

HEARING SILENCE  
SEEING SOUND

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HLTALE002  
2021

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## INTRODUCTION

This body of work has been driven by a curiosity for listening. Through working with sonic visualisation, audible and inaudible sound, this year has been underpinned by an exploration of sound as an intangible connector between that which is seemingly separated. The gathering of material in a research-led practice has fuelled the investigations this year, from the collecting of academic sources to evidence from outside archival collections, organic samples from my own moving components of home.

By focusing on common materials used in mark-making - ink, paper and calico - I have been driven by a curiosity for interacting with methods devised to quantify and map the invisible. Using Google Earth mapping as a point of departure, I began this year painting digital maps of deserts as natural spaces that offer challenges to mathematical methods of charting space. Choosing to focus on Sutherland and the Southern African Astronomical Observatory as desert landscapes, the process involved the observation of observatories from satellite imagery, a dynamic interaction between analysing from above the mechanisms created to understand our place on land. My investigations then led me to a physical exploration of Sutherland and the Southern African Astronomical Observatory, as part of the project methodology, all to explore inner mechanisms built to map home through the sky and stars.

In seeking to explore alternatives of meaning-making to the ocular-centrism of the 21st century, I have been interested in the power of sound to conjure familiarity, location and similarly dislocation and alienation through feeling. Being inspired by the research on sound, critical theory and contemporary art practice explored in *Acoustic Entanglements* (2017) by Sabine Kim, I am interested in the transgressive and immersive potentials of sound as "the body is more permeable to sound than to vision (while one can close the eyes, the ears are always open)" (Kim, 2017:27). As such, my fourth year body of work features practical and conceptual exploration of sonic navigation and memory. My explorations in first semester involved engagement with sound as a primary tool for navigation in the ocean and the contribution of increased anthropogenic noise to displacement of oceanic wildlife, with a focus on its correlation to mass stranding in cetaceans, particularly seen in the pilot whale (Discovery of Sound in the Sea [DOSITS], n.d). Subsequently, the second half of the year involved more sensitive engagement with soundscapes on land through engagement with the changing soundscapes of Cape Town and the indications of life, movement and presence observed in sound recordings and sound visualisations made digitally and interpretively, through abstract sound paintings. Being driven by the challenge of rendering sonic memory present and engaging with its intangibility, infrasound has been used to speak to the present, yet inaudible nature of sound in memory. Through the visualising of 20 hz as the theoretical starting point of the human audible range along with its presence shown through the movement of a subwoofer playing this frequency, this body of work seeks to create a space of sensitivity to our own sonic memories and to encourage a yearning to listen.

## ECHO-(DIS)LOCATION: Beginning with Pilot Whales

The body's permeability to sound can be felt on land, but has even greater power in water, where sound is a primary medium of navigation. As an extreme case of the importance of sound in finding home and feeling lost, the phenomenon of mass strandings provided an avenue of exploring the effects of noise pollution and the fatal results of not being able to hear one's community or oceanic environment. Although various theories have been used to explain varying cases of mass strandings, it is a phenomenon that continues to require more research as "it is not fully understood" (BBC News, 2020). Pilot whales are the species most associated with mass strandings, with cases of hundreds of bodies washing ashore (Hobson, 2021).

This particular species, although referred to as a whale, is actually a member of the oceanic dolphin family (Discovery of Sound in the Sea [DOSITS], n.d). Their name is believed to be inspired by the behavioural pattern of pods following a leader or pilot (International Whaling Commission [IWC], n.d), a feature of their social structure that plays a role in the complex range of factors contributing to mass stranding. Ranging from 5-7 metres in length, these oceanic dolphins are characterised by their large head with a "prominent melon" (DOSITS, n.d) and are found across Northern and Southern Hemispheres in pods of 20-100 members (IWC, n.d). These pods are highly socially stratified and are "based on matrilineal lines" (IWC, n.d). The strength of their familial bonds can be seen in the occurrence of mass

strandings, where a member of the pod may strand themselves, causing the rest of the pod follow, ending up stranding en masse (Hobson, 2021).

Although a central cause has not been identified, anthropogenic noise from commercial shipping, military sonar and seismic testing (Discovery of Sound in the Sea [DOSITS], n.d), has been identified as collective contributors. When the sounds of sonar prevent a whale from accurately "hearing" the lay of the land nearby or the sounds of prey and neighbouring pods, it may drift ashore due to disorientation or physical harm to echolocation faculties. Hearing a distress call from a member of their pod, Pilot whales are more likely to follow and risk their safety.

The mid-year exhibition included visualisations of Pilot whale calls - digital prints of 5,7 metres in length (*fig. 1*) hung alongside head- phones playing a heart beat set to the average rate of a Pilot whale. One wall of the space included figurative explorations of music scores, containing Western classical symbols of rests, representing silence, and digital conversions of military sonar. The opposing wall featured ink paintings of sound recordings I had taken in my residential area - Rondebosch East and the accompanying sound samples. A zine accompanied the installation featuring images taken from news coverage of mass Pilot Whale stranding along with text exploring the longing for connection, familiarity and home (*fig. 3 and 4*).

The work from this part of the year is to be included in the format of books in the final exhibition.

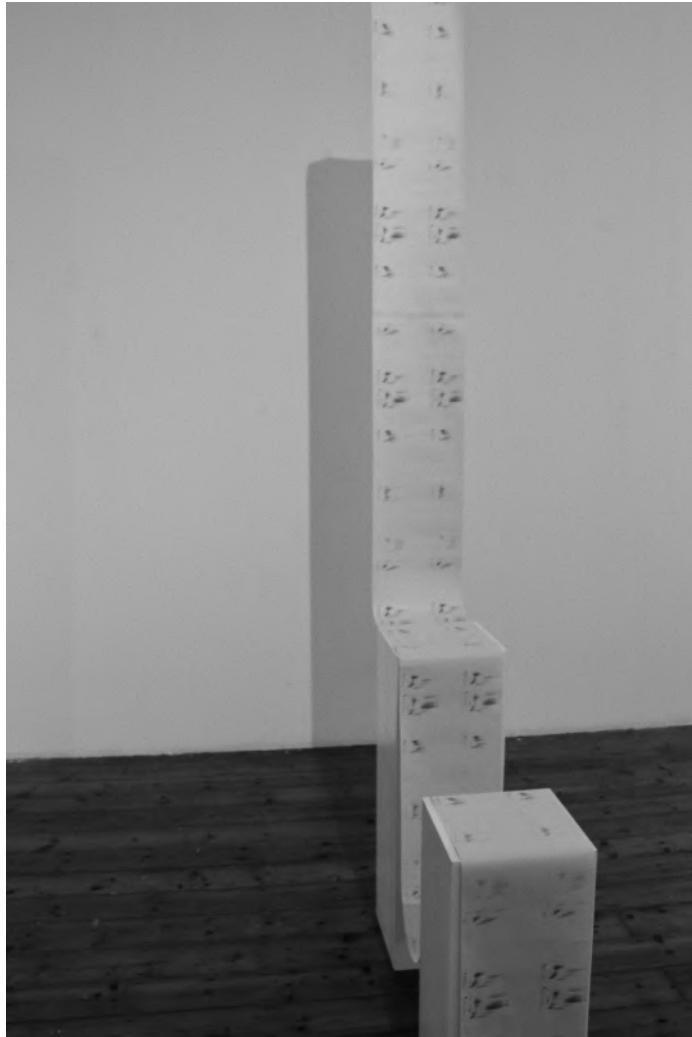


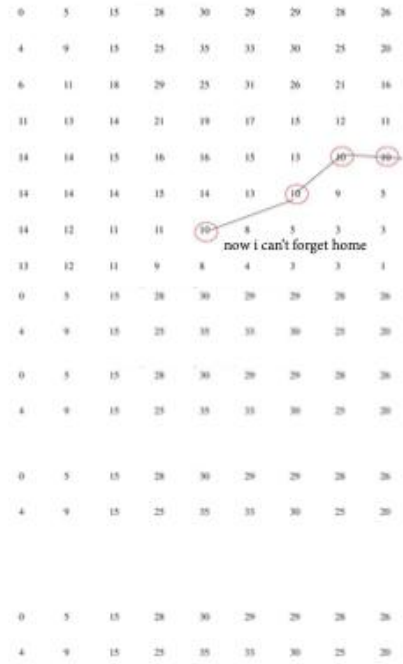
Figure 1  
*Evidence of Looking*  
Digital Print on Newsprint  
28 x 570cm (Installation View) (Photo: A-N.Holtman)



Figure 2  
A participant (Grace) in the installation (Photo: A-N.Holtman)

Figures 3 and 4

Extract from a zine featured in the mid- year examination



or the longing for it



always landing somewhere



in between

## ECHOES OF LOCATION

Sabine Kim's book, "Acoustic Entanglements", explores the transgressive qualities of sound, allowing for the crossing of physical borders "'entangling' past and present, living and dead, periphery and alleged center" (Kim, 2017). By exploring sound, literature and visual art, Sabine Kim takes the reader through several examples, opening inquiry into the role of sound in historical claiming of space and place and the continuing relevance today. The use of the term "entanglements" in the title, alludes to the networked quality of sound studies and sound itself in connecting bodies, places and times seemingly separated. Kim adopted the term 'entanglement' from Rey Chow, renowned cultural critic focusing on networked critique between media, postcolonial theory and politics (Columbia University Press, n.d). In her book, "Entanglements, or Transmedial Thinking about Capture" published in 2012, Chow explores the critical value of considering "entanglements" as "phenomena that are not defined by affinity or proximity" (Duke University Press, n.d) and how connection through "disparity" (Duke University Press, n.d) may speak to "discursive relations" (Duke University Press, n.d) across "medial forms" (Duke University Press, n.d). Ultimately derived from quantum physics, Sabine Kim states that the term describes the " 'mysterious connections between

particles...reactions that are not the results of proximity'" (2012, quoted by Kim, 2017:17). As such, Kim uses the term to speak to the ability of sound to transgress borders, rendering physical barriers permeable. Sound allows for presence to be carried through its ephemerality, linking the source (whether known or unidentified) to the listener and the listener to the source (Kim, 2017:27).

In exploring these themes practically, I have been drawn to the layering of sonic visualisations. Through the documenting of these audio recordings, the aim has been to render the presence of these spaces visible and to consider the ways in which the fleeting sonic elements influence subconscious feeling of space.

As Sabine Kim states, "the overlapping of old sounds in new places...or conversely the dissemination of new sounds in old places...can bring to light the stratified nature of cultural space itself in a politicising effect" (Kim, 2017:17). It is this layering of sound that we accumulate over time and become accustomed to. In this way, one can argue that these sounds influence our framework of understanding in subtle, subconscious ways. Therefore, we carry these soundscapes with us, rendering their presence in our responses to spaces, people and their sounds.

Figure 5  
Soundscapes in Rondebosch East  
and Athlone I (Process Work)  
Ink on Paper.  
29.7 x 21cm (Detail Scan)

Sound Recording Available:

<https://youtu.be/O2gAyxFGfTE>

(-33.9673484, 18.5011050)  
14:23  
7 May 2021

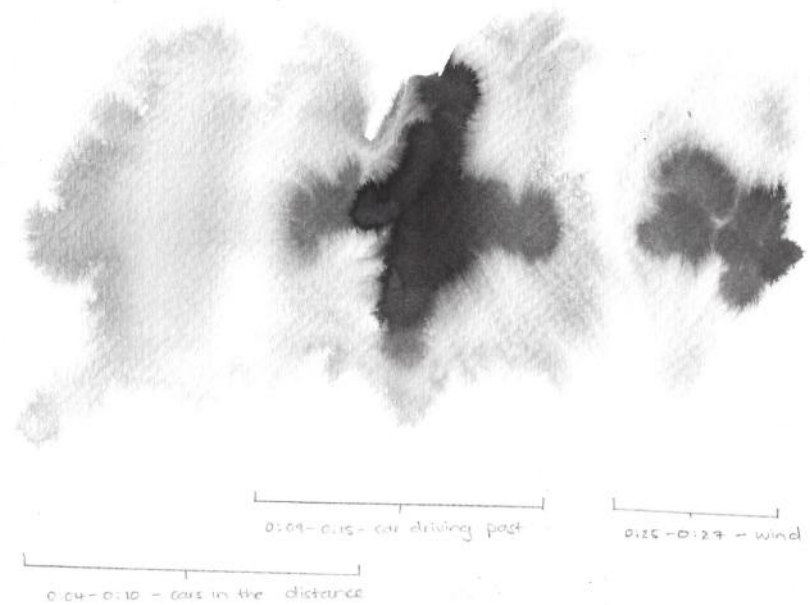
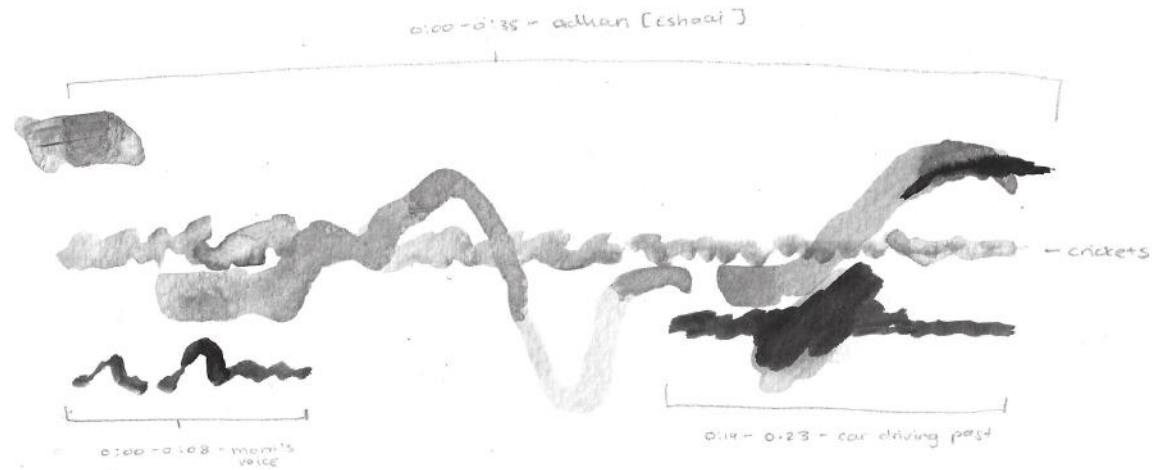




Figure 6  
Soundscapes in Rondebosch East  
and Athlone II (Process Work)  
Ink on Paper  
29.7 x 21cm (Detail Scan)

Sound Recording Available:

<https://youtu.be/mel7li9lclg>



Sounds from home  
17 March 2021  
20:15

(-33.9673+34, 18.501050)

*Athlone in Spring*

*Soundscapes in Rondebosch East - Cape Sparrows, cars and the Adhan from three nearby mosques*



Figure 7  
Ink on Calico  
1,4m x 3m

Sound Recording Available:

<https://youtu.be/AoyoPAPBcN0>



Figure 8  
Ink on Calico  
1,4m x 3m (Detail)

## EMBODIED SOUND

### Layered Soundscapes in Gelatine

I have been exploring the layering of soundscapes through the use of gelatine and ink visualisations of sound recordings. In this process, I have been scanning ink paintings and printing them onto tracing paper (*fig. 9*). These are then situated between layers of gelatine (*fig. 10*). By encasing the ink visualisations in gelatine, this exploration seeks to evoke a sense of bodily texture and movement. As the material and vertical layering obscures the ability to read the sound visualisations, the layers can be seen only slightly, challenging the ability to see these sounds. This relationship of legibility and illegibility can be said to be echoed in the way soundscapes are over-layered in urban spaces, displaying varying levels of presence through volume and pitch. These documentations, however, are not audible, but rather act as symbols of accumulated sonic memories that we carry in layers. The gelatine acts as a reminder of our own body as a receiver of sounds and how these memories are situated in physical and emotional memory, connecting various parts within ourselves and in external environments, as collagen (the dominant component of gelatine) facilitates connection and movement of the skeletal framework.

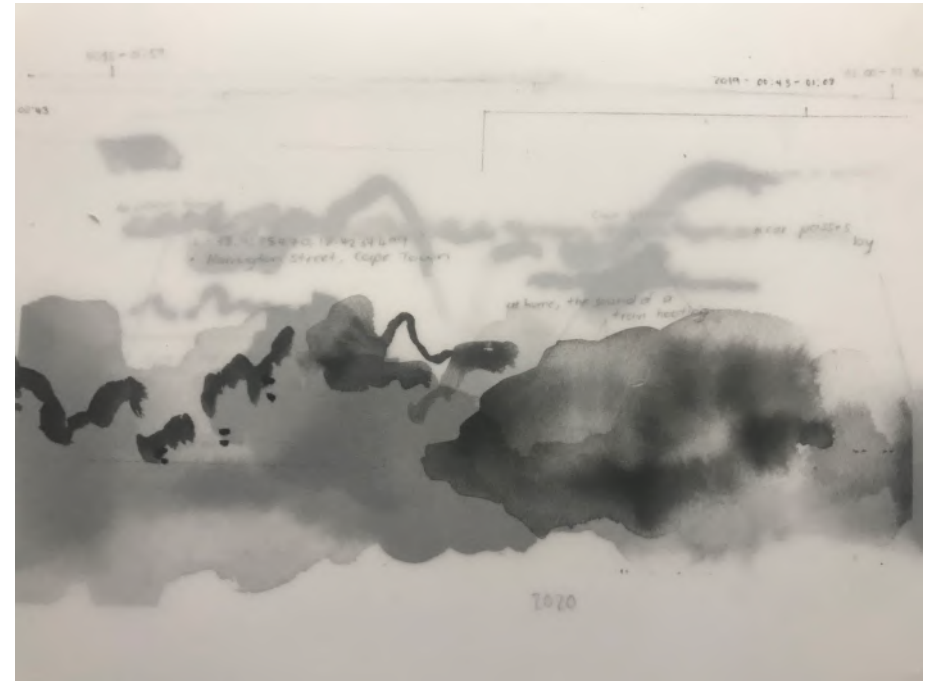


Figure 9  
Layering of ink paintings on tracing paper (Process Work)  
21 x 29,7cm  
(Detail) (Photo: A-N.Holtman)

Figure 10  
*Embodied Sound*  
Layered ink soundscapes in  
gelatine - side view (Process  
Work) (Detail)  
(Photo: A-N.Holtman)



# INFRASOUND

## Challenging silence and the inaudible

Sonic frequencies below 20 Hertz are defined as “infrasound” (Leventhall, 2007:1) and are most often only observable to humans through their effects on surrounding elements. Due to the limits of the human audible range, infrasound has been believed to evoke physical discomfort as the body can not fully locate the sound, alarming the senses and sometimes causing emotional confusion or discomfort as a result. The sound is present, but it escapes being heard.

As with memory, the presence of histories, people and sounds is carried through personal and collective perspective, informing current and future understanding. In this way, memory enables the carrying of sound through the mind and body, although the sounds themselves may not be audible. In addition, soundscapes that may be silenced due to geographical distance or volume of anthropogenic noise are carried in perspective and what is held as familiar, contributing to collective connections and community. As sound opens opportunity for invisible connection through its audibility across space, memory, too, can be said to afford sonic connection through its inaudibility.

The use of black pigment has also been used to echo this contradictory state. Inspired by Alexandra Karakashian whose use of black as a colour has been described by Sean O’Toole as “multitudinous and contradictory” (O’Toole, 2020:8) (Figures 21 and 22). O’Toole highlights the multiple uses of the colour in history and its subsequent associations. The symbolism of blackness as a colour also speaks to the materiality of used motor oil, carrying connotations of ecology and politics and possessing a seeping quality that speaks to “the fugitive nature of grief” (Rizek, 2021).

Karakashian’s minimalist palette thus presents a multi-faceted way of viewing black pigment, as “the colour of mourning and resistance, of...writers and artists” (O’Toole: 2020:8). Using black ink to render infrasound present, the aim is to bring into conversation absence and fullness, hidden presence as unlocatable sound, “so slight and ephemeral and on the other hand ineradicable” (Kim, 2017:15).

*Sound Recording Available:*

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



(Left) Figure 10  
Alexandra Karakashian  
*shroud (consolations)*  
Used Engine Oil, Black Oxide and Sunflower Oil on  
Canvas  
212.5 x 145 x 4 cm



(Right) Figure 11  
Alexandra Karakashian  
*Refuge III*  
Used engine oil, black pigment and sunflower oil on  
canvas  
145 x 100cm

Infrasound has been chosen to evoke the tension between awareness of presence and not being able to hear clearly. This tension and resulting discomfort aims to evoke a yearning to hear, returning a sense of power to the metaphorically unheard or silenced. Similarly, this dynamic can also be associated with the longing for hearing or to be heard, the longing for familiar sounds or sounds that have been ushered out of audible range.

It is this longing that also yields a sense of dislocation. In the din of CBD construction and traffic, is it silence we long for so as to return to the sound of our own thoughts? Longing to be heard or to listen to something comfortingly familiar are increasing as the world becomes noisier and our attention becomes more valuable. As much becomes silenced in the pursuit of being heard and being present, I argue that these silences do not present absence in a conventional sense, but rather an absence that possesses fullness. As silence grows, this fullness grows, escaping hearing but becoming present through cumulative effect.

Black ink has also been used to record the effect infrasound has on the way in which it dries. The resulting documentation features black circular markings showcasing a seeping effect as the ink moves from the center to the outer edges of the material (*fig. 13 - 16*). In addition, I have also been observing the effect of placing two bodies of ink on opposing sides of the material, recording how the ink is encouraged to move to the other side through the subtle vibrations of the infrasound emanating from the speaker below (*fig. 17 - 20*). In this process, the bodies of ink are seen to move towards each other, sometimes gradually, sometimes violently and suddenly, displaying connection in different ways.



Figure 12  
Process Image - Infrasound beneath ink on calico  
(Detail) (Photo: A-N.Holtman)





Process Video:

<https://youtu.be/N-hW2lQe66A>

Figures 13 - 16  
20 Hz  
Ink on Calico  
47 x 37cm  
(Photo: Imaan Samie)



Figure 14



Figure 15

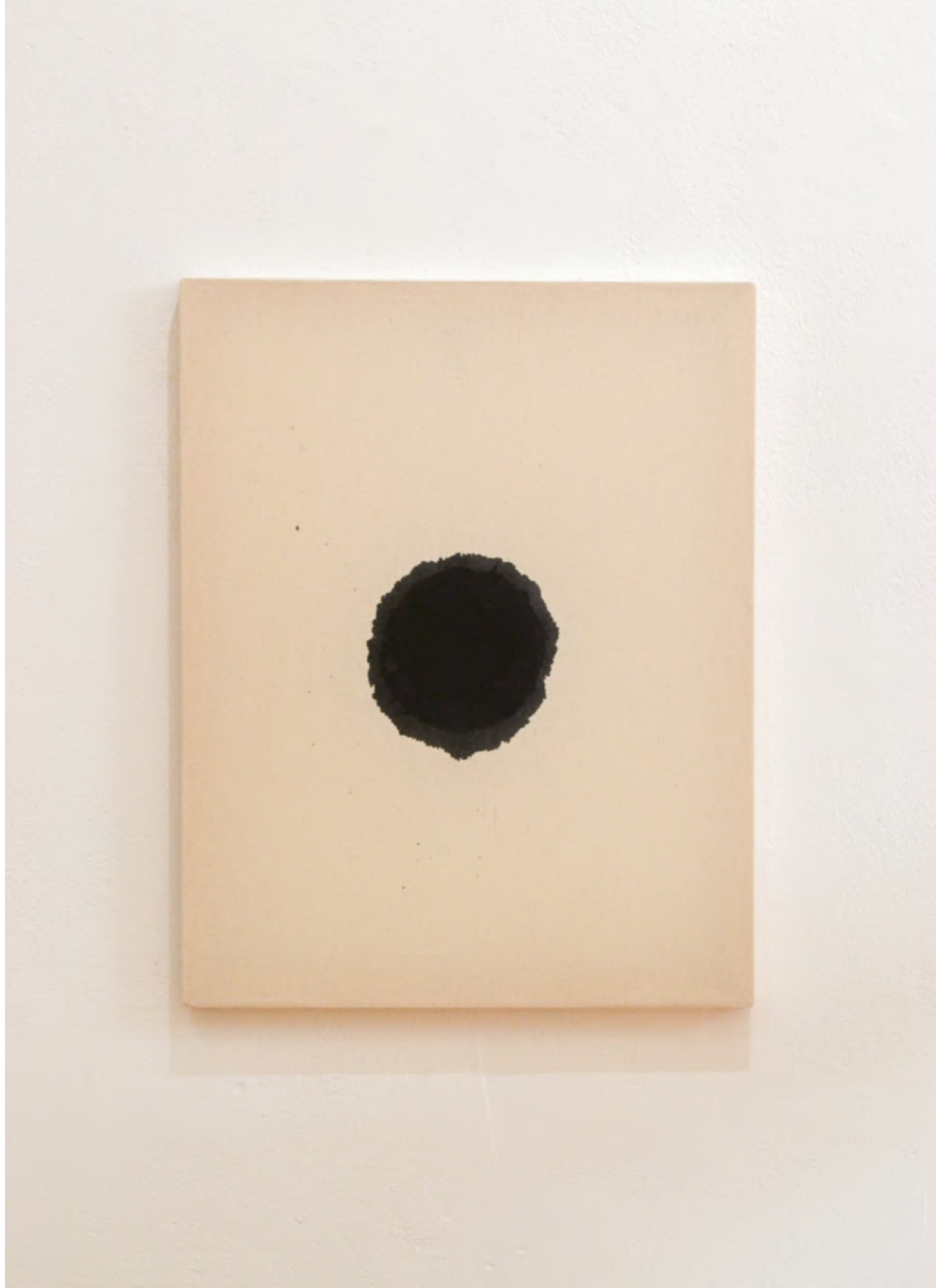


Figure 16



Process Video:

<https://youtu.be/2s8USnyDxvE>

Figures 17 - 18  
*20 Hz II*  
Ink on Calico  
67 x 47cm  
(Photo: Imaan Samie)



Figure 18



Figures 19 - 20  
*20 Hz III*  
Ink on Calico  
138 x 95cm  
(Photo: Imaan Samie)



Figure 20



Figure 21



Figure 22

ADDITIONAL IMAGES





Figure 23  
*Telematic Embrace*  
Wood, Cups and String  
3m (height), Length Variable  
(Photo: Imaan Samie)

## TELEMATIC EMBRACE

*Exploring visualising of sonic connection*

This sculptural work is based on two fundamentals - parabolas and cup phones. In exploring how sound is transmitted through materials outside the invisibility of air, I gained interest in the reflective quality of the parabola in its ability to receive and echo sound. Whisper dishes became a point of inspiration as large scale mechanisms that allow for the analog transferral of sound and in the recording of physically distant sounds through parabolic receivers. As I am curious about how the sight of sound can be realised through means outside personal interpretation, the example of cup phones emerged, often used in early science demonstrations of how sound travels in waves.

As such, the intention is to bring the two together in an interactive work that seeks to visualise the delicacy of sound transferral. One is invited to participate in a conversation across a space bridged by string and sound, where the information exchanged exists only between the two bodies in connection.

The title of this work is derived from the work of Roy Ascott, British artist and author who uses art and writing to explore technological connection and its effect on human consciousness (Tate, n.d). The term, telematics, is used to describe the ability of technology and the internet to connect physically separated individuals via an invisible pathway (Ascott, 1990). In his book from which the title of this work is derived, Ascott invites exploration of philosophy, art and technology and the potential for deep relationship along intangible cords of connection.

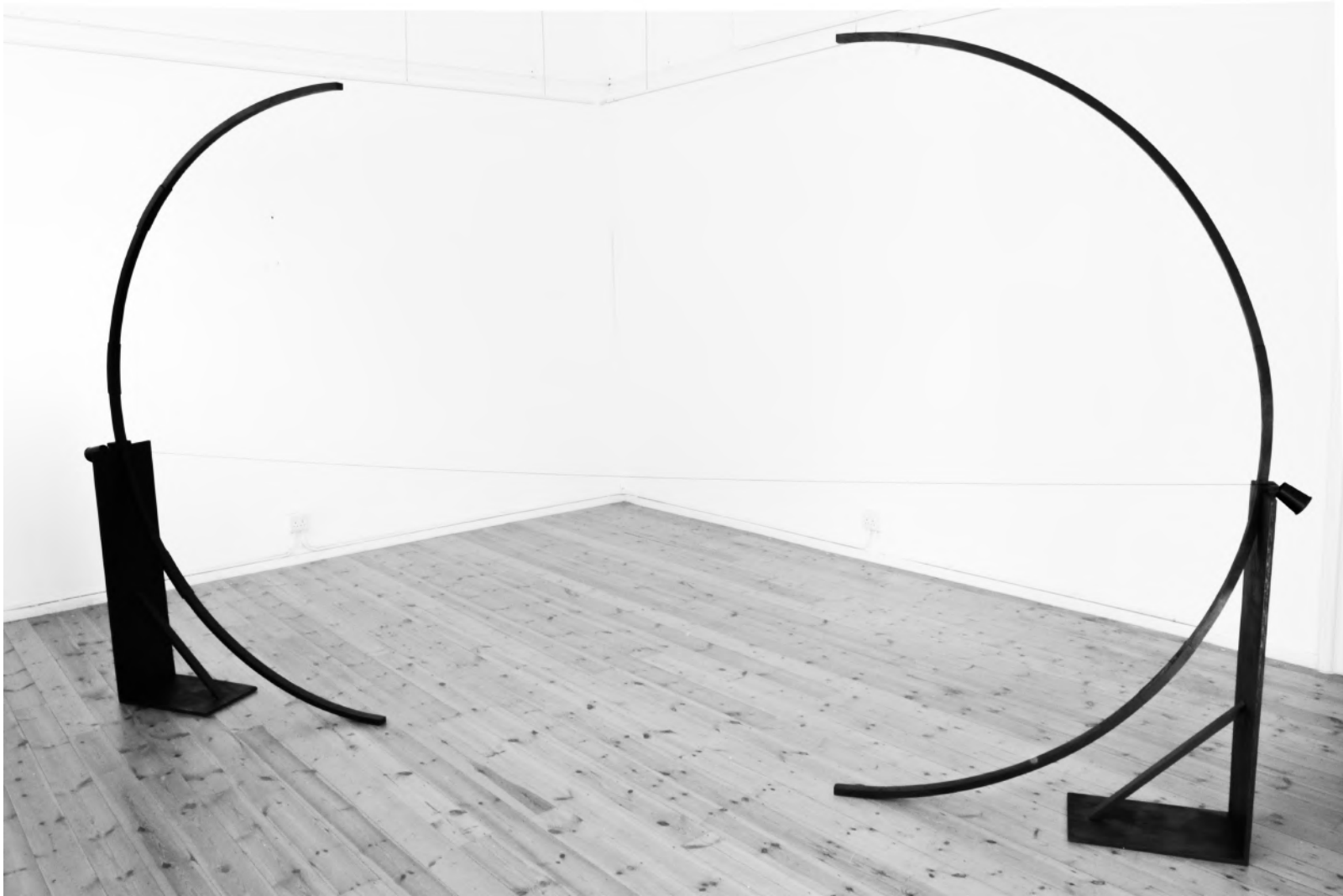


Figure 24  
*Telematic Embrace (Installation  
View)*



Figure 25  
*Telematic Embrace (Installation  
View)*

## CONCLUSION

Being driven by sound, navigation and place, this body of work seeks to open a space of awareness the power in the act of listening. Through documenting soundscapes in an attempt to preserve the ephemeral, ink, paper, calico and gelatine, have been used to highlight bodily remembrance of sound and the importance of sensitivity to seemingly silent soundscapes. This has been echoed in the engagement with infrasound, where its presence is indicated in the movement of the speaker and the subtle movement of materials in close proximity. This body of work seeks to present various avenues of engaging with “struggles over sound” (Kim, 2017:151). Where the feeling of home exists on deeply personal and collective levels, the connective quality of sound can be seen as powerful on multiple levels. Its subtlety and ephemerality linking it with the “spirit and intangible energy...continue to produce the impression of presence even when the body’s matter is inert” (Kim, 2017:23). Through the inclusion of these varying layers of engagement in installation, the aim is to immerse the viewer in a a space of inquiry into sound and silence, inviting a heightened sensitivity to listening and to the magnitude of “silence”.



Figure 26  
Speaker used in the process  
31cm (diameter) x 12cm (depth)

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