 2020, 160). It goes without saying that Murray Schafer has also had a significant influence beyond the academy, such as in artistic circles and environmental activist groups. At the same time however, over the course of sound studies’ disciplinary evolution, Schafer’s soundscape philosophies have been subjected to multitudinous critiques within the scholarly world.

One such example is addressed by Ari Kelman, a professor of religious knowledge transmission at Stanford University. Kelman’s overall critique is that the term soundscape has become so widely disconnected from its originating scholarly roots to the point that its exact

definition is in a perpetual state of flux. In doing so, he proposes the root of the problem lies in Schafer's "urgency to silence the noise of contemporary life and train his ears and those of his students to tune out sounds that don't matter, forgetting that mattering happens in conversation with the soundscape" (Kelman 2010, 231). Evidently, Kelman is highly critical of Schafer's selectivity, as it negates the specificities and complexities that exist within specific sounds.

Similarly, Phil Alexander, a scholar of Jewish-Scottish music relations at the University of Edinburgh, has stated that Schafer's initial delineation of soundscape is both "ideologically loaded and somewhat oversimplified in its grasp of urban modernity" (Alexander 2019, 781). Such a critique highlights Schafer's failure to also acknowledge the nuance, subjectivity, and relationality imbued within the perception of silence, as silence can also be a "harsh mechanism of order and control" (781), such as in schools and courtrooms.

With the origins and critiques of soundscape in mind, the methodological approaches I have taken in my work broadly engage with soundscape through an acoustemological lens, or 'knowing through soundscapes'. Rather than focusing exclusively on how people at the memorial contribute to its sonic environment, I am interested in how they relate to it. The following methods of this project seek to approach the complexities of Berlin's urban soundscapes as multifaceted vessels of memory, knowledge, and relationality.

Listening as a Method/Soundwalking

As defined by Hildegard Westerkamp (n.d.), soundwalking is an active listening exercise that "helps us become aware of our immediate acoustic environment. It is also about the

aesthetic pleasures of listening. Listening to sounds we might otherwise have missed; listening to the rhythm of sounds; listening for the unique 'voice' of a city. It's about enjoying the sensual beauty and sheer surprise of sound" (para. 1). After a soundwalk, participants are typically encouraged to recount their experiences by identifying the sounds they heard over the course of the walk, their impressions of these sounds, and if the experience of the soundwalk made them feel a certain way. The broader implications of soundwalking are to recalibrate our sensory experiences of the world for the potentiality of perceiving sonic ecological information that may otherwise go unnoticed.

Given the complex, multifaceted sonic makeup of the MMJE within the context of Berlin's city centre, soundwalking in and around the memorial has proven to unveil undeniably complex auditory information, giving it a central role in the methodological framework of this project. The memorial's unique layout and spatial enormity creates an undoubtedly distinctive environment for soundwalking to take place.

Sound Recording

Audio recordings are occasionally done as a part of a soundwalk, so those who are involved can listen back and potentially uncover sounds they may have initially missed (Aletta et al. 2016, 69). During my visits, I used a zoom microphone to record audio clips throughout the memorial, some of which while walking, others while standing stationary. Considering the sheer size of the memorial, recordings were conducted in different spots throughout the site in accordance with the surrounding sonic cityscape. As demonstrated by Feld, there are undeniable acoustemological implications that arise from field recordings. Boudreault-Fournier

(2020) affirms this idea by stating that “sounds recorded on location are necessary to create rich and complex soundscapes that contribute to the fabrication of ethnographic ways of knowing” (154). Thus, research participants were given the opportunity to submit their own recordings from the memorial, along with their written reflections.

Additionally, each of the subsequent chapters will feature an attached soundscape composition consisting of audio recordings from the memorial. These soundscape compositions will contextualize the theoretical concepts being discussed as a means of engaging with the acoustemological focuses of this work. Recordings that were used in the compositions feature those of the participants, as well as my own. To listen to the compositions for each chapter, a link and QR code to a Soundcloud page will be placed at the top of each section titled ‘Soundscape Composition’.

Thesis Overview

Chapter 1 addresses conflicting issues of silence, noise, and their subjectivity as it relates to sonic experiences at the memorial. As two seemingly opposing auditory constituents, the MMJE problematizes the binary frequently occupied by silence and noise as it relates to Holocaust memorialization. The complexities of said constituents and their acoustemological implications will be discussed in this chapter through the concept of sonic dissonance, as well as notions of ‘inner’ and ‘outer’ sounds.

Chapter 2 presents an engagement of the concept of polyphony as metaphorical means of knowing through sound at the MMJE. This chapter will begin a discussion on rethinking

multiplicity through sound in terms of history, modernity, language, and memory in Berlin as a global city, as well as through the diversity of participants' sonic experiences at the memorial.

Chapter 3 will broadly engage with the musical implications of rhythm as it relates to experiences at the MMJE. In doing so, I will investigate how walking as a form of corporeal engagement with the memorial can be conceptualized by engaging discourses of *rhythmanalysis* with contemporary ideas of Holocaust commemoration and representation.

By engaging with the three above acoustemological themes in my research, this thesis will imbue a critical sensorial and corporeal dimension to this world-renowned Holocaust memorial. Doing so will encourage discourse beyond culturally imposed sensorial peripheries within public and academic spheres. At a time where there are fewer and fewer Holocaust survivors to tell their stories, broadening our understanding of how public Holocaust memorialization is related to and engaged with is more crucial than ever before.

Chapter 1 - Silence and Noise as Mediation for Dissonance in Holocaust Memory

At the Memorial to the Murdered Jews of Europe (MMJE), the ways in which silence and noise are perceived in relation to each other are undoubtedly complex. Silence and noise “circulate not as passive descriptions of sonic phenomena but ideas that inform experience” (Novak & Sakakeeny 2015, 1). For example, what might be considered silence to one person, at one very particular place and time at the memorial, might be perceived as noise to another person entirely, or, as sound historian David Hendy (2013) states, “one person’s irritating din is another person’s sweet music” (325). However, projecting a simplistic binary onto sonic experiences inadequately represents the embodiment of sounds at the MMJE, as demonstrated by participant reflections and recordings from the memorial.

Much of the discourse surrounding the silence and noise refer to extremities pertaining to levels of sonic excess (Hendy 2013, 311). However, based on how participants relate to their sonic experiences at the memorial, understanding the two in such a way provides an inadequate basis for an acoustemological framework of the MMJE. I will critically address how this memorial unveils the inadequacies of silence and noise as a frequently perceived sonic binary in disciplinary discussions. As such, this chapter will answer the following questions:

1. How can sonic experiences of the MMJE disrupt the binary of silence and noise?
2. How can sonic dissonance blur the lines between perceptions of silence and noise at the MMJE?

In addressing these questions, I will outline how silence and noise have historically been understood, defined, and engaged with in both sound studies and contemporary efforts of Holocaust memorialization. I will then open a three-part discussion. The first part of the discussion proposes dissonance as a metaphorical and perceptive phenomenon to deconstruct silence and noise as a binary. Doing so encompasses sonic experiences at the MMJE more adequately, as such an epistemic framework leaves space to take “both individual and group knowledge into account” (Dengah et al. 2019, 440) without actively separating the two. The second part of this discussion will auditorily contextualize dissonance at the memorial with an attached soundscape composition. Lastly, I will intersect sonic dissonance with contemporary discussions of post-witnessing and post-memory as they relate to Holocaust representation through the complexities of imagination and memory. It is the nuances of sonic dissonance that can not only disrupt the binary of silence and noise, but also potentially bridge the multiplicity of discussions, experiences, traumas, and memories of the Holocaust.

Silence

Silence as a sonic property has raised numerous questions regarding both the physical and metaphysical nature of its perception and subsequent interpretation. Prominent sound scholars Samuel Beckett and John Cage have compared searching for silence to searching for nothing, implicating that silence is nothing’s “equally ineffable auditory counterpart” (Smith 2020, 169). Such an assertion opens an inevitably extensive philosophical debate on the nature of human perception as it relates to what does and does not exist. However, if silence is truly the auditory depiction of *nothing*, it might not carry with it the relational capacity to invoke any

sort of feeling or emotion yet unveil knowledge about *something*. In short, if nothing does not exist, then silence too must not exist.

In contrast, according to Salome Voegelin (2010), silence can be more accurately conceptualized as when listening begins:

When there is nothing to hear, so much starts to sound. Silence is not the absence of sound but the beginning of listening. This is listening as a generative process not of noises external to me, but from inside, from the body, where my subjectivity is at the centre of the sound production, audible to myself (83).

Voegelin's temporally suggestive contemplation considers the perceptual nature of silence at the individual level. Such an idea creates space for the simultaneity and mediation of 'inner' and 'outer' sounds. At such a bustling memorial in the centre of Berlin, it can be seemingly difficult to imagine how silence could possibly begin, but the audio recordings and reflections of my research participants suggest otherwise.

In addressing silence from a cultural perspective, one reflection from Steven Feld's research findings in Papua New Guinea is how the Kaluli people interpret bird sounds. In Kaluli ontology, birds are what become of humans once they have achieved death. Translated to 'gone reverberations', the sounds of a bird reflect absence turned into presence (Feld 2015, 16). While this example obviously cannot directly apply to the experiences of visitors at the MMJE, it is evident that perceiving inner and outer silences can be a cultural experience as well.

In the western world, memorials have historically been considered places in which perceived silence is valued as a formality and as a result is placed on top of an ideal sonic pedestal. It has been used to represent "metaphorical absence, a warning against forgetting... a

proxy for death or symbolic precursor to the divine (Alexander 2019, 778-779). Additionally, the act of being silent at commemorative spaces or events has become a way of simultaneously celebrating community and paying respect to the memory of the dead. Ross Brown, a professor of sound at the University of London argues that silence is part of a “humanist meta-narrative: emblems of hope – of a human capacity, after all is said and done, to be solemn, great and universal in times that might otherwise suggest humans to be decadent, violent and trivial” (Brown 2013, 210). Thus, acts of silence can elicit collective reflections as a response to the perceived ‘noisy’ cacophony of modernity.

This act of silence, typically simplified as a lack of speaking, is a prevalent social norm throughout the western world to this day (Aarts & Dijksterhuis 2003, 25). It is demonstrated at spaces and events of memorialization, as well as institutions such as libraries, museums, and art galleries. However, wherever there is human presence and activity, there is sound (Bubaris 2014, 1). Silence, as demonstrated, is what is often used interchangeably with a perceived absence of sound, but the reality is that silence does not truly exist (Ochoa Gautier 2015, 183). Such an idea is a noteworthy consideration as the concept of silence is very often associated with Holocaust memorialization.

In her TED talk on her own experiences with the intersections of music and sign language as a deaf person, artist Christine Sun Kim shed light on the sheer impossibility of silence. She provided a clear visual representation of musical dynamic notation using what she calls a ‘*p* tree’. It can be seen below:

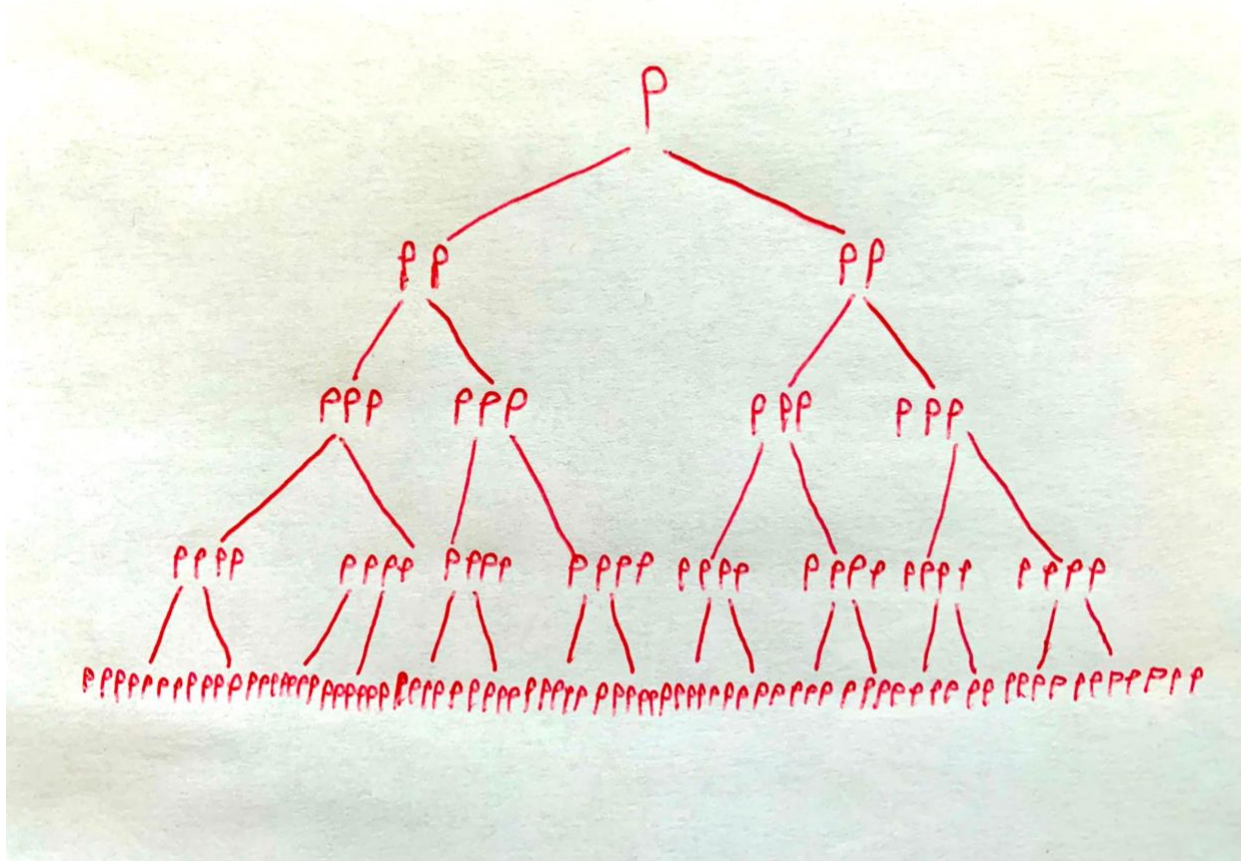


Photo 3: 'p tree' - Drawing and photograph by Elli Bookhalter

In western music theory, 'p' stands for *piano* and is notated on sheet music as an indication for the musician to play softly. To play even softer, another 'p' is added to create pianissimo ('pp'). As evident in Sun Kim's 'p' tree, decreasing a note's volume can theoretically go on and on forever. The conclusion is that no matter how many 'p's are added, they will never ultimately amount to true silence. Silence, more precisely, must be understood as a perceptive and relational phenomenon.

To this day, however, silence continues to be an institutional objective of Holocaust memory in many spaces of commemoration. In such a space like the MMJE, where the bustling city centre of one of Europe's largest cities is central to its experience, such an objective

certainly seems unrealistic. With every footstep, every car, and every conversation, sound plays an inextricable role in the relations of silence and memory. Consequently, it is essential to consider the complex perceptual relationship between silence and its supposed opposite: noise.

Noise

Historically, the concept of noise has been at the centre of deep interdisciplinary fascination. What noise is and how it is evaluated, perceptually and phenomenologically, has been the subject of debate across sound studies, anthropology, urban studies, environmental studies, and other disciplines. Many sound scholars have come to agree that “noise is a crucial element of communicational and cultural networks, a hyper productive quality of musical aesthetics, an excessive term of affective perception, and a key metaphor for the incommensurable paradoxes of modernity” (Novak & Sakakeeny 2015, 125). It is widely accepted that “sound becomes noise when it has lost its meaningful dimension and imposes itself with an aggression that leaves people defenseless” (Le Breton 2017, 71). In sum, noise as a perceptual phenomenon is “a rhetorical device for getting to the heart of sound’s *social* role” (Hendy 2013, 326).

One might ask, why is noise something we would *want* to escape? Due to the overwhelmingly negative discourse surrounding noise, it has readily become synonymous with “unwanted sounds” (Keizer 2010, 3). Historically influential thinkers in sound studies and ecology such as Murray Schafer and Barry Truax have characterized noise as undesirable, often describing it as unnatural, hyper-industrial, and prescient of the finality and consequences of humanity’s environmental destruction. Noise has therefore become a sonic representation of

annoyance and social and psychological damage, yet somehow void of purpose and meaning (Novak & Sakakeeny 2015, 125). Additionally, musician and naturalist Bernie Krause suggests that “noise in all its forms diminishes tragically the range of experience on offer to humanity” (Hendy 2013, 311). Indeed, from an ecological point of view, it is evident that the perception of noise has come to be understood as a sort of auditory pollutant. However, much like silence, it is critical to consider both historico-cultural context and the relationalities of individual perception. It is vital to acknowledge that in order “to understand its impact on lived experience properly, we need to work out *who exactly* considered a given sound wanted and *who exactly* considered it unwanted in any particular time and place and *why*” (Hendy 2013, 326). Furthermore, John Cage (1961) states that, “when we ignore it [noise], it disturbs us. When we listen to it, we find it fascinating (3)”. In short, there resides invaluable knowledge and information within sounds that might commonly be perceived as noise when considering perception and subjectivity.

In what is commonly understood as the sonic antithesis of silence, noise is irrefutably present in experiences of the MMJE and, by extension, in everyday life. As stated, public and academic discourse has become overrun with the perceptuality of noise in a predominantly negative way, particularly in spaces or events associated with memorialization. It is often perceived as disrespectful and interruptive auditory phenomena due to its seemingly dynamic contrast from the previously addressed socially embedded silences desired in spaces of commemoration (Bubaris 2014, 1). However, the ways in which noise is engaged with in a place such as the MMJE is a complex issue of varying points of view and experiences, as it is “an

integral part of the extended acoustic and multisensory experience” (Bubaris 2014, 8) of visitors at the memorial.

Due to the memorial’s seemingly strategic position at the geographical and political center of Berlin, it is forced to contend with the sounds of the city as a part of its sonic and spatial environment. Typically, these sounds might be considered and perceived as a nuisance, and therefore categorically as noise. However, as evident in the participants’ experiences as well as my own, noise itself is an active agent and participant in the ways in which memorialization is performed and experienced at the MMJE. Not only that, but it is actively interwoven and participatorily invokes many of the same feelings as those who perceived silence within the context of the memorial. Such an interwoven auditory relationship can only be summarized and explained by sonic dissonance.

Dissonance

Prior to engaging with dissonance, I will provide a brief outline of its etymological and perceptual opposite: consonance. According to the Oxford Dictionary (2023), consonance can be defined ‘musically’ and ‘formally’. The former being “a combination of sounds of musical notes that are pleasant when heard together”, and the latter being “a situation in which people are peaceful and agree with each other, or when things seem right or suitable together”. These two definitions are not entirely different from each other, as they both embody the situational and perceptive satisfaction of simultaneity. As such, due to its perceptually resolved and satisfying nature, it is clear through the reflections of individuals that consonance cannot adequately idealize silence and noise as they are experienced within the MMJE.

In relative opposition to consonance, dissonance has widely been defined musically as “a clashing or unresolved musical interval or chord” or in formal terms “a lack of agreement”, such as inconsistencies within one’s own beliefs or between one’s actions and beliefs (Merriam-Webster n.d.). Such definitions imply a sense of tension and unresolve. The etymological origins of dissonance can be traced back from Latin in the late Middle Ages, roughly stemming from ‘disagreeing in sound’. However, the term itself has since become widely dissociated from its acoustemologically implicated origins, as it has been forced to adapt to the culturally fabricated ontological division that has arisen between music and sound (Born 2013, 5).

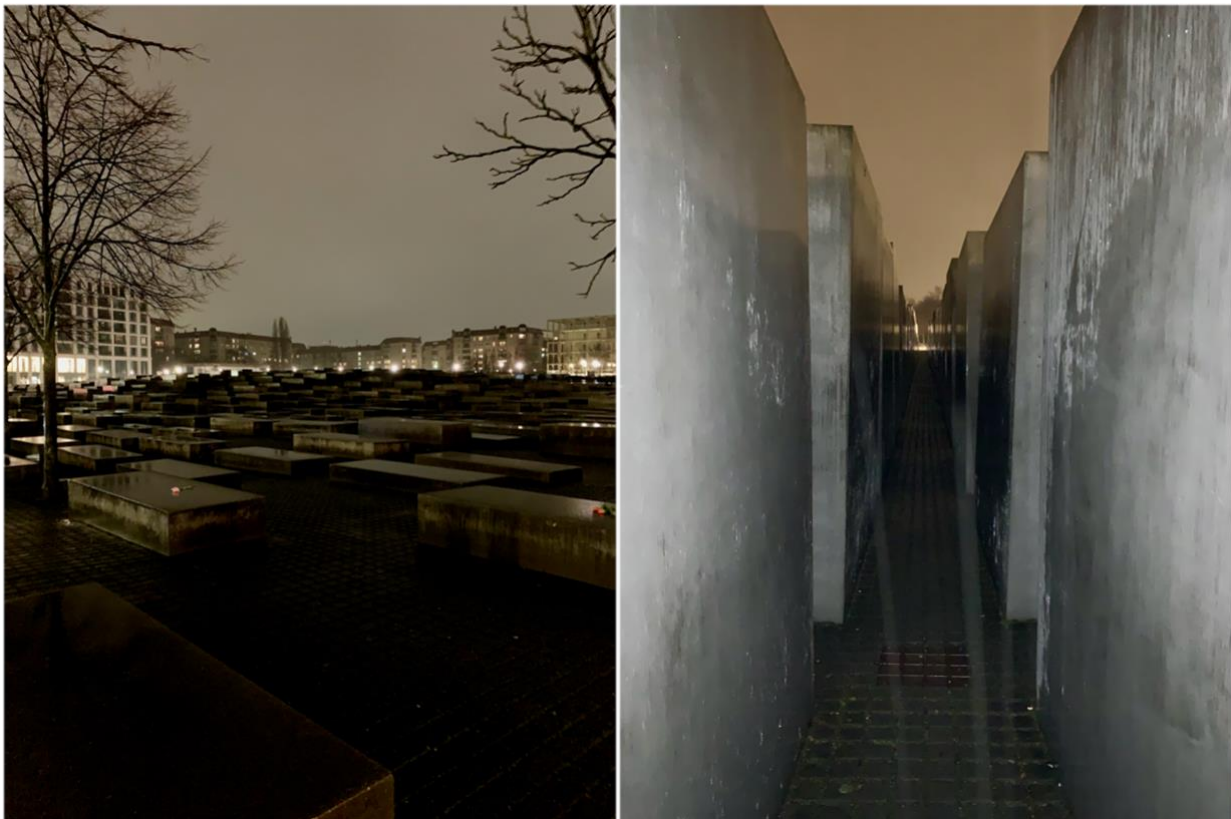
Additionally, there is little acknowledgment of how sonic dissonance in particular affects and is perceived by the individual. Whereas in social psychology for example, the theory of cognitive dissonance is a widely regarded concept that is concerned with the contradictions that occur when one’s personal beliefs do not line up with their actions (Wicklund 2013, 1). Though not a phenomenologically distant concept, sonic dissonance is most often a frequently universalized cultural phenomenon that is applied within an oversimplified homogenous framework. Made from recordings that were taken at the MMJE, I have created a soundscape composition that demonstrates the complexity and subjectivity needed to engage with dissonance as an auditory concept. In the next section I will introduce this composition, analyze the various compositional choices I made, and discuss how it contextualizes experiences of dissonance at the MMJE.

Soundscape Composition



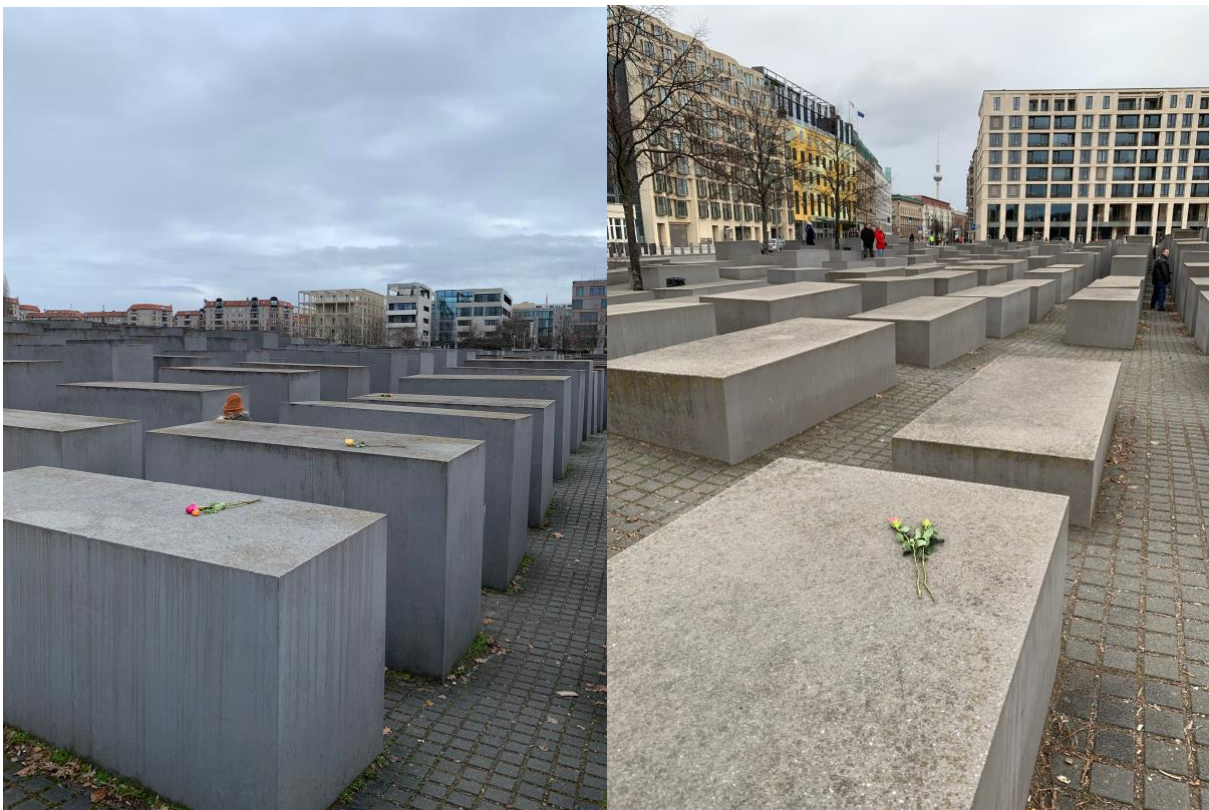
Click here to listen: <https://soundcloud.com/elli-bookhalter/silence-noise-soundscape-composition>

To auditorily contextualize the theoretical reflections I am engaging with; I have included the above link and QR code to a soundscape composition I have created from recordings at the memorial. The first 1 minute and 30 seconds of the composition uses recordings that were taken on a rainy Friday evening. Very likely due to the weather conditions and the time of day, aside from the occasional passerby, there was no one physically present at the memorial. Below I have included some photographs to provide visual context:



Photos 4 & 5: View from Outside (L) View from Inside (R) – Photos by Elli Bookhalter

Much like the photos, the soundscape recordings in the composition were taken on the northwest corner as well as in the middle of the memorial. The rest of the composition (from approx. 1:37-4:30) borrows recordings that were taken on a late Sunday afternoon. The weather conditions were much more favorable, so the memorial was busier than in the first half of the composition. Some photos of my visit that day can be seen below:



Photos 6 & 7: View facing southeast (L) View facing northeast (R) – Photos by Elli Bookhalter

Due to the memorial's design, the acoustic environment varies greatly throughout depending on location, movement, and time of day. Usually, as the stelae heighten towards the middle, the sounds of the city become blanketed and gradually fade into the background. In this instance, Participant 2 describes their inner sounds becoming louder in their written reflection:

There, in the middle, touching the stone, where the steles are more than head high, you are hearing the noise as if it would be behind a curtain. There, I was able to withdraw into myself, let the place make me feel lost, somehow lonely, far from everything and everybody (2023).

This participant's reflection demonstrates the relationality of noise and silence, and how the two come together through individual perception. The implication here is that the act of silence itself is not the only auditory constituent of memorialization, as it has just as much to do with the perception of noise. In contrast, as the composition demonstrates at approximately 1:35, sounds of people walking and talking are often amplified in the middle of the memorial due to greater acoustic isolation and sound waves bouncing off the tall stelae, making the centre of the memorial seemingly 'noisier' at times. Additionally, in the first part of the composition, noises of the city (such as the car horn at approximately 1:11), are much more prominent and disruptive due to the perceived silence that surrounds it.

The purpose of this composition's comparative nature is to demonstrate that whether the memorial is destitute of visitors, the perceptive simultaneity of silence and noise is ever present. This composition proves that regardless of the time of day, day of the week, or level of busyness, silence and noise cannot be divided into a clear-cut auditory binary. It also demonstrates that sonic experiences are not only culturally embedded, but also deeply individual and subjective. Much like John Cage's composition '4:33'¹, the lack of purposefully occurring sounds captured by the recordings demonstrates that perceptions of silence and noise are in a perpetual state of flux that never really begin, end, or resolve. As such,

¹ <https://www.youtube.com/watch?v=rDgHUj8sJaQ>

experiencing silence and noise can be more accurately described through the impressions and relationality of auditory dissonance: A concept which, as stated, has been widely engaged with in musical and psychological practice but remains largely unexplored in sound studies and Holocaust memorialization. In the discussion to follow, I will provide an experiential outline of sonic dissonance at the MMJE.

Experiences of Dissonance at the MMJE

Much of the academic and public discourse that has since attempted to bridge the divide between music and sound has fallen short in acknowledging dissonance. It, as such, has remained overwhelmingly under the academic radar; in this case at the intersections of sound studies and Holocaust-based research. However, the soundscape composition and participant experiences at the MMJE show just how perceptions of silence and noise can be bridged together acoustemologically by means of dissonance. The overlapping simultaneity of silence and noise at the MMJE can only be conceptualized by feeling and experiencing dissonance.

In a written reflection on their experience walking through the memorial, one of my research participants stated the following: “although this memorial is placed in a bustling metropolis, I felt very isolated. Instead of trying to fight this feeling, I acknowledged my discomfort, and allowed myself to process it. As my external environment became quieter, my thoughts became very loud” (Participant 3, 2023). As evident by their experience, not only is there an underlying perception of presence among absence, but also absence among presence. Such a reflection speaks greatly to the gradationally dynamic nature of sound, and how ‘inner’ silence does not necessarily correspond with ‘outer’ silence, as well as ‘inner’ noise and ‘outer’

noise. “Sound is tendentially methexic; it spreads in space, where it resounds while still resounding ‘in me’ (Nancy 2007, in Born 2013, 3). Thus, sonic dissonance is evident due to the lack of resolve and incessant clashing between inner and outer silences and noises.

While engaging in discussions of inner and outer sounds, it must be noted that the time and space in which these sounds are happening and experienced play an inextricable role in how they are perceived and conceptualized. This is made evident in the following participant reflection:

I was struck mostly by the sensation of being both ‘inside’ a space and ‘outside’, as in out-of doors, which I think isn’t a common experience. I was also struck by the notion that the space feels sacred somehow, yet is basically in the middle of the hustle-and-bustle of a big city, which seems more mundane, even ‘profane’ in its traditional, literal meaning of being the opposite of sacred – i.e. the city’s activity seems to capture something that is not sacred, although we have sacred spaces all over the city, and there’s a tension between the two somehow (Participant 5, 2023).

Based on this participant’s experience, it is evident that the space in which the memorial itself resides is integral to the relations and experiences of dissonance. Most explicitly, dissonance is made evident here by the tensions brought forth by the perceptive clashing of the memorial’s supposed sacredness with the metropolitan sounds of the city. Due to the memorial’s spatial integration in the geographical and political centre of Berlin, activities of the city are “not happening apart from the memorial, but rather on and in it” (Rosenberg 2015, 86), contributing greatly to the dissonances experienced by participants. The seemingly unremitting fluctuations of perceived silence and noise experienced throughout the memorial evidently span far beyond

the visually implicated boundaries of the site. This proves how the memorial is so spatially integrated within the historical fabric of Berlin itself; a city in which dissonance is markedly synonymous with its identity.

Experiences of sonic encounter and reflection at the MMJE are of a complex perceptive and corporeal nature. However, these experiences can be effectively addressed through sonic dissonance as an auditory embodiment of this memorial. By being present at the memorial and actively listening to its sonic environment, it becomes clear that neither silence or noise are monolithic or a simplistic sonic binary, but rather constantly interwoven auditory fluctuations of dissonance. As such, sonic dissonance can act as an agent for broadening discussions and blurring the lines between two subjects of debate in the scholarly world of Holocaust commemoration: post-witnessing and post-memory.

Holocaust Imagination → Sonic Imagination

Drawing on contemporary discussions of Holocaust memory and representation, two closely related terms that are frequently discoursed in recent years are post-witnessing and post-memory. Due to the gradual passing of the real witnesses of the Holocaust, the survivors, Holocaust memory has now entered a complicated post-witness era. Broadly, this stage of Holocaust memory aims to “transform the commemorative landscape of Holocaust remembrance” (Kook 2021, 971) and “shift focus from discussions on the ethics of representation and the limits ensuing from it to the *relevance* of imagination in representing the Holocaust” (Popescu 2015, 1). Most scholars of the Holocaust and memory concur that such a step is deemed necessary due to the generational shift and lack of temporal proximity that

more and more people have to the Holocaust. One such example of post-witnessing in context can be found in the recent work of Stefania Manca (2021) who investigates the ways in which three well known Holocaust museums use social media to engage their communities and the broader public's general knowledge and understanding of the Holocaust (31). Another example of a post-witness engagement of the Holocaust is addressed by Simone Gigliotti (2006), who explores Thane Rosenbaum's short story "Cattle Car Complex" to conceptualize Holocaust experiences of deportation through testimonial and fictional accounts (256-257).

Post-memory, however, is what "describes the relationship of the second generation to powerful, often traumatic, experiences that preceded their births but that were nevertheless transmitted to them so deeply as to seem to constitute memories in their own right" (Hirsch 2012, 103). It is commonly understood that "those who form post-memories are unable to recall for themselves an exact memory of the actual events, and instead rely on the information of others combined with their own imagination" (Polkinghorne 2013, 7). An example of post-memory in context can be found in the work of Antje Diedrich (2014), who discuss *The Cannibals* and *My Mother's Courage*; plays written by George Tabori. As works of post-memory, they "mediate memories of Tabori's parents' experience of the Holocaust through imaginative investment and creation" (1). Another application of post-memory is presented in an account by Pedzisai Maedza (2022) to address gendered intergenerational transmission of memory at the intersections of the Holocaust and colonialism in Africa (17).

Though theoretically distinctive, post-witness and post-memory intersect over a common phenomenology: imagination. The above examples, though theoretically and contextually distinct, necessitate an engagement that relies on methods of commemoration and

representation that individuals can encounter experientially through their own imagination.

How post-witnessing and post-memory have been engaged with, understood, and applied in the broad landscape of Holocaust discourses has been extraordinarily nuanced and varied, but I argue that sonic dissonance postulates a potential sensorially specific entryway for such representation to be engaged with using imagination.

To effectively bridge sonic dissonance with contemporary notions of post-witnessing and post-memory requires the integration of *sonic imagination*: an idea popularized by renowned sound scholar Jonathan Sterne (2012). Broadly, sonic imagination aims to articulate the individuality of perception and relationality associated with active listening practices and seeks to develop one's own creative and critical capacities through sound (5). In his text *The Sound Inside the Silence*, Sean Street addresses the notion of the sonic imagination by stating the following: "such is the wonder of the sonic imagination, because while sound is made up of events, it is our perception and psychic invention that gives it meaning and significance" (Street 2019, x). As such, it is evident that the sonic imaginations of visitors elicit perceptions of dissonance through silence and noise, particularly within the frameworks of post-witnessing and post-memory as they relate to the Holocaust. This is clearly demonstrated in the following participant's reflection from the MMJE:

As I walked through the memorial, the walls became higher, and I would listen to my footsteps and the quiet conversation and footsteps of other visitors. I began to think of the Jews and members of my own family being forced to quietly walk to their deaths. I could hear traffic noise coming from outside of the memorial. It made me think that as

Jews were being marched to their deaths, life was continuing on as normal away from the extermination camps (Participant 1, 2023).

In this vein, Street later addresses that “we are concerned with the sound inside us, prompted as it may be by externals, the sonic response of the imagination to the world that surrounds it” (Street 2019, 2). This underscores the previously discussed inextricable connectedness of inner and outer silences and noises as provocation for experiencing dissonance at the MMJE. Without imagination, these inner and outer silences and noises could not effectively elicit said experiences of dissonance at the MMJE.

It is clear from numerous academic debates that the notion of imagination pertaining to Holocaust memory is not without its controversies. Throughout the 1990s and 2000s, there was significant scholarly discourse on how “imagination is an assault on both the history and memory of the Holocaust”, and that memory has been spoiled “by the distortive capacities of the imagination” (Popescu 2015, 1). Such distortion inevitably resides within the allegorical confines of sonic dissonance, as Saul Friedländer (1993) states that “the total dissonance between the apocalypse that was and the normality that is makes adequate representation elusive, because the human imagination stumbles when faced with the fundamental contradiction of apocalypse within normality” (51). Perhaps it is this uneasiness and inconclusive discourse that speaks to the nature of the Holocaust itself, as is reflected in sonic experiences at the MMJE. Perhaps it is sonic dissonance that can be adopted as a metaphorical and perceptive means of engaging the seemingly unremitting complexities pertaining to commemoration of the Holocaust. Thus, as a counter memorial, the MMJE is not just the site of

ongoing narrative procession and identity construction (Lupu 2003, 131), but of unresolved tensions and paradoxes of representation.

Conclusion

There remain several gaps in the ways with which silence and noise are conceptualized in the broader picture of sound and Holocaust scholarship. However, as I have suggested, by addressing individual and cultural perceptions of silence and noise through a lens of dissonance, a path is forged towards an acoustemology of Holocaust representation through the complexities associated with imagination, ethics, and memory. There may never be one clearcut solution to issues of memorialization and representation relating to the Holocaust, but dissonance in and of itself may just be the missing piece needed to contextualize this justifiably unending discourse.

The next chapter will address polyphony as an acoustemological property of the MMJE. I will discuss how Berlin's unique and dynamic history in conjunction with sonic experiences at the memorial speak more broadly to globalization as a form of commemorative engagement relating to the Holocaust.

Chapter 2 - Sonic Polyphony as a Basis for Global Holocaust Memory

In conjunction with its uniquely tumultuous history, Berlin is a city that has become a critical metropolitan node in contemporary Europe. It has evolved beyond numerous spatial, political, and ideological fractures to become a modern, global centre. Berlin's globality is undoubtedly reliant on its past as a "place of remembering and forgetting" (Constantine 3, 2009). During Germany's unification of 1871, the new capital was merely a collection of small towns; a stark contrast to contemporary Berlin in every possible way. Since then, the city has been through what could not be wholly described as a singular historical and experientially homogenous trajectory, but as a pluralistic embodiment of "hermeneutical tension, contested memory, and a multiplicity of narratives" (Wlodarski 2015, 136). To contextualize the numerous individualities imbued within said histories and experiences, it must be acknowledged that "history inheres in locations within the city" (Constantine 9, 2009), such as the Memorial to the Murdered Jews of Europe (MMJE).

Though spatially confined to Berlin, the MMJE is no less than an internationally integrated symbol of Holocaust memory. It is a famously frequented site of tourism in the city, with several organizations available to offer guided tours in different languages to accommodate the wide array of nationalities that come to visit. The memorial has become well known globally due to Berlin's widespread circulation in contemporary popular culture and across social media platforms. Thus, it embodies the ideal site to begin not only "understanding and rethinking what memory means under conditions of globalization" (Wüstenberg & Sierp 2020, 3), but also the resulting implications as a site supposedly designed to commemorate the six million Jews who

were exterminated during the Holocaust. As such, this chapter will address the following questions:

1. How can the MMJE act as a site of global Holocaust memory?
2. How do sonic experiences at the MMJE speak to the polyphonic nature of Berlin's history and modernity?
3. How can polyphony and globalization be used to address the past, present, and future of Holocaust memory?

I argue that the sonic experiences at the MMJE, coupled with Berlin's complex historicity and contemporaneity as a global city, provide the ideal framework for asserting the importance of polyphony in Holocaust memory and representation (Stanyon 2017, 845). I will begin this conversation by defining the concept of polyphony, critically address its usage in various scholarly frameworks, and contextualize it within Berlin (macropolyphony) and MMJE visitor experiences (micropolyphony). I will then introduce a discussion addressing the implications of globalization on memory through sound and Holocaust narrative representation as it relates to these forms of polyphony. Lastly, I will engage in a discussion regarding the attached soundscape composition, address the emergence of polyphony throughout its duration, and discuss how recording and editing can act elicit polyphonic engagement of Holocaust commemoration and globalization.

Polyphony

In music, polyphony is a combination of several contrasting melodic lines occurring simultaneously. Etymologically speaking, it comes from the Greek word *polyphonos*, which

translates to ‘many sounds’. Polyphony is often brought up in relation to other compositional techniques such as monophony and homophony, the former made up of just one independent voice and the latter made up of one voice with harmonic accompaniment. It is a widely used compositional technique with a significant history dating back to the Renaissance and late Middle Ages. Nonetheless, polyphony as a musical device is not limited to western art music, as various forms of vocal and instrumental polyphony were found to have been used by people throughout Melanesia, Polynesia, and Sub-Saharan Africa long before the term polyphony even existed (Jordania 2011, 36). People of many distinct cultures, geographies, and societies continue to partake in musical practices involving the simultaneous vocalization or instrumentation of independent melodies. A visualization of polyphonic music can be seen in the score below:

The image shows a musical score for a string quartet, consisting of four staves: Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Violoncello (Vc.). The music is written in 3/8 time and features polyphonic writing with independent melodic lines for each instrument. The dynamic marking is *mf* (mezzo-forte). The score is numbered 36 at the beginning of the first staff.

Fig. 2: Polyphonic writing style from ‘Nightshade’, a string quartet by Elli Bookhalter

Beyond musical practice, polyphony is recurrently applied metaphorically in the humanities and in social scientific contexts. Examples range from biblical analysis, in which David M. Bossman (2011) approaches polyphony as a means of undertaking “the need and the

opportunity for examining biblical texts and books as complex and open to interpretive development” (1), to Indigenous socio-ideologies, such as Copp lie Cocq’s (2008) engagement with the plurality of voices regarding politics, law, and traditional S mi knowledge (33). Broadly, polyphony has been incorporated as a means of simultaneously engaging a multiplicity of voices and perspectives pertaining to specific issues or experiences.

Recently, polyphony has also been increasingly applied to linguistics, such as by Henning N lke (2017), a professor of French at Aarhus University in Denmark. His work broadly addresses the extraordinary multiplicity implicated through language, both as a spoken and textual phenomenon. He suggests that the numerous points of view in linguistic polyphony not only emerge in utterances themselves, but in the “interpretation of the utterances” (2). Here, N lke suggests that while polyphony stands to represent the quantitative multiplicity of individual voices, it carries with it the capacity to engage with said voices with an interpretative, qualitative measure. Such an idea inevitably opens many potential doors for polyphonic engagement in other disciplinary discussions, such as Holocaust studies.

One such example is found in the work of Beate M ller (2012), who investigates polyphony in the context of Holocaust survivor testimony. She explains how second-hand testimonial accounts penned by interviewers ultimately result in polyphonic texts:

When one person puts into writing what another person has told [them], the immediacy of orality gives way to the mediatedness of writing, which will retain some elements of the spoken word, and the written text will polyphonically reflect the language of all persons involved, to a greater or lesser extent (159).

Evidently, the application of polyphony in this context is to address multiplicity between the spoken word of the survivor and the subsequent written word of the interviewer/author. This text concludes that such polyphonic representation requires cautionary nuance, as it tells “a much more complex story of the context in which the testimonies were created” (Müller 2012, 185) rather than a direct insight into the survivor’s voice, world, and lived experience.

As evident by each of these examples, the variability and diversity of polyphony is not only within the disciplinary specificities in which it is applied, but also the scope and scale in which it is integrated. It can suggest something as seemingly focused as two simultaneous perspectives on a matter, or something much less quantifiable with intertemporal or trans-spatial implications. To put it simply, polyphony provides a multifaceted theoretical basis for engaging various socio-cultural phenomena. However, throughout its usage, the concept of polyphony has become largely divorced from its sonic origins. While not inherently problematic, it has instead become a symbolic or visual representation of simultaneous plurality. Reimbuing polyphony with its sensory origins using sound and narrative representations of Holocaust memory will effectively bridge this gap.

Counterpoint

Being musically related to polyphony, the concept of counterpoint is often present in similar compositional discourse. Some might even use the terms interchangeably, but this is incorrect. “Polyphony refers generally to music consisting of two or more distinct melody lines while counterpoint refers to the compositional technique involved in the handling of these melodic lines” (Jackson 2020, para. 2). While polyphony encompasses the specific melodic

nature of a piece itself, counterpoint shapes the context and methods for how the melodies interact in the first place. In other words, counterpoint is widely considered to be a type of polyphony.

Counterpoint has been used as social scientific metaphor by Fernando Ortiz (1995) to explain the social, economic, and political complexities associated with the co-evolution of sugar and tobacco industries throughout Cuba's History. To contextualize Cuban counterpoint, Ortiz introduces the term *transculturation*. Based on acculturation (the transition from one culture to another), transculturation is applied by Ortiz to express "the highly varied phenomena that have come about in Cuba as a result of the extremely complex transmutations of culture" (Ortiz 2020, 98), deeming it necessary to broadly conceptualize the intermeshed nature of historical and contemporary Cuban life. The basis for his discussion of the extraordinary ethnic, racial, and religious makeup of Cuba cites the various periods of colonization, slavery, and migration throughout the island's longwinded history (Ortiz 2020, 98). Transculturation, according to Ortiz, is due to the increased transfer of people, commodities, and labor to Cuba, and is central to the nation's counterpoint of sugar and tobacco. To put it simply, the sugar industry first came to Cuba due to Spanish conquest, which later was "increasingly monopolized by vast U.S. and British investments in a quazi-industrial capitalist form of agriculture" (Ortiz 2019, 222). Tobacco on the other hand, was rooted deeply in the island's indigenous population. As such, the counterpoint demonstrated by these industries' co-evolution speaks greatly to the historically complex demography of the contemporary nation.

Berlin's contemporary identity and historical trajectory as a monarchy, Weimar Republic, national socialist regime, geopolitical and ideological post war division, and current

metropolitan landscape speak greatly to its contrapuntal complexities. Although these changes may have occurred at different points on a linear timeline, they are spatially and temporally integrated into the fabric of Berlin and “continue to inspire nostalgia, identification, pride, anxiety, skepticism, and disdain in the present” (Walton 2019, 353). As a city that has gone through such uniquely dynamic historical, political, and spatial transformations, Berlin’s identity is more than the sum of its parts in every possible way, regardless of the oversimplified historically linear chronology that is often projected onto it. It’s historicity and contemporaneity are intimately intertwined in a seemingly endless, pluralistic state of progression, remembering, and forgetting.

Ortiz’s work with counterpoint has inspired my work to address how methods of musical composition and analysis can be used to engage the complexities and interrelations of historical events, postulating a nuanced backdrop for contemporary discourses and lived experience. However, the application of counterpoint to conceptualize Berlin’s historicity and contemporaneity is somewhat insufficient, as Cuba’s co-evolving sugar and tobacco industries are vastly different variables within a dissimilar spatiotemporal scope. I suggest that the specificities of polyphony provide a more sufficient theoretical framework due to the micro and macro level of analysis that I will be addressing in this chapter. I will first apply a notion of macropolyphony to engage with the complexities of Berlin’s history and contemporary identity, followed by the notion of micropolyphony to engage with the individual sonic experiences of the MMJE. I will follow these discussions with how the two polyphonic frameworks intersect through the globalization of Holocaust memory.

Macropolyphony of Berlin's History and Modernity

From 1871 until 1918, Germany was under the rule of a monarchy. Following Germany's defeat in WWI, a revolution sprung up to overthrow the monarchy in favor of establishing the German Weimar Republic (Snell 1968, 3). In the 1920s, after the end of post-WWI hyperinflation, Berlin experienced an unrelenting period of rapid modernization and economic prosperity (Hake 2008, 187). What are often called the "Golden Twenties" in Germany, the municipal centre of the Weimar Republic saw itself as a regional leader in science, art, humanities, government, and diplomacy, among many other areas. Documentation of this significant period of Berlin's history can be found in Walter Ruttmann's 1927 film "Berlin: Symphony of a Great City".² Prior to unprecedented dictatorial interventions of the 1930s, Berlin had become a hub of diversity and urban modernity (Föllmer 2013, 6) due to its leadership in many fields.

After the fall of Nazi Germany in 1945, the city was divided into four occupied zones by the allied powers: Britain, the United States, France, and the Soviet Union. It was in 1948 that the three western powers united, and thus Berlin was divided in two: east and west. A city of division and isolation from then until its reunification in 1989, Berlin's existence itself was a polyphony of great physical and ideological dissonance. Since the city's reunification and redesignation as Germany's capital in 1991, Berlin once again finds itself as a bustling urban metropolis; and is now what I would consider to be a global city.

In contemporaneity, Berlin's status as a global city is in and of itself a contested subject, as it challenges widely accepted definitions of the term. In reference to cities such as New York,

² <https://www.youtube.com/watch?v=0NQglvG-kBM>

London, and Tokyo, Saskia Sassen (1991) identifies global cities through the four following components:

First, as highly concentrated command points in the organization of the world economy; second, as key locations for finance and for specialized service firms, which have replaced manufacturing as the leading economic sectors; third, as sites of production, including the production of innovations, in these leading industries; and fourth, as markets for the products and innovations produced (3-4).

In accordance with these criteria, Berlin does not wield the same superregional and international strategic economic capacity to the same degree as the three cities referenced by Sassen. However, Stefan Krätke (2001) argues that Berlin's identity as a global city can be conceptualized through its urban social fabric as a city "with an internationally mixed population as well as a city with growing socio-spatial divides" (1797). Such a dynamic demographic comes primarily as a result of two factors: Germany's high volume of immigrants in recent decades, with Berlin being at the forefront of their absorption (Marcinczak & Bernt 2021, 1), as well as significant influxes in tourism largely due to internationally known historical sites and museums throughout the city. Additionally, events throughout history that took place within the city had undoubtedly global ramifications, such as the geographic origins and subsequent spread of National Socialist ideology and the subsequent cold war microcosm of historical east and west Berlin. Consequently, though its economic significance might not be of the same degree and scale of global exchange as other major cities around the world, Berlin's global significance evidently emerges through its historical trajectory in conjunction with its contemporary social fabric.

In short, Berlin has an undoubtedly unique relationship between its history and modernity. Central to the city's broader character, these aspects of Berlin's identity have always functionally represented a co-evolving, polyphonic intertwining that necessitates pluralistic spatiotemporal engagement. Daniel Libeskind (1992), the architect of Berlin's Jewish Museum has stated that "Berlin is not only a physical place, but also something in the mind, something belonging to a past which was never present. A spiritual reality that makes itself immediately comprehensible to everyone in the world" (82). Today, Berlin's history continues to progress alongside its contemporaneity as a major city that has experienced a colossal rebirth as a global centre of history and memory. As such, it is evident these two aspects of Berlin, historicity, and contemporaneity, embody its polyphonic character. I will now introduce the notion of micropolyphony to address participants' polyphonic engagements with sound at the memorial.

Micropolyphony of Sound at the MMJE

Micropolyphony is not a new concept. The theoretical term and musical property was first developed in the 1950s by Hungarian-Austrian composer György Ligeti to describe polyphonic textures that "consist of many imitative lines (built on small motifs) that displaced in time create dense vertical clusters" (Variago 2021, 71). It has been compared to cluster chord voicings (see below), but it is of course written polyphonically. Ligeti himself describes it as "a kind of impenetrable texture, something like a very densely woven cobweb" (Bernard 1994, 238) likely due to the tonally compact, dissonant nature of the clusters forming the polyphony, resulting in the individual melodies being difficult to distinguish.

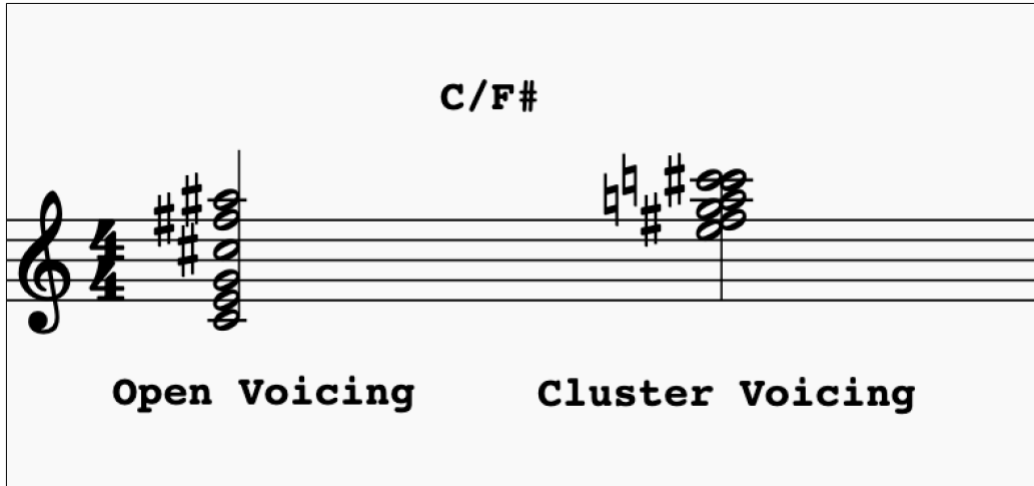


Fig. 3: Chordal representation of open vs cluster (micropolyphonic) voicing – Elli Bookhalter

It is Ligeti's definition that speaks greatly to the polyphonic nature of sounds that are heard and experienced at the MMJE. As discussed in the previous chapter, it is clear that the multiplicity of sonic experiences creates unsettled feelings of dissonance, regardless of how one relates to these sounds. I will now elucidate the polyphonic variability of these experiences and how they engage with Holocaust memory and globalization.

The polyphonic experiences through sound at the MMJE are twofold: (1) the diversity of reflections as demonstrated by research participants as it relates to their perception of the memorial's sonic environment, and (2) the significant variety of sounds and assortment of acoustic phenomena at the memorial. I argue that sonic mediation at the MMJE yields a globally integrated polyphony of remembering and forgetting (Constantine 2009, 3), and I will engage with participant experiences below to substantiate this.

Pertaining to the first two points above, it may be that such a plurality of sounds at the memorial has a seemingly negative effect on visitors' initial auditory perceptions of the memorial.

This is evident in the following participant's initial reflection regarding the many sounds that were heard:

It is hard to feel touched when there are cars, busses, motorbikes driving by with all their noises and braking, waiting at the traffic light, and then starting to go on. Or people talking, some are even jumping from one stele to the other or sitting there, eating food. Police or firetrucks pass with sirens or bicycles ringing their bells to warn people they are coming (Participant 2, 2023).

It wasn't until this participant entered the middle of the memorial, where the walls are higher, that they began to connect with the memorial in a way they would have desired. As discussed in the previous chapter, the interrelatedness of perceived silences and noises such as this elicit experiences of dissonance at the mercy of imagination. However, the plurality implicated by the sounds in which the memorial resides evidently carry with it the agential capacity for visitors to simply forget where they are. Yet, another participant's experience of sonic multiplicity produced an entirely different effect:

As I walked through the memorial, the walls became higher, and I would listen to my footsteps and the quiet conversation and footsteps of other visitors. I began to think of the Jews and members of my own family being forced to quietly walk to their deaths. I could hear traffic noise coming from outside of the memorial. It made me think that as Jews were being marched to their deaths, life was continuing on as normal away from the extermination camps (Participant 1, 2023).

It is evident in this participant's reflection that the way they relate to the surrounding polyphony elicits an emotional, relatable response based on their own background. As such,

contrary to the prior participant's experience, this instance of polyphonic engagement ensued an experience of imaginative remembrance.

The global flow of people, ideas, technology, and language embody the polyphonic profile of the sounds heard at the MMJE and engage its commemorative sonic profile as “a startling commentary on global modernity” (Shaw 1997, 870). By intersecting Nølke's polyphonic idea of ‘interpretive utterances’ with Müller's polyphony of representation, it is evident in these two participants' experiences alone that polyphony at the MMJE is undoubtedly complex, relational, and much like globalization itself, ever changing. Through its multifaceted sonic plurality, the memorial demonstrates how urbanization and modernity create pluralized experiences of not only remembering, but also forgetting.

Global Memory and Holocaust Representation

Berlin's polyphonic historicity, contemporaneity, and globality in conjunction with experiences of sonic polyphony at the MMJE have revealed that discourses of Holocaust commemoration are inherently pluralistic and necessitate such treatment at sites of Holocaust memory. Engaging with polyphony as a sonic metaphorical framework at this memorial has shown that “multiplicity of languages, ethnicities, national and subnational memories and identities” (Langenbacher et al. 2012, 219) and Berlin's pluralistic complexity as a historically multidimensional and unbounded global space (Shaw 1997, 857), require further discussion intersecting Holocaust memory and globalization.

The intersections of macro- and micropolyphony in Berlin and at the MMJE can jointly provide a potential avenue towards Holocaust memory in a globalized world. However, as

previously mentioned, polyphonic engagement necessitates reintegration into its sensory origins through listening. As such, I will now introduce this chapter's attached soundscape composition to sonically contextualize what I have discussed so far.

Soundscape Composition



Click here to listen: <https://soundcloud.com/elli-bookhalter/polyphony-soundscape-composition>

This chapter's soundscape composition is constructed from multiple recordings taken at the MMJE. Some of these recordings were taken by research participants, while the rest were recorded over the course of several of my own visits to the memorial. The recordings were taken on an early Saturday afternoon, when there was a greater number of visitors and, subsequently, a richer polyphonic texture for the listener to engage with. Broadly, this soundscape composition simultaneously unveils the diversity and sonic variety of the MMJE while broadening the periphery of sensorial engagement at sites of Holocaust memory.

This composition can provide the listener with auditory context for how the aforementioned polyphonic frameworks emerge in conjunction with one another through audio recording and editing. Firstly, the recordings reveal the voices of numerous memorial visitors, several of whom are speaking languages other than English and German; the two most widely spoken in Berlin. Other languages that can be heard include Hebrew, Turkish, and French, and the speakers are made up of tourists, tour groups, or locals. The polyphony created by this

blending of languages demonstrates a complex “interplay of local, national, regional, international, and global dynamics... resulting in the emergence of transnational memory spaces” (Wüstenberg & Sierp 2020, 4). As such, this composition unveils that the linguistic polyphony at the MMJE is not a cultural microcosm of separate histories and preexisting difference, but a “shared historical process that differentiates the world as it connects it” (Gupta & Ferguson 1992, 16).

Although I have integrated several audio recordings from the memorial into this composition in a linear fashion, I have employed volume automation to achieve fluidity: a fundamental property of polyphony as it relates to sonic mediation and memory with which I will elaborate on in the following section. This editing technique was inspired by ethnographic filmmaker Alyssa Grossman’s work in Post-Soviet Bucharest, Romania, as a means of “examining memory by evoking how it operates and feels, rather than by explaining or depicting memories themselves” (Grossman 2013, 201).

By editing these recordings in such a way, the listener can connect and engage with the fluid, polyphonic nature of the memorial’s soundscapes using their own imagination (Boudreault-Fournier 2016, 82). For example, from approximately 1:55-2:00 and 2:15-2:50 in the composition, the listener can hear the simultaneous sounding of visitors talking and the traffic surrounding the memorial. The polyphony emerges from this isolated instant in the overlapping, auditory representation of tourism, immigration, and transnational automotive technology in the memorial’s immediate sonic environment. Additionally, from approximately 3:10 to 3:30, the faint sounds of birds chirping can be heard, underscoring the distant yet present polyphony of voices in the nonhuman world. At the discretion of the listeners

imagination, these sounds can potentially elicit feelings of discomfort, confusion, remembrance, or amnesia by engaging with how they function in the auditory airspace of a Holocaust memorial, consequentially invoking a polyphony of the imagination.

This soundscape composition unveils the seemingly constant formation and interaction of these sounds at the memorial, resulting in a rich polyphonic texture whose “parameters are evolving and can be continuously changing” (Okonsar n.d., 17), much like globalization itself. As such, this composition demonstrates how the broader historical and contemporary evolution of Berlin is contextualized within the MMJE as a site of Holocaust memory. I will now conclude this chapter with a discussion to discern how the future of Holocaust commemoration will necessitate an engagement with polyphony and globalization.

Realism, Anti-realism, Fluidity

Of the many issues facing discourses of Holocaust representation and memory, one of the most significant emerges from the complicated intersections of the following:

1. The multiplicity of individual experiences as they relate to the Holocaust.
2. Testimonial records of survivors.
3. The sheer scale, incomprehensibility, and specificity of the Holocaust as the only industrial-scale genocide of its kind.

As such, the complexity of Holocaust representation in the academic world is evidently ridden with seemingly irresolvable contradictions “between the event’s ‘uniqueness’ and ‘typicality’, its ‘extremity’ and its ‘banality’, its ‘incomprehensibility’ and its susceptibility to ‘normal’ understanding” (Rothberg 2000, 3). These are epistemological issues that span spatial,

temporal, cultural, and political contexts, and have amounted to extraordinary discord and debate across academic disciplines and commemorative institutions across the globe.

It is starting to become clear that Holocaust-related discourses pertaining to memory are now at the mercy of an increasingly globalized world. Memory scholar Michael Rothberg (2014) appropriately states that “in our globalizing age, archives and repertoires of memory have increasingly become interlinked, the prominent example being the ways in which Holocaust memory has travelled virtually across the globe” (178). Thus, I suggest that intersecting the previously suggested forms of macro- and micropolyphony of Berlin and the MMJE respectively elicit a global, sound-based notion of Holocaust memory.

In his book *Traumatic Realism*, Rothberg (2000) has suggested that discussions of contemporary Holocaust representation can be divided into a realist and anti-realist binary. The former suggesting that “the Holocaust is knowable and a representational claim that this knowledge can be translated into a familiar mimetic universe” (3), and the latter claiming that “the Holocaust is not knowable or would be knowable only under radically new regimes of knowledge and that it cannot be captured in traditional representational schemata” (4). Though he suggested these ideas more than twenty years ago, it is unquestionably prescient of much of the current discourse. However, such a binary implicates that realism and anti-realism in Holocaust representation are mutually exclusive of each other and that the two cannot overlap. As evident by the polyphony ensued by the globality of Berlin, the sonic experiences at the MMJE, and the attached soundscape composition, the line between realism and anti-realism is blurred to conceptualize a global, polyphonic fluidity.

Fluidity, as it stands in current Holocaust discourses is certainly not without its flaws. Scholar of fluid memory Brett Caplan suggests that “The crisscrossing, interconnected networks of living memorials offer windows from the present into the past”. However, as my discussion has suggested, sonic experiences of the MMJE are not by any means homogenous nor temporally isolated to the present or the past. As insinuated by Caplan’s work, fluidity is not a visually exclusive property. Thus, I suggest that fluidity, as a sonic conceptualization of the polyphonic nature of globalization and Holocaust memory, can not only address the current state of Holocaust representation, but also theorize its future state as well.

Sound is not only fluid in its spatiotemporal and epistemological core, but is itself “the world as dynamic, as process, rather than as outline of existence” (Voegelin 2010, 36), speaking to the relational and polyphonic nature of globalization as well as the experiences at the MMJE in conjunction with Berlin’s complexities. Conceptualizing the memorial through polyphony offers a new mode of thinking about global Holocaust memory and how memorials are experienced. In opposition to its conceptualization as a place of spatial and temporal isolation, the MMJE’s fluid polyphony through globalization and sound delineates it as “an integrative commemorative institution rather than one that separates itself from life” (Neumann 2020, 23), underscoring Holocaust memory as a “global phenomenon manifesting in place-specific ways” (Pickren 2018, 227).

Conclusion

Contemporary and historical engagement with the nuances of sonic polyphony at Berlin’s MMJE uncover the “discrepant temporalities and differently paced modernities”

(Huysen 2000, 58) of globalization within the sensorial dimensions of “sound, aurality, cognition, subjectivity, and embodiment” (Erlmann 2015, 181). The Holocaust and its ramifications span beyond any particular place and time, beyond any singularities, and beyond what is and what is not knowable. Commemorating such complexity necessitates a future that blurs the line between realist and anti-realist ideals of representation. A future reliant on pluralistic, global, auditorily integrated forms of Holocaust memory.

The next chapter addresses rhythm as the final acoustemological property of the MMJE that I engage in this thesis. I will discuss how walking, as a form of sonic and corporeal engagement with the memorial can be conceptualized through discourses of rhythm analysis and contemporary ideas of Holocaust commemoration and representation.

Chapter 3 - Walking as Rhythmic Facilitation of Embodied Holocaust

Memory

Spatial and commemorative enormity is as much of an auditory and embodied phenomenon as it is visual. As mentioned in the introductory chapter, the Memorial to the Murdered Jews of Europe (MMJE) is indisputably massive in comparison to the vast majority of public Holocaust memorials. Coming in at a total of 19,000 square metres, the memorial's sheer size itself is central to the corporeal experiences of visitors as they maneuver throughout the monument. These experiences necessitate a particularly underacknowledged yet vital mechanism of engagement: walking.³

Due to the multisensorial variability of its embodied nature, and centrality as a routine of everyday life, "there has been a surge of interest in walking in the social sciences in recent years, both as a subject of study and as a method of conducting research" (Lyon 2018, 37). From an auditory point of view, it rhythmically contextualizes "a nuanced understanding of the articulations of tempo, movement, flow, stasis, and repetition" (Lyon 2018, 4). As such, considering how such properties are conceptualized at the MMJE necessitates a broader discussion of spatiotemporal integration at a place of Holocaust memory.

In this chapter, I will broadly engage with the musical implications of rhythm as it relates to experiences at the MMJE. In doing so, I will investigate how walking as a form of corporeal engagement with the memorial can be conceptualized by engaging discourses of rhythm analysis

³ The MMJE is wheelchair accessible; all references to walking account for alternative forms of mobility.

with contemporary ideas of Holocaust commemoration and representation. I will include participant reflections as well as a third and final soundscape composition that engages with recordings of the memorial to contextualize and relate to the discussions of this chapter. Lastly, I will address how the rhythmic properties of tempo rubato and syncopation intersect with a proposed Jewish concept of time at the MMJE. Thus, this chapter will answer the following research questions:

1. How does experiencing the sound of walking at the MMJE engage with Holocaust representation?
2. How do tempo rubato and syncopation engage with a Jewish concept of time at the MMJE?

Prior to this discussion, I will provide a definition and theoretical backdrop of rhythm and how it has been applied in various disciplinary contexts.

Defining and Approaching Rhythm

Originating from *rhythmos* in Greek, the concept of rhythm can be broadly defined by “a strong regular repeated pattern of sounds or movements, or of opposite or different conditions” (Anon 1971), as well as “the organization of musical notes in time, which includes the beat (or pulse), meter, tempo, and patterns of long and short note values” (Pederson 2015, para. 1). It is theorized to have been developed due to natural selection over the complex course of hominid evolution (Jordania 2011, 109), and it is generally agreed upon to be a foundational property in so many facets of humanity and life itself. Cognitive research has shown that humans even neurally synchronize with rhythm in speech, which “captures our attention, regularizes speech

flow, may emphasize meaning, and facilitates interaction with others” (Kotz et al. 2018, 896). Its explicit prominence, however, undoubtedly resides in music. Fundamentally speaking, rhythm can be characterized by repetition and temporality. Repetitive successions of beats exist at certain frequencies and periodicities ranging anywhere from the span of milliseconds up to several years. Below is a music staff to visually contextualize simple rhythmic subdivisions using contemporary notation:

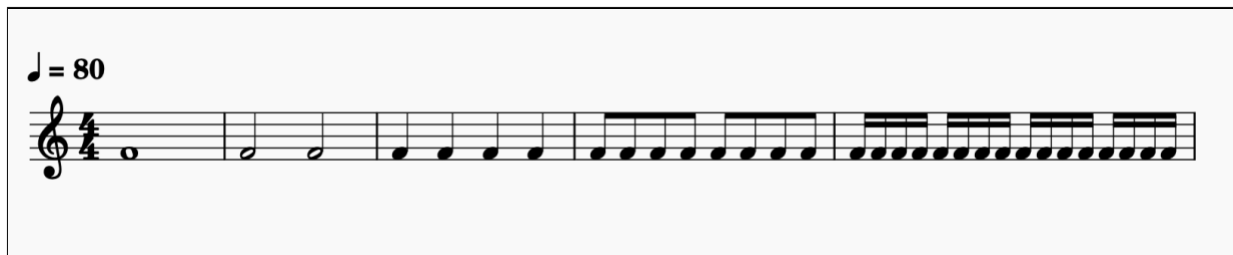


Fig. 4: Various rhythmic subdivisions played in 4/4 time at 80 beats per minute (BPM) – Elli Bookhalter

Like many other musical properties, the application of rhythm has spanned greatly beyond the scope of its auditory roots. In academia, rhythm as a concept has been applied across many disciplines ranging from social sciences, natural sciences, philosophy, medicine, and of course, music and sound studies. One such example in the scientific world is what has become known as the circadian rhythm: a multispecies “biological process which shows an endogenous and entrainable oscillation of about 24 hours... widely displayed in different organisms [adjusting] to the environment by different surrounding cues such as temperature, light, and redox cycles” (El-Esawi 2018, 1). Another prominent example is the heartbeat, which is considered to be inextricably tied to the very core of rhythm and humanity both epistemologically and physiologically speaking; so much so that it both metaphorically and literally represents life itself. Though it is widely accepted that only humans have the ability to

engage in rhythmic coordination, these examples demonstrate how rhythm itself is undeniably tied into the physiologies of the non-human world as well.

Due to its multivariable, philosophically enigmatic, and perceptually infinite nature and applicability, quantifying rhythm conceptually can seem like an unending task. Henri Lefebvre, a sociologist and urbanist philosopher, famously introduced the concept of rhythm analysis to address the rhythmic implications of humanity and temporality: “everywhere where there is interaction between a place, a time, and an expenditure of energy, there is rhythm” (Lefebvre 2013, 15). Furthermore, Lefebvre was concerned with taking the concept of rhythm and turning it into “a science, a new field of knowledge: the analysis of rhythms; with practical consequences” (Elden in Lefebvre 2013, viii). To contextualize the sheer complexity of rhythm as it relates to Lefebvre’s ideas, sociologist Dawn Lyon (2018) created the following table to quantify Lefebvre’s nuanced vocabulary of rhythm:

Linear Rhythm	Quantified and fragmented time, imposed by technology, industry, and consumption The time of the city and urban life Closer to repetition than rhythm per se - dripping of water, the beats of a hammer In musical terms, measure and beat
Cyclical Rhythm	The time of nature, ‘cosmic and vital’ evident in seasons and day and night In biology and the body - heartbeats and eye movements Characteristic of rural life Includes repetition <i>and</i> difference In musical terms, melody, and harmony
Polyrhythmia	A multitude of rhythms; the effects of different configurations of rhythm
Eurhythmia	When rhythms combine smoothly - Being in good health
Arrhythmia	Discordance between rhythms, being ‘out of step’
Isorhythmia	An ‘equality of rhythms’ beyond eurhythmia - The coordination of an orchestra
Dressage	Process of bodily entertainment and repetition through which rhythm is learnt and becomes evident in the body over time - Military drills

Fig 5: Lefebvre’s Vocabulary of Rhythm: Summary of Key Terms – Transcribed by Elli Bookhalter

This outline postulates a suitable springboard to begin engaging with rhythm's complexities beyond musical discourses and pedagogy. Due to its embodied nature, rhythm is at the very core of many epistemological, ontological, philosophical, scientific, and anthropological concepts beyond any particular sensorial framework. As such, rhythm, much like other musical properties like harmony, melody, and timbre, stems from origins that are not sensorially and corporeally exclusive of each other.

That said, there remains significant gaps at the intersections of memory, rhythm, and sound in academic discourse. I argue that the sonic experiences of visitors at the MMJE have proven that by engaging with the memorial through walking, rhythm not only exists at the junctures of sensoriality and corporeality, but of memory and perception. It is through walking that we tune into different relationships, forces, and atmospheres (Lyon 2018, 47), and it is through sound that arises the potentiality of bridging the rhythms of walking with Holocaust memory. Doing so, however, necessitates a thorough engagement with the ways in which these properties can be conceptualized at the MMJE.

In the next section, I will break down two central methodological components of this project that are grounded in the rhythmic experiences of those visiting the MMJE: improvisation and soundwalking. I will then address how these foundational rhythmic properties relate to participant reflections at the memorial, necessitating rhythm as a central sonic and corporeal property of engagement.

Walking, Rhythm, Memory

Walking, as a theoretical and methodological concept, has been engaged in numerous academic contexts. Within anthropology specifically, scholars such as Tim Ingold and Jo Lee Vergunst (2016) have engaged with walking epistemologically, specifically as a practice of creativity and perception. They argue that not only is walking a way of thinking and feeling, but thinking and feeling are ways of walking, as conceptualized in this excerpt:

To think and feel is not to set up a relation of external contact or correspondence between subjective states of mind and objectively given conditions of the material world, but rather to make one's way *through* a world-in-formation, in a movement that is both rhythmically resonant with the movements around us – whose journeys we share or whose paths we cross – and open-ended, having neither a point of origin nor any final destination (2).

It is evident that walking, as a practice, is very much woven into the fabric of the ever-moving, ever-evolving experiences, or in this case, rhythms, of daily life beyond its usually perceived niche as simply a form of physical mobility. Ingold (2010), additionally, has engaged with walking through intricate meanings of 'ground' and its epistemological relationship with weather and environmental variability. Weather, Ingold states, is an "all-enveloping infusion which steep[s] [one's] entire being... [it is] not so much what we perceive as what we perceive *in*" (S131).

Weather's centrality to human perception, according to Ingold, ties intimately with the ways of knowing and being imbued within the ground, as "the knowledge that grows from it are always in formation and never complete" (S136). Thus, it is through walking that a bridge between the two can be conceptualized.

A considerably significant aspect of walking that has remained largely under the radar is the relationality of how the sonic influences walking and how walking influences the sonic. Moretti (2017) briefly introduces walking as a method to engage with one's sonic surroundings, and in doing so addresses Steven Feld's work with the Kaluli in Papua New Guinea (99). Walking however, is a critical component of the sonic world. It, as such, remains a relatively unexplored method of memorialization through sound; particularly in relation to spaces commemorating the Holocaust.

I would now like to address the notion of improvisation and how it is not only central, but necessary to the perceptive and embodied qualities of rhythm as perceived by visitors as they walk through the MMJE. As previously stated, the vast memorial is made up of 2711 stelae of different heights, mostly getting taller the closer one moves to the centre. Visual context is provided once again below:



Photos 8 & 9: Different views of the stelae - Photo by Elli Bookhalter

Due to the memorial's design, there is no clear single pathway in which visitors are required to walk. For example, as they make their way through the site, visitors can decide if and when they would like to take a right or left turn, move forward, or retrace their steps amongst the stela. As such, a path instead 'evolves' as the visitor engages the memorial's "physical and material surfaces and textures" (Lyon 2018, 127). Regarding the nature and implications of cultural improvisation as it relates to everyday practice, anthropologists Tim Ingold and Elisabeth Hallam (2021) address the following:

First, it [improvisation] is generative, in the sense that it gives rise to the phenomenal forms of culture as experienced by those who live in them or in accord with them.

Second, it is relational, in that it is continually attuned and responsive to the performance of others. Third, it is temporal, meaning that it cannot be collapsed into an instant, or even a series of instants, but embodies a certain duration (1).

The sociality and musicality of improvisation is undoubtedly generative, relational, and temporal as an epistemological and ontological phenomenon. The sonic reflections of visitors at the memorial are a response to their improvised experiences at the MMJE, particularly in regard to the sounds and subsequent rhythm of their own walking in conjunction with that of other visitors. Based on my research, it is evident that walking is an improvised, imaginative practice that can be used as a way of "inhabiting, researching, and representing everyday realities" (Moretti 93, 2017), and to address the intersections of sound and memory at the MMJE. As such, I will now discuss how soundwalking as a methodology engages with the embodied rhythmic experiences of improvisation at the memorial.

In conjunction with Hildegard Westerkamp's definition of soundwalking, the use of walking in order to facilitate sonic engagement with the environment has been "subject to numerous theoretical, conceptual, and practical explorations" (Smolicki 2023, 5). Yet, my research has shown that there is an inextricable connection between soundwalking and memory through rhythm at the MMJE. The MMJE addresses this gap through the interrelatedness of its distinctive spatiotemporal attributes and the uniquely diverse ways in which participants engaged with rhythm in their reflections from the site.

The main objective of soundwalking for this project was to elicit a method of engagement in which participants could focus their ears on their acoustic surroundings at the memorial. Each participant engaged and related to the memorial in very different ways, but some of the first sounds that they identified were the sounds of their own footsteps as they walked through the memorial. As such, throughout the course of their visits, the sounds they encountered were accompanied by an often consistent yet distinct rhythmic ostinato of their footsteps as they walked. One participant began their reflection at the memorial by stating the following:

I would listen to my footsteps and the quiet conversation and footsteps of other visitors.

I began to think of the Jews and members of my own family being forced to quietly walk to their deaths (Participant 1, 2023).

This participant's reflection demonstrates the intertemporal rhythmicity of walking as it relates to their own family's history within the Holocaust. By listening to the consistent rhythm of their own walking as well as that of others walking throughout the memorial, it is clear that soundwalking at the MMJE not only demonstrates that the essence of rhythm lies not only in

the “movements and differences within repetition” (Lefebvre 2013, 90), but its ability to “engender emotional identification in its listeners” (Born 2013, 34); a critical component of engaging memory through individuality and collectivity.

The following excerpt from another participant’s reflection demonstrates walking’s rhythmic capacity to not only alter the temporality of one’s perceived sonic environment, but also reconfigure the generative nature of the space itself as it relates to their own improvised experience:

As I walked further into the memorial, the sounds became almost disembodied, I heard footsteps and voices, but I could not determine where they were coming from, nor what language or words were spoken. The taller the blocks became, the more distorted the sounds were (Participant 3, 2023).

This reflection further underscores the notion that rhythm is a “corporeal and conceptual nexus through which to grasp the spacetimes in which bodies participate”, imploring visitors to “increase conscious control over corporeal rhythms and complex bodily movements and develop an enhanced capacity for listening” (Lyon 2018, 7). As such, this participant’s comment unveils that the repetitive sound of walking in and of itself enhances their ability to grasp and engage more deeply with other sounds experienced in the memorial.

In the next section, I will address these properties through this chapter’s soundscape composition, which is made up of recordings at the memorial where walking is audibly prevalent from both the recordist as well as other visitors.

Soundscape Composition



Click here to listen: <https://soundcloud.com/elli-bookhalter/rhythm-soundscape-composition>

The purpose of this chapter's soundscape composition is twofold: to contextualize the rhythmic variability and complexity of walking at the memorial as it relates to the theoretical framework outlined above, and to provide audible context for how said variability can be applied to discourses of Holocaust commemoration and engagement at the MMJE. This composition, like the previous two, consists of several audio recordings taken at the memorial by my research participants and I during various days of the week and at various times throughout each day.

These specific recordings were chosen to highlight how the inevitably improvised nature of walking through the memorial's material infrastructure contributes to a complex interrelation of the two following rhythmic properties: tempo rubato and syncopation. It is by addressing and engaging the corporeality of improvisation, as well as the rhythmic variability of soundwalking that we can understand how these rhythmic properties can be conceptualized as embodied, auditory phenomena in the memorial as well as in the broader practices of Holocaust memorialization. I will begin by providing a brief definition of tempo as a broad concept, followed by an analysis of how understanding tempo rubato specifically as it relates to pace can elicit an engagement with the rhythmic properties of syncopation in the context of the composition and the memorial.

Tempo, as defined by Merriam-Webster (n.d.), is “the rate of speed of a musical piece or passage”, often indicated mathematically and in most contemporary popular music using beats per minute (BPM). In many forms of classical music, it is often specified using a range of descriptive words such as *Andante* (moderate pace), or *Presto* (quickly). In the context of walking, tempo is in reference to the speed or pace of the individual’s mobility (Lyon 2018, 49), and it is “through walking we become aware of pace and speed” (47). At various points throughout the composition, the pace of the recordists’ movement is in flux, not only making the walking tempo subject to change, but revealing the many tempos of visitors around them. This is clearly demonstrated between 1:00 and 1:35 in the composition. Such a phenomenon is known in music as *tempo rubato*: a musical term applied to the speeding up and slowing down of a song or musician’s tempo.

In a musical context, *tempo rubato* is usually at the discretion of a soloists or the conductor in orchestral settings and is typically engaged with as an expressive method of phrasing where notes and measures are stretched or shortened (Huberth et al., 2020). Such a dynamic expression has been implied outside of these musically specific frameworks as well. For example, it is evidently a recurring theme in soundwalks, as demonstrated in the reflections of one of Westerkamp’s soundwalk participants: “The mixture of different paces and emphasis of the step of each individual was making the overall sound so unique and interesting, with no consistent pattern or tempo” (in Westerkamp 2017, 4).

As it relates to the specific framework of the soundscape composition, the walking tempos throughout its various sections are expressed by improvised movements in conjunction with other sounds that can be heard at the memorial. For example, from approximately 1:56 to

2:20 in the composition, the walking tempo slows down and speeds up as an embodied reaction to the presence of car engines and people talking and coughing. Such temporal elasticity elicits the effect of tempo rubato in response to these external sounds. These sounds act as a metaphorical representation of rhythmic syncopation (Pederson 2015).

In a musical context, syncopation is typically defined as “a disturbance or interruption of the regular flow of rhythm”, involving the “placement of rhythmic stresses or accents where they wouldn’t normally occur” (Hoffman 1997). It is typically employed in improvised styles of music such as Jazz where the rhythmic properties of a song are at the discretion of the musical circumstances surrounding the players. Much like the improvised nature of walking through the MMJE, this soundscape composition reveals that recordists’ experiences of syncopation (De Boeck 2015, 147) are characterized by occasional sonic disturbances as they walk through memorial, such as visitors talking or vehicles driving by (0:29 - 0:55). The temporal implications of walking through these moments in response to these external syncopations subsequently result in a reactive, embodied, improvisation.

Such a phenomenon demonstrates the intertwined nature of sound and corporeality in the context of the MMJE, broadening the potential for rhythm and its numerous properties to act as a medium of engaging Holocaust memorials from an embodied (Lund 2015, 31), fluid (Kaplan 2019, 59) and improvised perceptuality. However, as evident in the composition, recording soundwalks at the MMJE does more than reveal how the improvised, unpredictability of one’s footsteps sensitizes the body to the unique rhythm of the space (Lyon 2018, 48). It also showcases how doing so auditorily and metaphorically contextualizes both the current and potential future state of Holocaust memorialization.

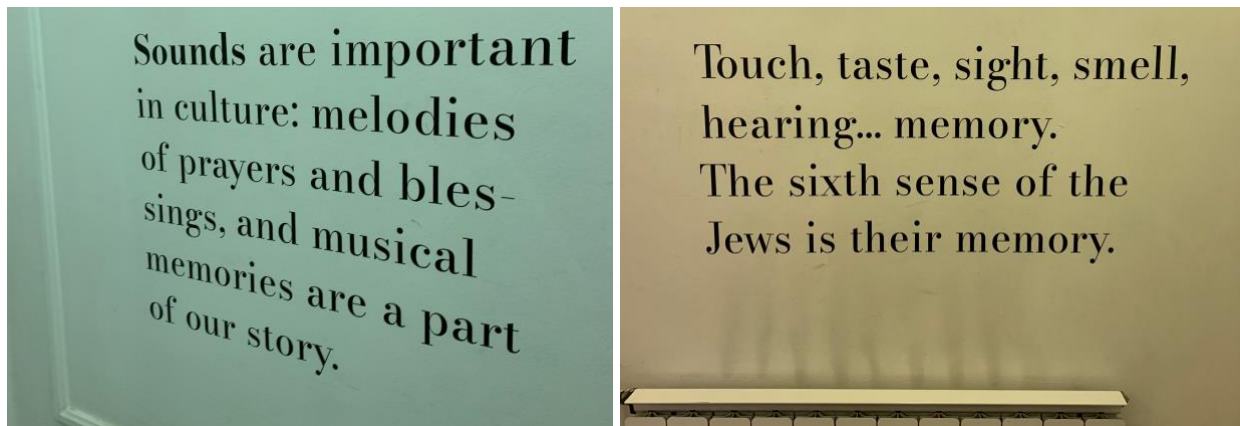
Improvisation as Representation

Engaging with the rhythmic variability of walking in this composition as well as the rhythmic implications of participant reflections brings into question the complex nature of Holocaust memorialization as it stands today. The rightful question of the impossibility of representation pertaining to the Holocaust should not only acknowledge the construction of relationships between the past and the present (Wagrell 2015, 285), but the practicality and broader nature of commemoration. Beginning to do so necessitates questioning memory as an achievable outcome and instead consider improvisation and process as a broader methodology of commemorative practice.

It is by engaging with the improvised, rhythmic unpredictability of walking at the MMJE that discourses can shift toward an embodied, sonic approach to address the complexities necessary for commemorating and representing the Holocaust. Addressing the sonic complexities associated with the intersections of corporeality, improvisation, and rhythm can elicit new discussions of sonic engagement at places of Holocaust memory as well as lay the groundwork for improvisation as a 'goal' within the sheer impossibility of past and present Holocaust representation. To give an applicable example of how this can be done within the epistemological framework of the Jewish people as a whole, the next section will discuss how the intersections of improvisation and rhythm engage with a proposed Jewish concept of time. I will begin by providing an overview of how my experience travelling to different Jewish sites throughout Europe after my time in Berlin inspired me to consider such a framework for engaging with rhythm as an auditory phenomenon at the MMJE.

Rhythm and Walking as Mediation for a Jewish Concept of Time

After my time in Berlin, I spent two weeks travelling through central and eastern Europe. During this time, I made a point of visiting various Holocaust memorials as well as Jewish museums, cultural centres, and synagogues. One particular place that I visited was the Dohány Street Synagogue of Budapest, Hungary. The complex on which the synagogue stands is also home to a museum of Jewish art, culture, and history. As I was walking up the stairs to the museum, there were various quotes on the wall pertaining to Jewish sensoriality, epistemology, and memory. Two quotes that really stood out to me can be seen below:



Photos 10 & 11: Dohány Street Synagogue Museum - Photos by Elli Bookhalter

Upon coming across these quotes, I began to consider them in relation to the work I had done in Berlin, the nature of the work, and the people who I am ultimately doing the work for. I wanted to reflect on how engaging with sound at the MMJE, a space whose intended purpose is to commemorate the 6 million Jewish victims of the Holocaust, can potentially speak to Jewish ways of knowing and being in the world today, throughout history, and subsequently, in our collective memory. As such, I will provide an overview of a framework for a potential Jewish

concept of time, its rhythmic implications, and how the rhythms experienced at the MMJE engage with the intersections of Jewish memory and epistemology.

A Jewish concept of time should be broadly conceptualized through a positive cyclical continuum. In other words, while time continues with a forward momentum, the present maintains an unending relationship of cyclicity with the past. Though a unified Jewish concept of time has long been a subject of debate, Jewish holidays evidently bring into question the nature of temporality as it relates to Jewish practices and their relationship to a particular point in the Jewish story. One such example is the holiday of Passover. According to Israeli anthropologist Elazar Ben-Lulu (2023), “the foundation of the [Passover] Seder rite is difficult to determine, spanning as it does so many different cultural and religious communities over time” (52), yet throughout the diaspora, the words ‘next year in Jerusalem’ are recited at the end of each seder, calling back to the liberation of the Jews from Egypt in their return to the Land of Israel. Such phrasing implies a recurring liberation, threading a cyclical relationship between the present and the past. In another example, Jewish mysticism scholar Elliot R. Wolfson (2015) addresses temporality in Kabbalistic practices by stating the following:

Extrapolating more generally about the nature of time, we can say that every moment is radically new only to the extent that it is utterly ancient. Time, on this score, extends as a line that revolves as a circle. In any given point of the temporal rotation within the cycle, creation mimics this linear circularity (22).

Evidently, various Jewish schools of thought and religious discourses have unique interpretations and understandings of how time operates in both philosophical and theological terms. That said, broader Jewish temporal consciousness is unified in how the “past participates

in the present, [while] the present recapitulates the past” (Neusner 1997, 353). It is recurrently implied that “time is not linear or progressive but, rather, is constituted by various ‘paradigmatic’ moments or events that give meaning to subsequent stories through memory” (Barter 2016, 3). As such, any notion of a singular Jewish temporality is not only reliant on memory; it is memory.

Memory is undeniably central to Jewish epistemology. Therefore, engagement with memorials dedicated to the Holocaust necessitates acquaintance with Jewish conceptions of time. I argue engaging the rhythmic implications of walking through the MMJE elicits an effective starting point for this discussion. In addressing the memorial landscape of contemporary Berlin, Kirsty Ward (n.d.) states the following pertaining specifically to the effectiveness of the MMJE as a significant Holocaust memorial:

The Memorial to the Murdered Jews of Europe effectively presents the extreme loss of the Holocaust due to the enormous size of the project [which seems almost inescapable once you enter the Field of Stelae], but in so doing, removes the possibility of relating to the loss of Jewish culture on a human level (21).

While there are undoubtedly many clear inadequacies regarding the memorial’s visual ambiguity, discussions around the memorial’s effectiveness would benefit from engaging the broader socialization of ocularcentrism in conjunction with the lack of proper education surrounding Jewish culture and epistemology. Thus, as demonstrated by the reflections of participant soundwalks and audio recordings, it *is* possible to engage with the memorial through a lens of Jewish epistemology: through the positive cyclical intersections of both the rhythmic experiences at the MMJE and ideas of Jewish temporality.

Tempo Rubato and Syncopation as a Positive Cycle

When first introducing Lefebvre's rhythmanalysis, I included a table created by Lyon (2018) that engages with the following rhythmic vocabulary: *linear rhythm*, *cyclical rhythm*, *polyrhythmia*, *eurythmia*, *arrhythmia*, *isorhythmia*, and *dressage*. Within this rhythmic framework, Lefebvre argues that linear and cyclical rhythm are "at the heart of rhythmanalysis" (Lyon 2018 24), with linearity being described as "homogenous, fragmented, monotonous, tiring and even intolerable" (25), whereas cyclical time is "linked to nature which has long 'held sway' over everyday life" (Lefebvre in Lyon 2018, 25). Unfortunately, such a clearcut, rigid distinction ultimately denotes an ideologically charged binary void of complexities associated with perception, embodiment, and memory. I argue that by engaging with Jewish epistemology, the rhythmic experiences of tempo rubato and syncopation while walking are both cyclically and positively distinct, going against the simplistic framework employed by Lefebvre and frequented by other thinkers who engage with rhythmanalysis.

The positive cyclicity of a Jewish concept of time can be engaged with through the rhythmic experiences of the MMJE in the following ways. Firstly, its cyclical component can be conceptualized through walking. Though a relatively simplistic practice of mobility, "all forms of walking (...) are invariably constrained and enabled by a range of factors, including the characteristics of the terrain moved across, and the particular regulatory regimes that overtly or more subtly coerce normative modes of movement" (Ingold & Vergunst 2016, 124). As such, and as evident in the recordings of participants, the sounds of their footsteps, though repetitive, indicated a clear cycle of varying paces (tempo rubato). Secondly, the reflections of Participant 1 demonstrated how walking and the sounds of others walking provided them with an

opportunity to contemplate the atrocities of the Holocaust as it related to their own family through auditory representations of individual and collective memory. Thus, it is evident that the sonic embodiment of walking dismantles the notion that pace exclusively “tends toward a linear spatialization of time” (Lyon 2018, 5), as demonstrated by the sonic syncopations experienced by visitors at the MMJE.

As previously addressed, the syncopations heard at the memorial can be most accurately described by auditory phenomena other than the sound of one’s own walking, such as sounds produced by other visitors. Much like the variability in the sound of one’s own walking, these syncopations were perceptually at the mercy of improvisation. However, unlike walking, once these sounds occur, they metaphorically function much in the same way as ‘high points’ in Jewish history: moments in the past that are “decisive turning points in history and somehow remain with us still” (Barter 2016, 2), even if they never ‘happen’ again. As time continues to cycle through, it is the positive direction that enables these moments to be revisited in the past from the present.

Conclusion

Broadly, Jewish conceptions of time in conjunction with rhythmic experiences at the MMJE demonstrate how cyclical and positive temporalities are by no means mutually exclusive of each other. In doing so, I have demonstrated that spaces of memory can be engaged with in ways beyond “an emanation of individual trauma, as rhetoric of testimony, or as a collective account endowed with historical and political significance” (Ionescu 2017, 11). For visual

context, I have created the following diagram to illustrate how the sounds and sonic experiences at the MMJE engage with a proposed Jewish concept of time:

Walking → tempo rubato → cyclical
Other sounds → syncopation → positive

As previously mentioned, it is evident that much of the current and historical discourse of artistic Holocaust representation and memorial revolves around critiquing the art or artists themselves as opposed to addressing the socialization of ocularcentrism in western society and a significant lack of education surrounding Jewish culture and epistemology. In this chapter, I have demonstrated that with the MMJE, it is possible to recalibrate and rethink how engaging with spatiotemporally integrated memorials addresses the individual perception of sonic, embodied, and improvised implications of rhythm as a paradigm for current and future Holocaust discourses. The time to blur the lines between Jewish peoplehood, sound, and Holocaust commemorative practices is long overdue.

In the concluding chapter to follow, I will reflect on the 3 previously addressed acoustemological properties of the MMJE: sonic dissonance, polyphony, and rhythm. In doing so, I will address how Primo Levi's notion of the gray zone can metaphorically engage said properties through its implications relating to ethics of Holocaust memory, representation, and testimony.

Conclusion

This thesis prompted a discussion about various ways in which sound can be explored to address discourses of Holocaust commemoration and representation at Berlin's Memorial to the Murdered Jews of Europe (MMJE). Over the course of this research, I have demonstrated that much of the current discussions surrounding the Holocaust are lacking not only in sonic engagement itself, but in *how* sound is engaged with at existing sites of Holocaust memory through a lens of individuality and culture. Using sonic and musical metaphors as well as soundscape compositions, I have explored various ways in which Steven Feld's *acoustemology*, or knowing through sound, can be used as a theoretical and methodological framework to broaden these discourses.

Before bringing this discussion to a close, I would like to address the following. Firstly, I will summarize and then bridge the core acoustemological arguments I have brought forth in the aforementioned chapters to address their broader implications in current academic debates about the Holocaust. This will also address the creation and use of soundscape composition as mediation for engaging Holocaust memory in contemporaneity. Secondly, I will introduce Primo Levi's notion of the gray zone to open a discussion pertaining to how the previously addressed topics of this thesis can be engaged with through its testimonial and commemorative implications. Lastly, I will broadly reflect on my experiences throughout the course of this research project, both in the field and in the writing process. I will also address how the theoretical and methodological components of this work can inspire ideas for potential projects in the future.

Exploring Acoustemological Properties

As stated by Steven Feld (2015), acoustemology is a relational concept (12-13). Having conducted fieldwork at Berlin's MMJE, I have identified the three frameworks addressed in each chapter as core to an acoustemological engagement of this memorial. As such, an acoustemological engagement of Berlin's MMJE can evidently take many forms.

The first of three sonic specific frameworks that I have chosen to work with addresses how sonic dissonance can encompass the inadequacies of oversimplification pertaining to silence and noise as a perceived auditory binary. This discussion concluded that the complexities associated with post-memory and post-witnessing discourses of Holocaust representation are by and large recapitulated by experiences of sonic dissonance at the MMJE and within the chapter's soundscape composition.

The next acoustemological property that was explored was the notion of polyphony. This chapter addressed how Berlin's historical and metropolitan complexity in conjunction with the diversity of sonic experiences at the MMJE, through frameworks of macro- and micropolyphony, speak to the ever-evolving plurality of Holocaust memory in a globalized world. I concluded that simultaneously engaging with notions of Holocaust representation such realism, anti-realism, and fluidity through the aforementioned polyphonic frameworks can elicit the potential to quantify the past, present, and future of Holocaust memory through pluralistic, global, and auditorily integrated forms.

The final topic of discussion broadly centred the musical implications of rhythm, and how walking as a form of corporeal engagement at the MMJE can be conceptualized by intersecting discourses of *rhythmanalysis* with improvisation to embody and critique Jewish

representation in Holocaust memory. In doing so, I addressed how the rhythmic properties of tempo rubato and syncopation as experienced through walking at the MMJE can embody the positive cyclicity that encompasses a proposed Jewish concept of time.

In addition to the written component of this thesis, each chapter featured a soundscape composition to contextualize the sound-based frameworks I am engaging with. Each of these compositions consisted of various audio recordings that both myself and my research participants had taken during visits to the memorial. The purpose of these compositions was to stimulate the listener's active listening skills through imagination and memory (Boudreault-Fournier 2016) as they relate to the theoretical ideas being discussed. To thoroughly engage with said theoretical ideas, I employed different production techniques in an aim to evoke the emotional and epistemological specificities pertaining to sonic experiences of the memorial in relation to my discussion.

Overall, these topics and their respective soundscapes can individually stipulate various points of entry for conceptualizing how an acoustemological engagement with the MMJE can further develop contemporary discussions surrounding Holocaust memory and representation. However, the ways in which the aforementioned ideas of sonic dissonance, polyphony, and rhythm at the MMJE overlap and contribute to the bigger picture of contemporary Holocaust memory is an undoubtedly complex issue. In the following section, I will attempt to bridge these ideas through contemporary questions of memory as they relate to Primo Levi's notion of the gray zone.

Discussion

The study of memory and proliferation of memory discourses have become extraordinarily complex interdisciplinary issues. Since the 1980s, these issues have resulted in multitudinous concepts pertaining to cultural memory, communicative memory, social memory, memory cultures, cultural remembrance, social forgetting, memory in the global age, transcultural memory, and individual memory (Erll et al. 2008, 6). As such, memory research has evidently been an “outstanding example of how far apart methods and research interests [of] individual disciplines can be despite the close relationship of the objects of study” (Pethes et al. 2001, 5). Such a microcosm of these disciplinary complexities is undoubtedly found within memory-based discourses relating to the Holocaust.

In a world of rapid cultural interconnectedness and technological expansion, questions and ideas surrounding Holocaust memory have arguably become one of the most complicated topics of contemporary memory studies. As stated in the introduction, many institutions and organizations have attempted to address these complexities with various forms of commemorative practices and memorials. Furthermore, Berberich (2019) addresses that “new modes of representation are needed to stop Holocaust memory from solidifying and becoming static; only if it is kept alive can it keep its message and its relevance to contemporary society” (5). Issues that are central to these discussions have long stemmed from the broader implications of the following questions: “‘Who has the right to represent the Holocaust?’ and ‘How should the Holocaust be represented to ensure its continued commemoration?’” (Berberich 2019, 2). Such questions, though seemingly simple in their asking, are undoubtedly

complicated in their delivery. Such complexities have been addressed by several scholars and writers of the Holocaust, such as Primo Levi.

Levi was an Italian-Jewish writer, chemist, and Holocaust survivor. One of his texts, titled *The Drowned and the Saved*, is a collection of essays he wrote pertaining to life, death, morality, and ethics based on his experiences at Auschwitz concentration camp in Nazi-occupied Poland.

In the book's second chapter, Levi engages with what he refers to as the gray zone.

Etymologically speaking, gray zone connotes the broad spectrum of color that exists between the purest white and the deepest black. It is a metaphorical critique of simplistic binary ways of thinking and perceiving of reality, often termed 'black and white'. It instead suggests a 'fluid' conceptualization of the space that exists between those colors:



Fig. 6: White → Black spectrum – Created by Elli Bookhalter

Though this term has long existed prior to his application, Levi's use of the gray zone is to address and confront "the human need to divide the social field into 'us' and 'them', two clearly distinct and identifiable groups" (Craps 2014, 202). He claims that such binary thinking is morally inadequate in the face of the complexity of life he experienced in the camps, citing what he refers to as the Nazis most demonic crime: the attempt "to shift onto others—specifically the victims—the burden of guilt, so that they were deprived of even the solace of innocence" (Levi 41, 2017). Here, he is referring to the sheer guilt felt by Jews who were selected by the SS to

perform horrendous tasks such as herding other Jews to gas chambers while being forced to lie and manipulate them (Lee 2016, 277).

The ethical implications of the gray zone have influenced and drawn much critique from scholars across disciplines including thinkers of history, moral philosophy, psychology, and memory studies ever since Levi's book was first published in 1986. The gray zone has been engaged not only as an ethical concept, but as a necessary narrative device for engaging with the lived realities of survivors in contemporary Holocaust discourses (Caldas & Spinola 2019, 31). Levi states the following at the beginning of his chapter: "have we survivors succeeded in understanding and making other people understand our experience? What we commonly mean by the verb 'to understand' coincides with 'to simplify'" (Levi 2017, 25). Such a statement has not only profoundly impacted how memory and testimony have been engaged with by Holocaust scholars and commemorative institutions. It has also created significant tensions in the ways in which the broader public comes to think about the Holocaust. Prior to engaging with how Levi's work can intersect with my research, I would like to address the visually grounded etymology of gray zone, and the resulting implications it has on memory.

Novelist Lisa Appignanesi (1999), a second-generation Holocaust survivor, succinctly addresses the sensorial nuances imbued within memory, speaking to much of the moral and representational complexities addressed by Primo Levi's experiences and subsequent notion of gray zone. She states that "memory is an emotional climate, a thick set of sights and smells and sounds and imprinted attitudes which can pollute as well as clarify" (6-7). Gray zone, as it suggests, captures a visual metaphorical representation of the complexity of Levi's experience. However, perhaps by broadening sensory experiences of memory in contemporaneity, the

legitimacy of survivor testimony can be engaged with in different ways in spaces of commemoration. Rather than focusing exclusively on the specific philosophical implications of Levi's ethical proposition of the gray zone, broadening its sensorial reach beyond the visual into the realm of sound elicits the potential for a transient, temporal, and fluid forms of commemorative and testimonial engagement (Le Breton 2017, 63). Vision can be argued as fixed and suspended in time, assuming distance from an object, subsequently presenting itself as truth (Voegelin 2010, xi – xii). Sound, much like the ethical ramifications of Levi's testimony, forces us to lend ourselves to it because "it is beyond our power to control it" (Le Breton 2017, 66) due to its ephemeral invisibility (Voegelin 2010, xii).

As such, I argue that the three previously discussed notions of sonic dissonance, polyphony, and rhythm, and their subsequent engagement with contemporary discourses of Holocaust memory and representation, can be broadly encompassed by an auditory gray zone, what I would like to conceptualize through the sonic notion of 'resonance'. Derived from the Latin *resonare*, resonance as a sonic property originated in the field of acoustics to describe "the intensification and enriching of a musical tone by supplementary vibration" (Merriam-Webster). Beyond musical applications, resonance has additionally been adopted in scientific disciplines such as physics to describe when "a particle is subjected to oscillating influences (such as an electromagnetic field) of such a frequency that a transfer of energy occurs or reaches a maximum" (OED). Grounded in its sonic origins, resonance has additionally been engaged with in the humanities and social sciences as a "part of a rich metaphorology that seeks to replace the binaries of structuralist thought with a notion of discourse that is diametrically opposed to a distancing and objectifying form of knowledge" (Erlmann 2015, 175).

Resonance, as such, stimulates an ideal epistemological, commemorative, and testimonial framework for conceptualizing Levi's notion of gray zone as a sonic paradigm. It can effectively bridge previous engaged sonic properties of dissonance, polyphony, and rhythm by nuancing not only "the precarious interrelations between sound, aurality, cognition, subjectivity, and embodiment" (Erlmann 2015, 181), but also the ways in which memory is "affected by the dynamics of the sound events around us" (Street 2019, 21).

As a conceptual and perceptual umbrella for the theoretical, pragmatic, and acoustemological praxis of memory through sound, resonance can elicit a broader sensorial engagement for conceptualizing the complexities associated with sonic experiences at the MMJE. As stated, with the visually grounded notion of Levi's gray zone encompassing spatiality, resonance as a sonic equivalent can broaden the conceptual paradigm of his ideas through transience and temporality. Discourses concerning commemoration and representation often engage the Holocaust as a multiscale, historical event within the framework of a shifting chronology. Engaging Levi's gray zone in conjunction with sonic resonance elicits the potential for Holocaust engagement and discourse to be considered more dynamically as something moving through both space and time (Cole 2020, 336). Though the Holocaust is often historically confined to events that occurred from 1941-1945, it resonates amongst the Jewish people to this day. In short, resonance postulates a temporally and auditorily integrated metaphorical dimension to the discourses introduced with Primo Levi's notion of gray zone through an acoustemology of Berlin's Memorial to the Murdered Jews of Europe.

Closing Reflections

Before I bring this thesis to a close, I would like to provide some of my own thoughts and reflections based on my experience of this project over the last year. When I arrived in Berlin for the first time, I was immediately shocked that I was in the place that once was the nucleus of the Third Reich. I didn't know what to expect, but thinking about the unspeakable atrocities that stemmed from this now bustling metropolis created a strong dissonance between what I assumed and what I ended up experiencing. I had heard a lot about Berlin, but I had never heard Berlin.

Over the course of my time there, I went to the memorial almost every day to record sounds in and around it. When I came back to listen to my recordings, it was seemingly impossible to imagine I was recording audio at a supposed site of Holocaust memory. Sounds of traffic, sirens, laughter, eating, multiple languages, birds, and so much more somehow made me feel as though the historical backdrop of Berlin was far removed from its contemporaneity as an urban metropolis. I began to question the nature of my work, its purpose, and for whom I was ultimately doing the work. Gaining insight as to how people connected with these sounds in and around the memorial started to seem impractical.

That was however, until I started to engage with the contributions from those who I was very fortunate to have helped with this project. I've come to understand through their reflections and sound recordings that these seemingly ordinary sounds embody a relatively uncharted means of engaging with spaces of Holocaust memory. Each participant, by focusing specifically on what they could hear in the memorial, was able to engage with their own thoughts, feelings, memories, histories, and biographies. Though a seemingly transient sensorial

constituent, sound, through active listening, can evidently elicit embodied, intertemporal, and spatially integrated means of engaging the MMJE as a site of memory.

In fully realizing this thesis, soundscape compositions have proven to be a relatively unexplored means of engaging notions of Holocaust memory. Due to the sensorial and artistic specificity of this work, I felt that these compositions could effectively accompany and demonstrate much of the auditory notions discussed in each chapter. Readers and listeners are thus invited to consider the potential of using creativity and imagination as a means of acoustemologically conceptualizing the MMJE as a site of Holocaust memory. “The concept and approaches of soundscape compositions are being embraced as an interdisciplinary methodology” (Martin 2018, 27), but are yet to see much emergence in Holocaust-based research. I hope that through this project, other scholars in related disciplines will consider engaging with such methods and means of dissemination.

Disciplinary Contributions

Perhaps the most significant contribution this thesis would bring to those whose research centres Holocaust memory would be its ethnographic dimension. By engaging with thoughts, ideas, and experiences of research participants using ethnography in conjunction with a broad range of anthropological literature, this thesis demonstrates that topics pertaining to Holocaust memory can include discussions with everyday people, irrespective of their connection to the Holocaust. As vital as it is to engage with those who are most closely affected by the Holocaust, including those who are not usually present in its discussion elicits the potential of expanding Holocaust-based education to a larger demographic.

In the spirit of forwarding anthropological knowledge, this thesis' most significant disciplinary contribution would be artistic methodological approaches. Stemming from deeply colonial disciplinary roots, anthropology has recently become concerned with its own entanglements with colonialism; referencing how anthropologists have historically claimed "an innocent position as representatives of *the other*" (Jensen et al. 528, 2017) in order to produce knowledge. Now forced to come to terms with its past, anthropology sees reflexivity, or drawing attention to the researcher's presence (Lumsden et al. 2019, 1), as a central tenet of disciplinary methodology.

As previously discussed, my presence as a researcher was undoubtedly inspired by Alexandrine Boudreault-Fournier's work on the Echo Project, positioning myself not only as a researcher, but as a composer and producer eliciting a relational encounter (Boudreault-Fournier 2016, 137) between myself and my research participants. Such an encounter was made possible by using a website as a digital space where contributions were shared and engaged with. As such, this thesis has propelled anthropological knowledge in such a way that addresses issues of reflexivity in conjunction with the emergence of artistic methodological practices within the discipline.

Going Forward

Due to the predominantly theoretical and somewhat abstract focus of this project, a necessary next step for this work could be taking it from mere concepts to something more pragmatic in nature. As of right now, I have considered the following three ideas: Firstly, I could reach out and engage with various Jewish artists whose work also centres Holocaust memory,

with the potential for collaborative projects in the future. Such endeavours could also potentially broaden the sensorial framework in which this work is currently embedded. Secondly, I could shift the focus of my work to be more testimonial in nature by reaching out to Holocaust survivors or their descendants to start a discussion about how sound can be used to reflect their experiences in a respectful, meaningful way that can elicit real world change in current artistic practice surrounding the Holocaust. Lastly, I could contact various Holocaust-based institutions and commemorative spaces with ideas of how sound and sound-based forms of engagement can be incorporated in their spaces to elicit alternative means of engaging memory. Regardless of the route this work may take, I am confident that this thesis has provided a sufficient foundation for engaging with sound in the future of Holocaust commemoration and representation.

Final Thoughts

In conclusion, I would like to address the events of October 7, 2023. On this day, the Jewish people experienced what many of us would consider our greatest devastation since the Holocaust. In southern Israel, more than 1,200 innocent Jews were murdered by Hamas in a massacre that some have deemed reminiscent of Nazi atrocities. Since the occurrence of these events, engaging with my work and its broader implications has become quite a bit more difficult. It, again, made me feel as though this work was less than impactful in the bigger picture of Jewish experience, trauma, and memory. That said, as I write this in a continued state of grief, I can't help but think about how much we have overcome as a people. In the words of Holocaust survivor, writer, and activist Elie Wiesel, "I marvel at the resilience of the Jewish

people. Their best characteristic is their desire to remember. No other people has such an obsession with memory” (Reis 2008, iii). It is our memory that has inspired this work. It is our memory that will continue this work. It is our memory that will resonate into our future.

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