

THE TRUMPETS

An Exhibition of Installation

by

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I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

A handwritten signature in black ink, reading "Cameron McKay" with a stylized flourish at the end.

ABSTRACT

The Trumpets: An Exhibition of Installation

The work of my MFA thesis exhibition comes directly out of the physical processes that constitute my studio practice. It is work that embodies the labour of my hands and the decisions that guided them in their struggle with unfamiliar materials. Drawing inspiration from subjects as diverse as physics and fiction to create a sculptural arrangement, the work is intended to engage with its audience in an active way through acoustic appropriation and physical presence. As an artist, I set up an environment to be explored, establishing boundaries and also possibilities.

ACKNOWLEDGMENTS

It is my wish to acknowledge the assistance of all my professors, both past and present. Neither my presence in the Masters programme, nor this thesis exhibition, would be possible without the support that all have supplied. I also wish to thank my family and friends for the encouragement and patience they have demonstrated during my studies.

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INTRODUCTION

My thesis exhibition presents a body of work intended to engage its audience through acoustic appropriation and sculptural forms. The work in the exhibition takes the shape of four large acoustic trumpets hanging from the ceiling, each rendered in a different material: one of spruce, one of sheet metal, one of polycarbonate and one of ferro-concrete. Some of these trumpets record audio data from the audience, and others represent it through speakers. This sets up an effect that echos the presence of onlookers. The studio processes I employ to create my work focus on me as a labourer. A constant search for materials and techniques new to my practice keeps me off-balance and struggling to assimilate fresh ideas and skills. The aesthetic of inexperienced amateur that my work exhibits is bolstered by this search. The aesthetic comes naturally to me, and reflects a sense of exploration embodied by the final work. Finally, my studio processes and concerns have strong precedents in the context of contemporary art.

MOTIVATION

I create works of art because of the enjoyment the fabrication process gives me, and the opportunities for discovery and exploration offered by the finished works themselves. The physical processes associated with fabricating the sculptural elements of my installations are the main motivation in my studio work. Using my hands to create – to laminate, to pour, to bend, to measure – provides me with great satisfaction. If I were to stop enjoying these physical processes, I would be incapable of continuing my practice because there would be

no personal reward. This is important, even if it is commonplace, because it does much to shape both the direction in which my projects go, and the final form that they assume once complete. The need to use my hands and to fabricate is what creates a role for sculptural elements in a work which also uses audio mechanisms and audience engagement. If an installation I consider creating does not offer sufficient opportunities for me to use my hands in the creative process, it will likely never materialize.

The strong link between fabrication and my motivation in the studio means that I am reluctant to out-source any aspect of the work. The only time I allow others, be they individuals or companies, to physically participate in the creation of my work is when it is a necessity. Sometimes there is a tool I do not possess and cannot procure within budget, or perhaps some task requires more than two hands. In turn, my insistence on doing everything personally ensures that each decision embodied within my work has been made by me. This insistence often limits my choices, influencing the work's direction and contributing greatly to the inexperienced aesthetic of my finished pieces. The handmade quality that comes with this aesthetic can be seen in work by other artists.

Many of Murray Favro's works like *Rear Pedals Bicycle* (1988) or *Guitar #1* (1966) share some of the same aesthetics seen in the sculptural elements of my installations. The tinker-like fabrication of Favro's sculptures is intentional. The exposed and obviously hand-welded joints mesh with the highly idiosyncratic choice of reversing the pedals. By exposing his hand and revealing his ineptitude, Favro shows us that the objects he creates are not part of the wider production in which our consumer culture engages (Teitlbaum, 21). They are

fabricated, but certainly not manufactured. The status of being handmade lends Favro's works a sense of both freshness and playfulness. It is the sense of playfulness that interests me most, as it ties into my intent of providing the possibility for audience engagement. Work that does not take itself overly seriously is more easily engaged because the audience is put at ease.

In the process of revealing the personal nature of his sculptures through traces of their fabrication, Favro also shows us the importance of his decision-making process. By choosing to display the obviously handcrafted backwards bike, Favro lets us know that what is important is not the idea of rear peddling transportation, but the idea that he laboured over it himself. It was Favro who cut the metal tubes of the bike frame and amateurishly welded them back together, and it was him who sat down and planned out how it could be done. He is anxious to display the decisions, simply because they are his. It is through this kind of concern with decision making, and consequently through the resulting aesthetic, that I connect most strongly with Favro's practice. There is a strong parallel in the way we make decisions and our intentions in doing so.

Revealing my hand through the decisions I make and the materials I choose is an important component of my own practice, because it not only makes the process more enjoyable for me, it also provides one possible way for the audience to engage with the work. Audience members have the results of my labour right in front of them for easy viewing, embodied in the sculptural elements of the installation. The wood-filler plugging my mistakes and the holes in the concrete stare back at the audience, inviting a contemplation of

how the work was made. My intention is that this simple and aesthetically intriguing entry into the work can serve as a bridge to the audio components, which require that the audience spend some time in the installation before sounds are registered and played back.

By always keeping tight reins on the actual fabrication process, and thus limiting my choices as to how I can physically proceed with the work, each piece is an exploration of my personal knowledge and skills. Not only am I faced with decisions such as improvising with off-specification hardware and plunging straight into unfamiliar processes, but those very decisions constitute the material fabric of the final forms. The mistakes I make and the lessons I learn are on display in the gallery, under scrutiny by the audience. The installations are physical manifestations of my learning processes, a fact I am continuously reminded of whenever I see my own work on display.

STRATEGIES OF ENGAGEMENT

Creating work that manages to engage its audience has always been one of my goals. In past works, such as *The Other Room*¹, a philosophical agenda motivated my desire to create a space with certain properties. The inflatable plastic form of an ideal architectural space contrasted with reality once the sheet plastic stretched and deformed around all of the everyday detritus of a lived space. The tension created by this contrast illustrated the divide between our phenomenological experience of the world, and the way our structures of knowledge allow us to understand and conceptualize that same world. *The Other Room* was an attempt to share my conclusion – that everyday we live with a fundamental gap between

¹ See Figure 1 on page 20.

our understanding and our experience – with those who entered into it. My goal of encoding this message into the work narrowed my criteria for its success: Did the audience leave with my message that the processes of experience and understanding are different? This made it difficult for me to recognize its success as an immersive phenomenological environment.

The work I have created for my thesis exhibition attempts to engage its audience through sculptural form and audio recording, but without being heavy-handed about what should be taken away from it in terms of meaning. The goal is to provide an installation in which individuals have the opportunity to explore and experiment in an environment of my own devising. The environment makes it possible for the audience to contribute acoustically, by having the sounds they make recorded and played back through large sculptural trumpets. These trumpets can also be explored visually, as the handmade quality of my material handling leads to many dents, scratches and choices that serve as points of visual interest. Since the four trumpets are hung in different corners of the room, additional exploration of the space is encouraged. Thus, the audience can engage with the physical work itself, and individual members may even be integrated into the exhibit via the recording.

The idea of providing an environment in which the audience can include themselves is a theme of my thesis work. My exploration of this theme has slowly matured during the MFA programme. In the piece *The Web Typewriter*² the mechanism of typing on a computer via a typewriter and a mechanism of wooden fingers of my own devising proved inaccessible. Audience members displayed such a hesitancy to engage it, either because of good gallery manners or because of embarrassment, that my strategy was reduced to an

² See Figure 2 on page 20.

ineffectual gesture. The inaccessibility of the piece meant that instances of actual interaction were rare. *The Typewriter* left me wanting to find new ways to engage the audience with my work.

With *The Trumpets*³, I settled on the more active mechanism of audio recording, enabling the installation to capture what it needs from the audience. *The Trumpets* utilizes a microphone to record all the sounds inside of the installation space, which it then plays back after a time delay. This mechanism sets up the possibility for the integration of the audience's presence into the work itself. This occurs when one's voice is parroted back after a short delay. Our voice and speech are highly individualistic things. It is primarily through speech that we interact with other humans, and voice is an identifier. Because audio data can capture this information, what echoes back at the audience in *The Trumpets* is also highly individual.

Audience incorporation is a strategy used by many artists. The type of appropriation my installation engages in is echoed by some works of Jean-Pierre Gauthier, such as *Battements et Papillons* (2006). The piece features a foil clad piano that makes use of motion detectors to monitor the audience. Data from these sensors is then fed into the control centres of the piece, dynamically changing its behaviour and creating a unique musical composition. Gauthier's use of input devices is directly analogous to mine; he takes from the audience without permission and incorporates the data into the exhibit. In both Gauthier's case and mine, we hope that members of the audience engage with the work to realize its full potential.

³ See Figure 3 on page 21.

When more than one individual is in *The Trumpets* installation, its performative aspect is highlighted. As additional voices and noises mingle in the room, some of the individual identification is lost, but each sound one makes is presented to all other people via the work. Each individual becomes an agent, sometimes unwittingly, in a collective performance orchestrated by the installation. While this performance does not have established roles, the work serves as a kind of director, and the installation as a stage. When, and if, an individual becomes aware of his or her own acoustic contributions to the performance, that person can then modify his or her behaviour accordingly. Some choose to turn silent, others welcome the role of actor and engage in it with gusto.

The variability of the experience that *The Trumpets* creates is one way the installation avoids being locked into a specific message dictated by me to the audience. While my choices concerning its construction – what forms to include, how they are positioned, how they function – carry with them a certain kind of content, what they create is something dynamic and variable. Not only is each individual viewer free to interpret the piece according to her/his own preconceptions, but the phenomenological experience of the installation is actually different for each individual as the acoustic content changes according to who is in the room and what they are doing. In the installation's final form, it serves as a stage or experiment to be explored.

Beyond the conceptual strategies of engagement by which my installations function, there are the aesthetic and visual strategies. In a piece like *The Web Typewriter* there are few traces of my labour, and the work of my hand is not immediately visible for the audience to

engage aesthetically. Devising, constructing and tuning the mechanism which mechanically relays key strokes from the typewriter to the keyboard took months of work. However, the failed prototypes and endless tinkering are not embodied in a physical way within the space of the installation. With little visual evidence of my labour in the final installation, it stood in stark contrast to how I engage with my practice as a fabricator.

The Trumpets represents a decision on my part to make manifest, in the final installation, the processes of my physical labour. This is done with the intention of providing a point of aesthetic engagement for the audience. This approach follows my personal realization that providing an opportunity to enjoy the sculptural aspects of an installation can compliment its other components. Exposing the physical labour embodied by the trumpets themselves can better connect an audience to my studio labour. Visual traces of the construction process also provide an accessible point of entry into the work. Tool marks and repetitive lacing are immediately visible and understandable in a physical way. They can be contemplated while *The Trumpets* begins to record. The desire to include this physical kind of attraction goes hand in hand with my interests in material and labour. The laminating of the spruce strips, the bending and fastening of the sheet steel, and the mixing of the concrete not only express my desire to construct and understand physically, but also give members of the audience something to appreciate and digest.

While the trumpet forms present a polished and purposeful facade from afar, on close inspection their many imperfections become clear. The spots where spruce strips have failed to laminate and are now peeling, holes that have been re-drilled again and again in metal

sheets to make them line up, and cracks and fissures in the concrete all reveal not only my ineptitude and inexperience, but also the history of my labour. These incidents of fabrication are one aspect of potential interest to audience members. However, the choice of hardware and design also embody my labour and the process of fabrication. The tabs that fold over to hold the metal trumpet together are inspired by paper models, and the finger tightened wing-nuts serve to show my hand. The obvious repetitiveness of the lacing on the plastic trumpet, and infinite sanding, planning and gluing of the wood trumpet, all allow the interested viewer to understand the processes of my studio work. These kinds of choices and processes are what serve as aesthetic entry points into the work.

Complimenting to the processes that I employ are the actual materials used to construct the forms. Visually the materials serve to highlight the repetition of a single form through space. Each trumpet is the same mathematically derived shape, produced in the same dimensions. However, as each material theoretically alters the acoustic properties of the sound passing over it, it also visually differentiates one form from the next. This adds to the visual interest offered by the piece, and increases the opportunities for exploration. Whereas the concrete trumpet is visually solid and heavy, the clear polycarbonate form dissolves into space, revealing whatever stands behind.

Finally, the materials function as the medium into which the traces of my labour are recorded. This happens in the same way that Richard Deacon's processes are recorded by his sculptures. Deacon uses plywood, plastic, sheet-metal and other basic elements to construct his forms. Although the finished pieces boast a higher level of refinement than my constructs

do, the materials still embody all his choices and processes. Each time he drives a nail or fastens a rivet, the material carries that action on to the audience. Deacon highlights the importance of this aspect of his work by insisting that he is a “fabricator”, as opposed to a “sculptor” [Wikipedia, Richard Deacon (sculptor)]. The aspect of this distinction that interests me most is the focus it places on process. Instead of using the result of his efforts (a sculpture) to label himself, he uses the process itself (fabrication). In this I see an echo of Favro's fascination with the handmade, and my insistence on doing all the labour myself.

Max Dean is another artist whose practice compliments my own, while at the same time contrasting it. The long-standing trend in Dean's work of highlighting and exploring audience engagement is clearly evident. Even his early performance works revolving around the artist's body relied on viewer interaction. In _____. (1978) only the audience's vocalizations could stop a blindfolded Dean from being forcibly strung-up by a machine of his own devising (Baert, 15). His newer works, such as *The Table* (2001), still involve the audience, but in a less urgent way. The table, in advancing towards and interacting with the audience, has the capacity to build relationships with those who meet it. In turn, those same people infallibly relate to the table, involving themselves with the work to complete it (Baert, 19).

Interestingly, *The Table*, even with its strong emphasis on viewer interaction, is an excellent example of how Dean's practice differs greatly from my own. In handing over the artistic reins to technology and technicians as thoroughly as he does, Dean removes himself from the finished installation as it appears to the audience. His hand is not evident in the

manufactured table, nor is it evident in the robotics hidden inside. Although this may be beneficial in terms of his goal (allowing the table 'itself' to become an object of relations), it differs greatly to how I treat physical labour and decision making. Dean goes so far as to coauthor his work with those he consults, whereas I selfishly maintain my place as creator and refuse to relinquish it to the function – the technology – of the piece. Keeping a personal hold over the physical creation of my work is an active decision on my part, intended as a kind of honesty. Physically working in the studio is an important part of my creative process, and thus sharing that labour is also important.

STRATEGIES OF PRODUCTION

There are three major strategies of production that I consciously and routinely employ as I fabricate my sculptural forms. First, I always make a point of searching out materials that are new to me in order to challenge my understanding of the fabrication process. Second, I attempt to treat each technical or formal decision I make separately. Finally, I ground or curb the two previous strategies with the restrictions enforced by having the project function as planned. These three strategies, often at odds with one another, serve to create a dynamic studio environment in which my creative process thrives.

The constant search for material processes in which I am inexperienced is the primary engine behind my struggle in the studio. By always forcing myself to tackle new processes of fabrication, the learning curve I am faced with never levels off, but instead remains steep. In the past, when I have become overly comfortable with a specific material or technical

solution, the comfort has hampered my progress in the studio. In such a situation, I find myself employing the comfortable solution automatically, as if by rote. In turn, this not only reduces my satisfaction in the studio, but also leads to stagnant and unimaginative work. After the visual success of *The Other Room*, I employed the same kind of plastic sheeting in other projects. However, the automatic reuse of this material did not always succeed. Sometimes it failed to capture the desired visual effect or simply proved too ephemeral, as the plastic ripped and tore in the gallery. It is these kinds of situations I try to avoid by constantly experimenting with new approaches.

The second motivating force behind my material experimentation is a primarily stylistic one. When specific materials and technologies become overly familiar to me, they also have a tendency to become refined. The sense of resolution and the manufactured refinement of an overly familiar material strategy runs counter to the aesthetic of inexperienced amateur. This aesthetic represents an acceptance on my part of a natural inclination, and helps to foster the handmade qualities of my final work. At the same time, the aesthetic plays into the possibilities for exploration I attempt to create. Presenting my work as the labour of an amateur removes from it the sense that all possibilities are exhausted. For example, the cracks around the seams invite the audience to imagine how the forms might be improved, and thus draw them into a more complicated relationship with the work.

It was my exposure to artists like Tim Hawkinson that demonstrated for me installations could be both 'rough around the edges' and refined at the same time. Some of his

works like *Drip* (2002) – conceived as a creature grown in zero gravity and then hung out to dry – appear to be created in an unplanned or accidental way (*Art 21: art in the twenty-first century*). The twisted plastic appendages hang impotently, but the work as a whole still manages to produce rhythmic sounds. This strategy, of function arising from apparent chaos, is echoed in the control mechanisms of *Drip*, which are cobbled together from parts creatively re-imagined and used in ways never originally intended. Rotating wheels of copper tape become timing devices, and pie plates in buckets serve as percussive instruments. The tinker-like aspect of Hawkinson's work has been most important to my own practice because it helped me come to terms with my naturally amateurish aesthetic.

In Hawkinson's work the visual clutter that his approach leads to makes the mechanical and electrical mechanisms a focus point. The rotating timing wheels continuously move, leaving the audience to wonder if they will ever stop. This wonder is a kind of engagement that helps connect viewers with the work. In *The Trumpets* my amateurish aesthetic plays out similarly. Although the controlling computers are hidden away, the sculptural forms themselves embody my aesthetic. On close inspection the inexperienced fabrication is visible through my use of hardware and technique, creating moments of doubt much like the mechanisms of Hawkinson. A viewer can question if the plywood clamps will suffice to hold the concrete panels in tension, or if they will fail spectacularly. Thus, my amateurish aesthetic contributes to a tension in the work, which ultimately is engaging and possibly unnerving.

One way I work within an amateurish aesthetic is to treat each decision as an individual choice, instead of a step towards a final goal. This makes my decision-making process a powerful directive force. It has the ability to change the development of an entire project in an organic way. By treating my decisions as separately as possible, no individual choice takes precedent over any other. Each time I work on a form I am largely free of worrying about the future ramifications of my actions, even if the choices themselves may alter much of what is still to be decided.

The strategy of making decisions individually, combined with constantly working with unfamiliar materials, constitutes one reason my finished work often features a tension between its form - what it looks like - and its function - what it needs to do in order for the piece to operate. When faced with any given decision, and my engineering ineptitude, I'll often weigh the options from two vantage points: the aesthetic and the mechanical. Can I use this pleasingly formed acorn nut, or does reality call for a functionally different piece of hardware? For example, my decision to build the wooden trumpet in two halves from the same mould meant that the second half, once rotated to mate with the first, exaggerated all inaccuracies twofold. This in turn led to a session of decision making and problem solving in order to forcefully close any gaps at the seams. The final result is the bulky metal brackets and cotton caulking along the seams of the wooden trumpet. It is in cases such as this that my decision-making process combines with the challenges of new materials to reinforce an aesthetic of inexperience.

Finally, I limit the formal development of the work with a strong sense of how the specific piece should function. The distinction between my guiding sense as one of function versus form is important. The decisions I make as I progress ultimately dictate the form of a work, but I have previously conceptualized and established the function. This is apparent from examining the differences between my preparatory sketches of a project, and its completed form. I often omit the preparation of drawings, instead relying on a mental understanding of how a piece should function. Even when I do make sketches, they are more schematic than didactic, showing how a piece might work and not how it should be resolved.

The schematic nature of my preparatory drawings can be seen in the sketches for *The Trumpets*. At the top of the first drawing is a diagram showing the basic function of the piece as I originally conceived it.⁴ The later drawings diagram the function of a cassette tape and how the piece might be installed in a gallery.⁵ This example illustrates how the function of a piece takes precedent over its form, which is instead worked out organically by the decision-making process in conjunction with the mechanical limitations of my engineering knowledge. Function guides form but does not dictate it, resulting in the tension between the two previously described factors.

CASE STUDY: *THE TRUMPETS*

Like most of my studio projects, *The Trumpets* started its existence as an idea or concept that captivated my imagination. Sometimes these ideas come from dreams or waking

⁴ Please see Figure 8 on page 23.

⁵ Please see Figure 9 and Figure 10 on pages 24 and 25 respectively.

inspiration, but more often they arise from a commingling of historical facts and technical knowledge. In the case of *The Trumpets*, I was intrigued by a romantic Internet hoax that purportedly showed Belgian researchers using a laser to analyse a ceramic pot recovered from the ruins of Pompeii.⁶ The hoax claimed that acoustic vibrations at the time of the pot's turning (e.g. the sounds of the potter speaking to his assistant in ancient Latin) could be played back by tracking the path of the potter's tool in the clay. Further research on my part led to data about modern day laser turntables for scratch-free enjoyment of valuable vinyl records, the history of early phonographic technologies, and the mathematical formulas for constructing acoustic trumpets.

My research gave me the desire to build an installation that capitalized on the idea of sound being transported through space and time. After running through many designs on paper, as previously evidenced by my drawings, I settled on the idea of using a tape-loop to dislocate sounds supplied by the audience. After building both miniatures and full-scale mock-ups, with varying results, I progressed to a digital system. This leap, from the visually complicated physical media of tape to a disembodied digital solution, greatly simplified the piece. It allowed the trumpet forms to take centre stage, and brought greatly increased reliability, allowing for more complex delays. I find this a satisfying solution because my research on the construction and physical properties of acoustic trumpets led to a desire to employ the new-found knowledge in my practice.

⁶ For a history please see: http://www.museumofhoaxes.com/hoax/weblog/permalink/ancient_pottery_recorded_audio/
The idea of ancient audio being recorded in ceramics has also appeared in numerous fictional stories and television series.

The formulas I employed are responsible for establishing the shape of the trumpets. Their graceful form, with six exponentially diverging seams and off centre balance, creates a large opening at one end that tapers down to a dark hole at the other. This curious visual effect serves as an invitation to explore the trumpets from both inside and out, as one tries to match the interior depth with the slender external appearance. The form was also a perfect match for my goal of embodying studio labour in the final exhibit. A long standing interest in the construction of wooden boats, and several experimental mock-ups, lead to the eventual selection of cold-moulded lamination as one satisfactory construction technique. It was a new strategy of production that I had never worked with before, and one that offered an ideal opportunity to visibly display a record of my labour. These properties fit well into my practice, as my relative inexperience would prevent the finished piece from being overly refined. Laser-cut sheet steel, ferro-concrete and clear polycarbonate are also all materials new to my practice. Similarly, they avoid becoming overly polished, while offering different acoustic properties as sound waves pass over them.

Two motivations influenced my decision to work at a large scale with the trumpet forms. First, they function as centres of attention because of their size. Not only do the methodically laminated strips of spruce and polished metal attract the attention of the audience, but the trumpets function on a corporal level as well. They interact with the viewer in the same space he or she inhabits. Furthermore, the large openings at the ends of the trumpets allow one to physically lean into the space occupied by their form. This kind of intimacy creates a more personal experience and gives the audience a reason to spend more

time in the installation itself. As audience members engage with the installation on a sculptural level, there is the possibility that they may become aware of its acoustic function.

Understanding what form that awareness might take is possible by looking at work by other artists who engage their audience via sound and acoustic performance. Janet Cardiff has long used sound to engage individual audience members with her work. Her piece *The Dark Pool* (1995) (created along with George Bures Miller) employs disjointed samples of prerecorded speech to create a dynamic narrative (Christov-Bakargiev, 55). These segments of speech are taken from fictional accounts of an imagined incident. Much like the spatially and temporally displaced samples generated by *The Trumpets*, the snippets of speech in *The Dark Pool* are broken up and scrambled. They emanate from the spaces around artifacts relevant to the incident in question, but with no particular order or logic. Each audience member can attempt to reassemble the fragments into a cohesive narrative as they wander through the installation. However, each individual comes away with a different story depending on his/her own experience of the installation. This 'experience-your-own' narrative effect is echoed in *The Trumpets*, but also modified by the fact that the fragments are a record of the audience itself. This parallel means that *The Dark Pool* provides a clue as to how the audience might explore *The Trumpets*, in that each audience member's experience of the installation will be dependent on how he/she engages the work. The unique narrative they produce will also incorporate them as actors, adding a further level of engagement between installation and viewer.

The scope of the possible outcomes is very broad. Some audience members are passive contributors, as they do not go out of their way to make noise for the piece to record. Indeed, some may not even be aware they are being monitored, and yet they are. Others take an active role, shouting and goofing around with the express intention of engaging the work and their fellow gallery goers. However, even those who enter the space and never make a sound still engage the work. The sculptural forms occupy the space physically and are lit to emphasize their presence. Their openings are inviting and the history of their fabrication is embodied materially. Both those viewers who are recorded, and those who are not, can explore *The Trumpets* as they choose.

CONCLUSION

The Trumpets comes directly from my studio processes and the labour that I pour into them. The work's acoustic function is inspired by my research, while its forms and materials grow out of the many individual decisions I make during the construction process. The process of fabrication is immensely important to me, as it provides the motivation necessary to complete the work. The finished work explores the possibility of having audience members contribute to the installations through their presence in the gallery space, in effect completing the work by exploring the boundaries it creates. While working I allowed the form of *The Trumpets* to evolve organically inside the framework established by the preconceived audio function. That same function also guides how the audience engages the finished work. However, both I as fabricator and the audience as participants are free to explore and experiment within the given boundaries.

PLATES



Figure 1: The Other Room (2006), plastic garbage bags, household fan and architecture.



Figure 2: The Web Typewriter (2007), typewriter, iMac, printer, the Internet and mixed media.



Figure 3: The Trumpets (2007-2008). Laminated spruce, laser-cut steel, concrete, polycarbonate and audio technology.



Figure 4: The Trumpets (2007-2008). Detail.



Figure 5: The Trumpets (2007-2008). Detail.

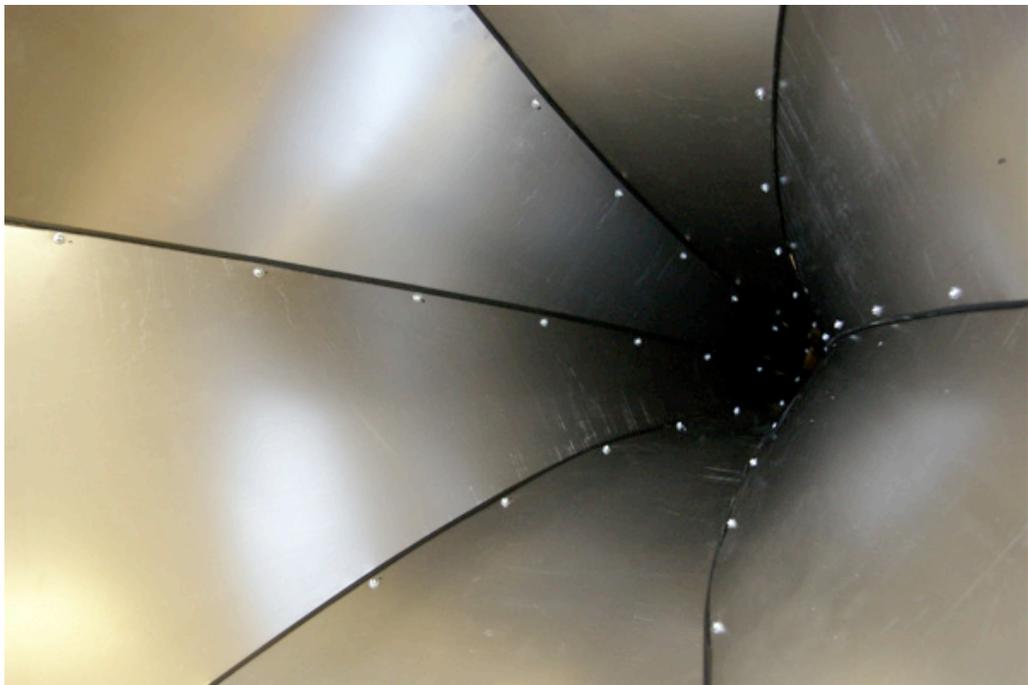


Figure 6: The Trumpets (2007-2008). Detail.



Figure 7: The Trumpets (2007-2008). Detail.

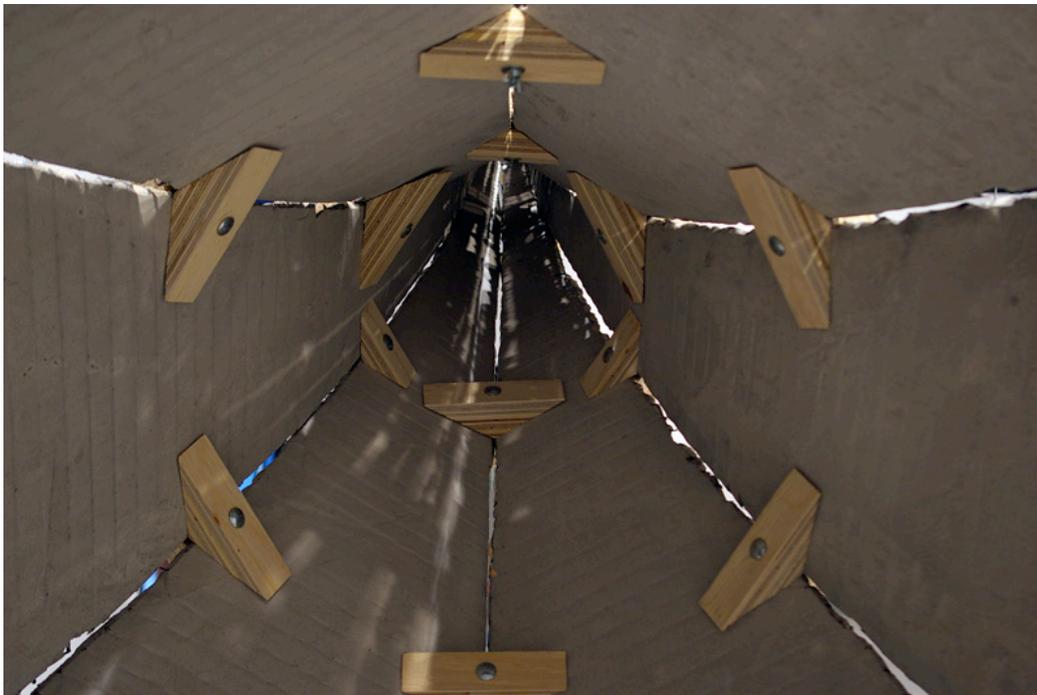


Figure 8: The Trumpets (2007-2008). Detail.



Figure 9: Working mock-up of The Trumpets using a tape loop.

ACOUSTIC TIME DELAY

A CONTENTLESS INSTALLATION

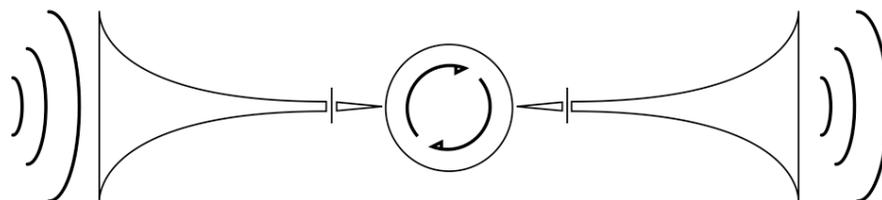


figure 1. A digramatic representation.

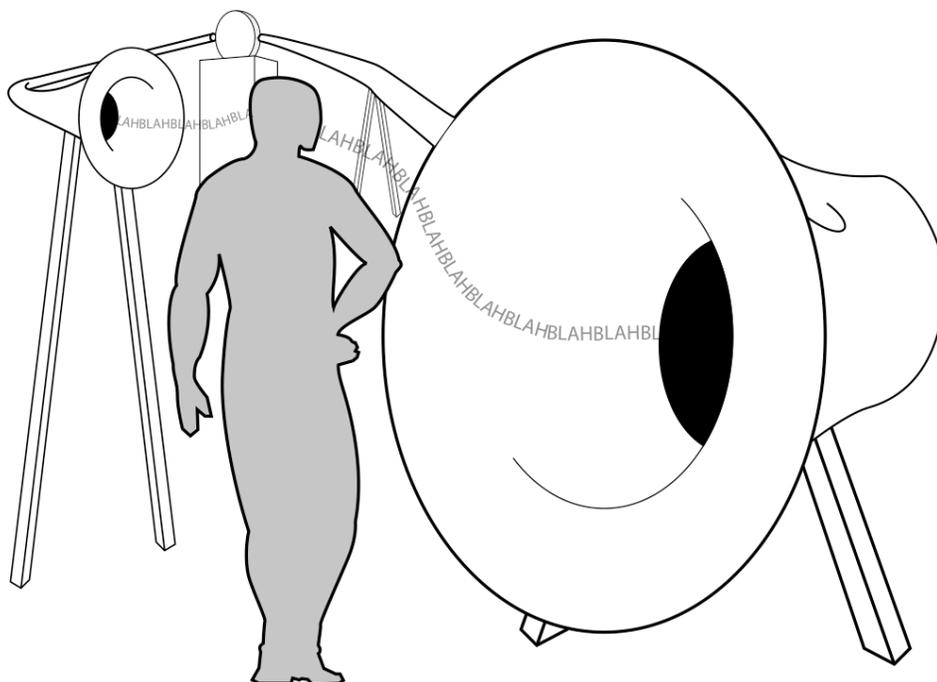


figure 2. The installation as it might appear in a gallery.

Figure 10: Preparatory sketch for The Trumpets.

ACOUSTIC TIME DELAY

A CONTENTLESS INSTALLATION

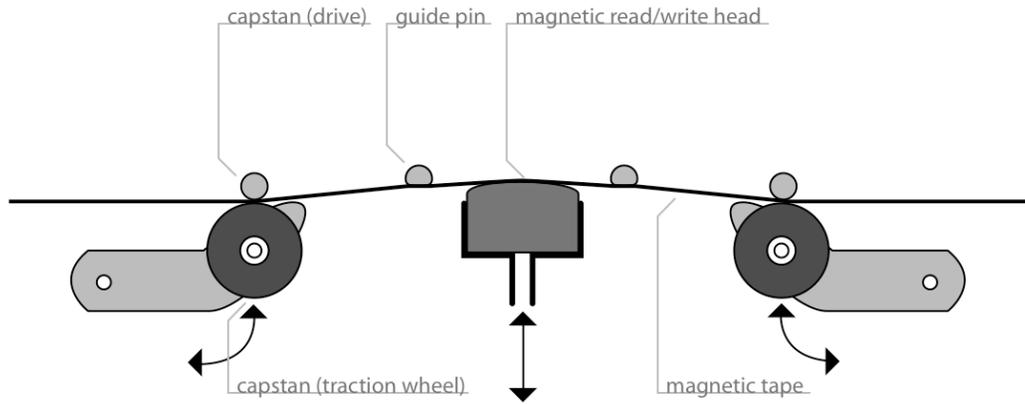


figure 3. The mechanical function of a tape head.

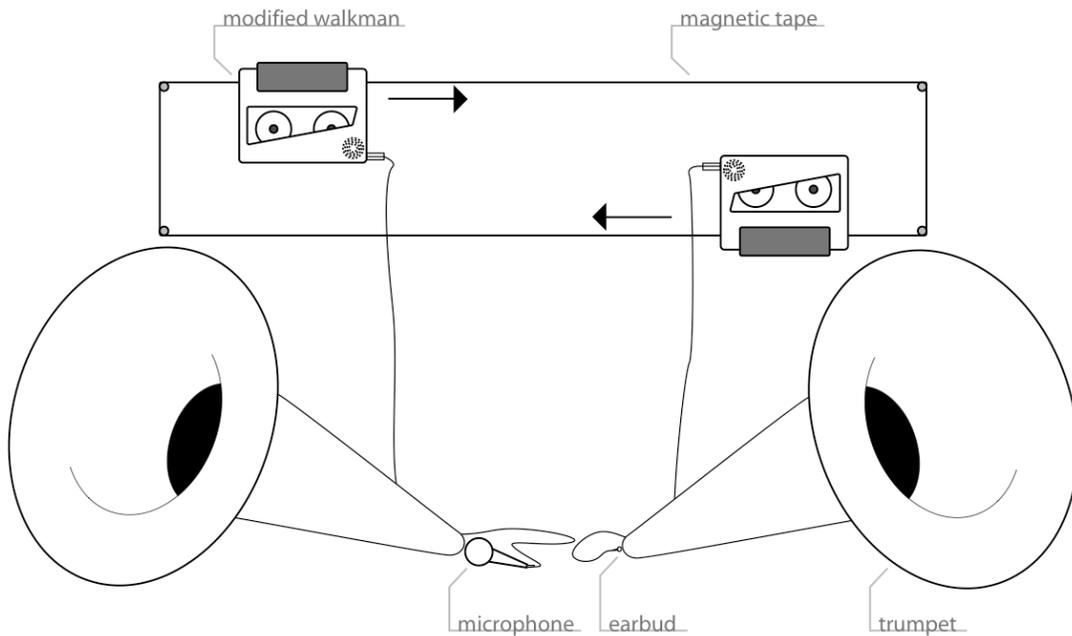


figure 4. Simple mock-up of an interactive tape-loop delay.

Figure 11: Preparatory sketch for *The Trumpets*.

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