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FUNGAL CHAPEL

Gabrielle Cerberville, M.M.

Western Michigan University, 2022

FUNGAL CHAPEL is an interactive installation exploring the ties between people and place through the deconstructed visual language of Judeo-Christian religious iconography. Comprising five sculptures; *BELFRY*, *OFFERTORY*, *BAPTISMAL*, *DOORWAY*, and *ALTAR*, visitors are encouraged to interact on multiple levels of physical touch and consciousness, including pouring water, self-expression through writing, interacting with sonified fungal biodata, meditation, and offering and receiving gifts. Most of the objects in the chapel are “sounding sculptures” hooked up to contact microphones with added effects, and can be manipulated to produce a variety of musical sounds. Through the process of semi-guided ritual as an individual moves through the space, visitors are given space to reflect, to participate in reciprocity, and to experience kinship with their environment.

FUNGAL CHAPEL

by

Gabrielle Cerberville

A thesis submitted to the Graduate College
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for the degree of Master of Music
Composition
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Gabrielle Cerberville

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	ii
LIST OF FIGURES	vi
CHAPTER	
1. DOORWAY	2
INSTRUCTIONS	3
SCULPTURE ELEMENTS	4
2. BAPTISMAL	6
INSTRUCTIONS	7
SCULPTURE ELEMENTS	7
3. OFFERTORY	11
INSTRUCTIONS	12
SCULPTURE ELEMENTS	12
4. BELFRY	17
INSTRUCTIONS	18
SCULPTURE ELEMENTS	18
5. ALTAR	20
INSTRUCTIONS	21
SCULPTURE ELEMENTS	21

6. TECHNOLOGY USED	25
PLANTWAVE	26
7. INTERACTIVE SCULPTURE SETUPS	27
BAPTISMAL	27
OFFERTORY	28
POWER CONSIDERATIONS	29
8. INSPIRATION AND CLOSING REMARKS	30

LIST OF FIGURES

1. Full diagram of FUNGAL CHAPEL.	1
2. Wrapping the doorframe.	2
3. Saplings bound with rope.	4
4. Binding the doorframe.	4
5. Adding sheets of moss to the doorframe.	5
6. Installing the doorway.	5
7. Activated sculpture.	6
8. Shearing copper into a circle to prepare for sinking.	8
9. Sinking the top bowl	8
10. The frame holding the bowls is welded and cleaned.	9
11. Finished work onsite.	9
12. Activated sculpture.	10
13. Completed sculpture onsite.	11
14. Sanding down “mycelium bowl.”	13
15. Using a dremel to carve out mycelium detail on a maplewood bowl.	13
16. Sealing with polyurethane.	14
17. Assembling the polycarbonate shapes into the base.	14

18. Reinforcing the interior of the polycarbonate base.	15
19. A visitor selecting an object to offer to the sculpture.	15
20. Placing an offering in the bowl.	16
21. Sculpture hung from a beech tree.	17
22. Side view of suspended frame.	19
23. View from below.	19
24. Top view of the altar.	20
25. Welding the base together.	22
26. Grinding the welds down.	22
27. Wet clay on photo glass.	23
28. Pouring resin for topcoat.	23
29. Cutting the center branch down to size.	24
30. Altar installed onsite with rock cairn and moss at the base.	24
31. Tech used (left to right, top to bottom).	25
32. Plantwave connected to fungi.	26
33. Zoom multi-effects processor and mixer.	27
34. Delay/loop pedal.	28
35. Jump box.	29



Figure 1. Full diagram of FUNGAL CHAPEL.

1. DOORWAY

*between Everyday and Sacred there is a doorway
liminal space
let your body test the In-Between
as the winds shift through you
though you may only imagine it
the welcome tastes of wildness*



Figure 2. Wrapping the doorway. Green twigs and saplings are bound to a sturdy aged branch.

INSTRUCTIONS

- Before you enter, find an offering to bring to the space (palm-sized or smaller). This could be a beautiful rock, an acorn, a piece of rubbish, even something you already have in your pocket. You may bring multiple items if you wish.
- Stand in the center of the doorway and take a moment to look ahead and behind you. Envision a division between the space you left and the space you are entering. You are in the liminal space.

SCULPTURE ELEMENTS

Twigs, fresh saplings in a variety of colors, leaves, and moss are twisted around a branch and wrapped with rope. The doorway is installed at the outer edge of the space to aid the visitor in creating an imaginary distinction between the chapel and non-chapel spaces.

DOORWAY is symbolic of the mental shift between common and sacred space. It communicates with the other installation elements by providing a bridge between spaces, setting the tone and temporality of the other sculptures, and by foreshadowing some of the organic and inorganic elements the visitor will encounter in the chapel.



Figure 3. Saplings bound with rope.



Figure 4. Binding the doorframe.



Figure 5. Adding sheets of moss to the doorframe.



Figure 6. Installing the doorway.

2. BAPTISMAL

*water is living and carries memory
patter, trickle, plop, glug, hiss
the same molecules cycle
satiating your great grandmother
bathing your child
thrum, tumble, drip, splash, roar
pour and listen
hear it singing, feeding fungi
song and dance replay ancestral memories
elders sculpted aquatic pouring out, making you*



Figure 7. Activated sculpture.

INSTRUCTIONS

- Take the pitcher and fill it with water from the creek. Pour water into the top bowl.
- Pause and listen to the sounds of the water trickling down from the top bowl. What do you hear? How do these sounds interact with the other sounds in the installation?
- Consider the role of water in your life. What cycles of your life are impacted by the movement of water?
- Repeat this action as many times as you like before moving on.
- Can you manipulate the movement of the water? Try pouring slower or faster, or shifting the top bowl to create different sounds. What do you hear?

SCULPTURE ELEMENTS

Three copper bowls are sunk, one each for the two levels of the baptismal, and a smaller one to hang upside down beneath the top level for water dispersal. The frame is welded in steel. The top and bottom bowls are connected to contact microphones. The top bowl has several small holes which allow water to sprinkle down from the top level, strike the center bowl, and finally reach the bottom bowl. The sculpture is activated by pouring water into the top bowl and allowing it to drip down.

BAPTISMAL is a meditation on the movement cycles of water. Water is transported from a natural source to the baptismal, where it trickles down multiple levels until it overflows back into the earth, where it is recycled and eventually returns to the source. The amplified sounds are looped, representing the cyclical nature of this process, and are accompanied by the constant organic sounds of the creek in the background.



Figure 8. Shearing copper into a circle to prepare for sinking.



Figure 9. Sinking the top bowl.



Figure 10. The frame holding the bowls is welded and cleaned.



Figure 11. Finished work onsite.



Figure 12. Activated sculpture.

3. OFFERTORY

*an offering is a reciprocity
a gift is fruit, swelling in the grateful belly
nectars cascading overflowing lips
a gift is fruit, grateful remembrance of a handful of seeds
nestled into the altar of shivering soil
blanketed in autumn gold
this is my body
take, eat.
receptive hands are open, fingers spread
repaying our wealth, completion of homeward journey*



Figure 13. Completed sculpture onsite.

INSTRUCTIONS

- Take the offering you found before entering the chapel. Turn it over in your hands. Examine it. Does it have a smell? What colors do you see? What does it feel like between your fingers? How many textures can you count? Why did you select it? Is it precious?
- Drop the item in the mycelium bowl. Watch it fall into the box below. How many objects did it hit on the way down? What sounds do you hear?
- You may repeat this activity as many times as you like with as many new objects as you like. How do these sounds interact with the other sounds you hear? Describe the sounds to yourself.

SCULPTURE ELEMENTS

A carved wooden bowl (the “mycelium bowl”) with a two-inch hole in the center rests upon a polycarbonate pyramid containing a series of woodcuts hooked up to contact microphones. The visitor is instructed to place an offering in the bowl, which clatters to the bottom of the pyramid as it strikes the objects in its path. Objects offered to the sculpture rest on a bed of sphagnum moss lining the base. The sounds produced by “offerings,” which consist of objects (seeds, pieces of twigs, or acorns, for example) are percussive and contrapuntal. Contact mics are placed inside the pyramid, and are connected to a delay pedal, which elongates the effect. This sculpture communicates with the other elements of the installation by signifying the reciprocity of relationship in our interactions with natural systems, and adds to the soundscape by providing dry, interruptive sounds that stand out in the foreground. As one young visitor to the chapel exclaimed, “you’re making a new world in there!”



Figure 14. Sanding down “mycelium bowl.”



Figure 15. Using a dremel to carve out mycelium detail on a maplewood bowl.



Figure 16. Sealing with polyurethane.



Figure 17. Assembling the polycarbonate shapes into the base.



Figure 18. Reinforcing the interior of the polycarbonate base.



Figure 19. A visitor selecting an object to offer to the sculpture.



Figure 20. Visitors placing an offering in the bowl.

4. BELFRY

*below
a chapel wends through earth
unseen, we flex our fingers
expand
repeat ourselves
our numbers multiplying
composed of gossamer thread
subterranean Illuminati
delighting in our feast
you join us in quietude
we collect you from
above*



Figure 21. Sculpture hung from a beech tree.

INSTRUCTIONS

- Look above you. Examine the geometry of the hanging form. What makes it a belfry? What shapes do you see in the pattern?
- Imagine what the mushrooms on the altar below are singing about. Start a conversation with them (you can do this in your head if you prefer).
- Look around the chapel for other growing things. Imagine what they might be singing about.
- Do you have things growing around or in your home? What do you think they sing about?

SCULPTURE ELEMENTS

Stainless steel pencil rod is welded into a complex geometric shape, woven with branches, and hung from a tree branch above the other sculptures. From the center of the sculpture hangs an omnidirectional waterproof speaker. The steel is painted white. When hung, the sculpture rotates.

This sculpture communicates with the rest of the installation by representing the “ceiling” of the space, like the function of the doorway. Its limited range of mobility as it is suspended mimics the tree canopy of the forest. By holding the speaker for the fungi, it serves an aural function as well, like that of a belfry in a Judeo-Christian church or chapel (the portion of architecture containing the church bells which elevates and amplifies them).

I did not take as many process photos for this sculpture, as it was appropriated from a previous installation. In FUNGAL CHAPEL, this work serves a similar function as it did in this prior installation, but here it serves as a frame for the aurally activated components of the installation rather than its focal point.



Figure 22. Side view of suspended frame.



Figure 23. View from below.

5. ALTAR

*do not take
unless you also leave yourself behind
release your hands
you have enough
take no more
the harvest is great and the workers are many
come, dine with us
rest in our collective bounty
place your gifts at the entrance
there is plenty to eat
the only trace of us is beauty*



Figure 24. Top view of the altar.

INSTRUCTIONS

- Close your eyes. Listen to every sound around you. Where is each sound coming from? What kinds of sounds do you hear? Are they long, slow, sharp, fast, bright, sad, cheerful, pensive?
- Take some time to look at the mushrooms. What do they look like? Smell like? Do you associate the sounds they make with any feelings?
- Listen beyond the sounds coming from the chapel. Can you hear weather sounds? Trees? Animals? Cars? Other people? How do they come together to create a musical whole?
- How do these sounds make *you* feel?
- Take the book and walk away from the chapel. Take a seat on the bench at the end of the boardwalk to the left and take some time to listen and write down your thoughts.
- Return the book to the altar and exit via the doorway.

SCULPTURE ELEMENTS

A cracked, topographical tabletop made of clay on photo glass is stabilized by a heavy sheet of acrylic, decorated by moss, and sealed with a layer of clear resin and a second layer of epoxy. The tabletop rests on a steel frame with a single tree limb affixed beneath it and is stabilized by a cairn of rock and sphagnum moss. A leather-bound book with a pen and a fruiting block of fungi rest upon the table. The PlantWave is connected to the fungi by two duck bill clips. The listener is encouraged to take as long as they like to write or draw about their experience in the chapel before exiting.

This is the centerpiece of the installation and holds three of its most important features: the fungi (the constant musical source), the PlantWave (the musical mouthpiece), and the book (for reflection and something akin to prayer). It is the destination for the visitor and contextualizes the other sculptures in the installation.



Figure 25. Welding the base together.



Figure 26. Grinding the welds down.



Figure 27. Wet clay on photo glass.



Figure 28. Pouring resin for topcoat.



Figure 29. Cutting the center branch down to size.



Figure 30. Altar installed onsite with rock cairn and moss at the base.

6. TECHNOLOGY USED



Figure 31. Tech used (left to right, top to bottom): Two OontZ Bluetooth speakers, one Anker speaker, a fruiting block of fungi for demonstration, four TRS-XLR cables, two aux cables with TRS adapters on one end each, a power strip, a delay pedal with power adapter, 10 contact microphones, a PlantWave, a Behringer 4-channel mixer with power adapter, a Zoom multi-effects pedal, and several TRS-TRS cables. Not pictured: portable battery jumper, Galaxy Audio JIB/S 4-way splitter. In addition, I added a set of powered studio speakers in lieu of using only Bluetooth speakers.

PLANTWAVE

The PlantWave was selected because, as a psychogalvanometer, it measures galvanic resistance over time, which can be observed in plants and fungi. Galvanic resistance is the metric which is measured in a polygraph test, and relies on the theory that skin (and similar surfaces) conduct varying degrees of electricity in the presence of physiologically arousing stimuli. Plants

and fungi may respond to shifts in barometric pressure, moisture, heat, cold, and more. The circuitry in the PlantWave allows this stream of biodata to not only be collected, but musically enhanced by providing simple synths for the data to “play” in real-time. The PlantWave detects these variations via electrodes or duckbill clamps placed in two locations on the organism, graphs those variations as a wave, and then uses that information to assign pitch, tempo, and other textural parameters to the output.

For this setup, the PlantWave is controlled by the PlantWave app on my mobile phone and is set to 528 Hz. I have chosen to use flute, gong, gamelan, and bass for the biodata to play, but will likely continue tweaking this configuration with repeat performances. I have plans to experiment with using a synth in the future, or possibly doing some live processing using Ableton Live or a similar program.



Figure 32. Plantwave connected to fungi.

7. INTERACTIVE SCULPTURE SETUPS

The tech setup for FUNGAL CHAPEL involves amplification of three main sound sources: BAPTISMAL, OFFERTORY, and the fungi themselves. Both BAPTISMAL and OFFERTORY are connected to contact microphones, which respond to a guided series of interactions with each work. The tech for each of these works is listed below:

BAPTISMAL

- One contact microphone taped to the top and bottom copper bowls (2 total).
- One Zoom G1X4 multi-effects processor.



Figure 33. Zoom multi-effects processor and mixer.

OFFERTORY

- Two contact microphones attached to two of the more prominent wood cuts.
- One FLAMMA FS03 Delay/Loop pedal.



Figure 34. Delay/loop pedal

POWER CONSIDERATIONS

Since this installation is outdoors, getting power to the site without visual disruption was a concern that needed to be addressed. A generator would have been too loud, but a typical jump box offers approximately 5 hours of power for the entire setup with no issues, including a 4-channel mixer, two powered studio speakers, a multi-effects pedal, and a delay/loop pedal.



Figure 35. Jump box.

8. INSPIRATION AND CLOSING REMARKS

This installation draws on lessons I have learned from observing and admiring the works of countless other artists, including Yoko Ono, Pauline Oliveros (specifically her Deep Listening exercises), Matthew Barney (his durational sculptures, particularly Cremaster 5), Pamela Z (Baggage Allowance and others), Elizabeth A. Baker, and Laurie Anderson. The work is built upon my own experiences as a person who grew up within the constructs of religious thought, my love of the natural world, specifically mycology, and my growing self-identification as a creative alchemist: one who breathes cohesive creative meaning into unrelated objects and personal curiosities.

FUNGAL CHAPEL is my attempt at gathering and reassembling my fractured self into something new and inviting others into my deconstruction and reconstruction process. Through the visual reminders and language of the religious iconography that dominated my youth, I am exploring and reframing my own identity in my adulthood. Through FUNGAL CHAPEL, I am taking the lessons I learned about devotion, service, meditation, gifts, and sanctification, and applying them to something I truly believe in; the restoration of human relationship with the environment, the ability of anthropomorphism to activate human empathy, and the power of artistic experiences to transform and renew the mind.