

## 0 – bell tower entry (intro)

In this part of the Come Closer series we are going to attempt to listen to the past through sound – remnant sound, architectural sound, sacred sound, and our own sounds as we move through the interior. We will occasionally be helped by the sounds of the Mellotron installation by Cardiff and Miller, as well as a few others. Tonight we are going to work together as ‘acoustic archaeologists’.

As Radna mentioned, I am a licensed architect and heritage specialist. My research has focused on using sound to decode the past – how we interact with a place through time and what kinds of environments we create. Sound can provide a new access point to how a place ultimately worked in the past. One such place I recently tried to decode through sound was the Berlin Wall. I recently started a PhD in archaeology, which is helping me to decode a sanctuary to Zeus in ancient Greece.

Tonight we are going to do something similar to my first investigations of architectural space. We’re going to look at the church not simply as an old building, but as a shell of practices accessible through hearing. We will look for artifacts of past uses that we might otherwise miss, the overall architecture geometries as much as the details, in an attempt to understand not simply how this place appeared, but how it sounded in the past.

For the sake of time, I would like to ask you to hold all of your questions regarding additional information until the very end, when the two groups rejoin each other. Feel free to ask me questions that can clarify what I am describing or asking you. But overall please keep in mind – **this is not an historical tour of the church**. We will break any and all building chronologies. In fact, I am asking you to suspend your associations and assumptions about churches in general and *this* church in particular as we walk to five separate locations.

We’re going to consider messaging in all its forms, both visual and audible, and often how these two angles work together. As we listen, start by identifying how you feel in response to the acoustics around you. Try to listen not to individual sounds, but to the entire composition of sound and the effect of your footsteps, your conversation, or your silence. Pay attention to your behavior in response. And while I hope you listen to the content of what I am saying, please also pay attention to how the sound of my voice may change depending on where we are. If you wish to close your eyes to focus solely on the sound, I won’t take it personally.

Are there any questions so far? Let’s begin.

## **1 – bell tower entry**

We are in the entry of the original church, which was built in at least 1306.

Imagine the sounds of the town or the city outside, the density of the city at different periods. Perhaps we came in response to the church bells ringing above us. From cacophonous streetscape we enter into this chamber, a rather small, compressed space. Try closing your eyes. How large does this space sound to you? **Consider how the acoustics of this space served as a transition between outside and inside.**

**PLAY: \*\*Kerk Choir\*\***

Consider the interplay of messages here. This space filters sound in both directions, isolating sacred sounds within, providing a moment of compression and tension, and serving as an experiential transition into the interior space. **Let's go inside.**

**STOP: \*\*Kerk Choir\*\***

As we enter, listen to how the sounds change around you, and in turn, how your feelings change in response.

## 2 – Framed Intimate Spaces

Did you notice the changing acoustics as we walked inside?

Let's look at this new space and its dominant elements – what do we see?

Perhaps most dominant are the slightly elevated octagonal audience benches surrounding the columns, as well as a higher elaborate version behind me. Heights are important here. **The addition of wood also creates a new space within the much larger church, a small and more intimate environment for what appears to be directional speech.**

**(Radna/Erica) \*\* DEPLOY AUDIENCE BENCH SCREENS \*\***

The complexity of the architectural detailing seems to indicate levels of privilege and access (or isolation). We also see movable structures – folding screens that help to isolate or protect the audience.

What we are standing in is the nave of the current church. But this area is actually the size of the whole church originally built around 1390. As the screens unfurl, they describe an echo of the church's former geometry.

They also isolate us visually and acoustically, literally screening against sonic distractions from either aisle and providing another hard surface for sounds to reflect off of.

Let's listen to how practice in this space might have worked.

**(Pam) \*\* STAND AT LECTURN \*\***

Can you hear a difference from when I was standing below? My new height made a small difference, didn't it? Listen to the echos of my voice off the stone floor, off the walls of the audience benches. Let's see if there is a shift when I go higher.

**(Pam) \*\* STAND IN PULPIT \*\***

Now when I speak, can you hear a difference? I am in fact standing in the pulpit, where the priest addresses the congregation. The difference in acoustics is not simply due to my height. Above me is called a sounding board. When you act as someone's *sounding board*, this is in fact what you are doing – reflecting sound back to the listener. This low ceiling channels sound out to you – the similar ceilings in the audience benches work similarly. And while the wooden architectural details are pretty, they also provide many surfaces and crevices that diffract and absorb sound, meaning that echoes do not last so long and speech can be heard more crisply. There is one more material that is also a very efficient at absorbing sound instead of reflecting it. Can you guess what it is?

People.

### 3 – organs and cross

When we look around here it is impossible to miss the Vater-Müller organ, installed in 1724. You would be forgiven for thinking that the church had been designed around it. The first was in fact built in the 1400s, but as the shields above help communicate, *this* one carried a message not just to the divine, but to other political powers. It was meant to demonstrate divine and political resonant POWER. Power of the church, and also the political power of the state that could support the installation of such a complex, massive machine of sound.

As we look at the scale of the space today, we can identify how the construction materials aid the resonance of this instrument. The space is wide and tall, the organ pipes framed by stone flooring, plaster and stone walls, and a solid wood ceiling. These all reflect the sounds multiple times between them, leading to a resonance – an echo – that is quite long. Let's use a simple acoustician's trick to get a sense of it.

**(Pam) !! CLAP !!**

Churches were built as acoustic spaces – they were built for this kind of resonance, to echo to the heavens as much as embody the grandeur and overwhelming nature of divine experience.

*(Talk near, talk far, demonstrate how...)* Now listen to my voice as I move away from you. The spoken voice begins to get a little lost and muddled by these long echoes, even with the wood. Particular musical traditions developed as the architecture was able to become larger and more resonant. The crispness of the spoken voice out in the middle here doesn't carry so well, **but a singing voice, with long, sustained notes, does.**

**PLAY: \*\*SINGER\*\* - HOLD FOR 10 SECONDS, THEN STOP**

The singer fills the space. We are still able to identify where the originates from, right? But the echoes carry her sounds around the space until they are absorbed into silence. This type of singing requires a resonant space such as this to achieve its maximum effect. Organ music developed in a similar way, which was able to carry a much larger range of sounds.

**(Marta) !! Organ playing !!**

Let's explore some space away from this central axis.

#### **4 – circumambulation and the ‘Living Room’**

We are standing in one of the many extensions to this church over time, which eventually grew and consolidated into what resembles a fairly traditional *Latin Cross Plan*. Here we can see just how much space these side aisles claimed. Since you are all becoming fine-tuned, if you close your eyes, you might be able to hear that space now as well.

At one time this church was known as the Living Room of Amsterdam, and it is large part to these side areas. The church added an exterior door on either aisle, which created something of an urban shortcut through the church. And these doors were always open. The church became an important meeting spot and transit space for all city inhabitants, **including the large population of street dogs.**

**\*\* SEE DIAGRAM PART 1\*\* CONTINUE PLAYING UNTIL GROUP MOVES TO CENTER OF AMBULATORY**

It was a place of refuge – from the cityscape, from the elements, from domestic spheres. It was a place of business, where people bought and sold items, where deals were negotiated and struck, where news was exchanged from newly arrived sailors, where prayers were offered next to fishing nets being repaired.

Looking around, we also see some new geometry with a curved wall and path. That is called the *ambulatory*, where the public can circumambulate the center. It is an architectural feature that repeats in many religious traditions and which likely was a feature of many visitor’s walks in the Oude Kerk. So let’s follow this path. While we do, try to listen to these sounds of the past, how they might have changed the feeling of the church in different ways. Listen to your footsteps and what their echoes communicate about the space we are traversing – its size, its geometry, its connection to other parts of the church through sound versus visibility. We will end up back in front of the *choir screen*; pay close attention to what you can hear on that side and how it changes as we round the corner.

**STOP \*\* PART 1 \*\* WHEN GROUPS GETS TO CENTER OF AMBULATORY**

**\*\* VOCAL TRACK #4 \*\* WHEN GROUP ENTERS SOUTH AISLE**

**STOP \*\* VOCAL TRACK \*\* WHEN GROUP ENTERS CHOIR**

## 5 – High Choir

Did you notice a difference in the clarity of the voice between the aisle and in front of the *choir screen*? Did it sound like it was being directed anywhere in particular?

Now that we are becoming an efficient acoustic archaeological investigation unit, we can recognize some acoustic consequences to the architecture in this high choir. We are in another room of wood, for one. It is obviously important and exclusive, with doors and raised up in height, excluded visually by these high *pulpitum* walls.

It also has something we haven't seen before – its own bell, positioned in the corner, out of sight. Shall we ring it to see how it sounds?

**(Pam) \*\* RING BELL \*\***

Out of sight, and in fact not very dominant sonically, is it? So who in fact is this bell for? It would appear to be communicating directly from this inner sanctum to the outside – perhaps to the city, perhaps to the heavens.

If we focus on the geometry in here, we recognize again the circular form in the apse. But something different is happening here. A little acoustic fact: A sphere produces perfect acoustics for someone in the very center – equal reflections from all directions accentuate themselves evenly. So this rear wall is reflecting sound especially to this spot

**\*\* Stand at table \*\***

But that's not all. If we look up, we will see a domed ceiling directly above, also reflecting sound back to this very spot. So what was so special about this position?

When I stand here and speak, you can hear me if I face you, or if I turn around. As I speak here, I can right now hear the echo of my voice off the back wall coming right back to me. So this space is not only magnifying my voice, it is channeling it out to the nave. It would be the perfect spot to place an altar, for instance. And indeed, this is the exact spot where it used to stand.

Now, I mentioned that we are standing in the *high choir*, which suggests that singing was a critical part of practice here. You might have an intuition about what it will sound like. The Cardiff and Miller Mellotron will provide our last soundline to the past tonight. When you come back to experiment after the program, take note that Cardiff and Miller created a new sound sphere through their speaker placements, located exactly at the bench.

Let's listen to the choir for a moment – when you are ready, please follow me out to collect your headphones for your tour with Jo Kali.

**\*\* SINGERS \*\* PLAY UNTIL PIECE ENDS OR EVERYONE HAS LEFT THE CHOIR**