The Sound Design of Antigone

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THE SOUND DESIGN OF

ANTIGONE

by

LUKE WALCHUK

A THESIS SUBMITTED
IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE
MASTER OF FINE ARTS
IN
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MINNESOTA STATE UNIVERSITY, MANKATO
MANKATO, MINNESOTA

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The Sound Design of *Antigone*

Luke Walchuk

This thesis has been examined and approved by the following members of the student’s committee.

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ABSTRACT


This document is a project submitted in partial fulfillment of the Master of Fine Arts degree in theatre. It provides an account of author Luke Walchuk’s process in creating and implementing the sound design for Minnesota State University, Mankato’s production of Antigone in January and February of 2016. The paper gives a chronological overview of the designer’s process in four chapters: an early production analysis, a historical and critical perspective, a process journal, and a post-production analysis. A fifth chapter provides a process development analysis of the designer’s career as a student of theatre. Appendices featuring production paperwork and other items of note are included, along with works cited and works consulted.
ACKNOWLEDGEMENTS

This thesis represents the culmination of a three-year process of learning and exploration. As with all such experiences, it was not a solitary journey. The author of this thesis, Luke Walchuk, would like to take this opportunity to acknowledge those who have made this possible. First, thanks to Paul J. Hustoles and the Minnesota State Mankato Department of Theatre and Dance. The faculty and staff have created a fertile environment for Walchuk’s education in theatre. Special thanks are due to George Grubb, Walchuk’s academic advisor. Grubb has helped the author to navigate a complex academic environment and, more importantly, provided the tools and encouragement he needed to begin to form his own identity as a theatre artist. Walchuk would like to thank Matthew Caron, the director of this production, who understands and encourages collaboration and is willing to place his trust in a designer who likes to take risks. The author thanks Joseph Tadie of Saint Mary’s University for granting him a different perspective on his work and providing the kind of support that only a mad philosopher can give.

Walchuk would like to thank his parents for encouraging him in his artistic ambitions throughout his life. Their emotional, intellectual and material support have been essential to his success. Finally, Walchuk thanks his wife, Melissa, for her love and enthusiasm, for her patience, and for being the best collaborative partner he will ever have.
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 CHAPTER I

PRE-PRODUCTION ANALYSIS

Minnesota State University, Mankato will present Sophocles’s *Antigone*, translated by Richard Emil Braun, in the Andreas Theatre in January and February of 2015. The production will be directed by Matthew Caron. The creative team consists of scenic designer David McCarl, lighting designer Steven Smith, costume designer Heather Grandprey, movement coach Ian Lah, and sound designer Luke Walchuk, the author of this paper. Jayme Caye Beerling is the production stage manager.

In his *Poetics*, Aristotle observed that a tragedy revolves around the change in fortune, for the worse, of a mostly virtuous protagonist. In order to be most effective, he wrote, the character must be morally good but must possess “some great error or frailty” (Aristotle 47) which ultimately causes his downfall. If one is a subscriber to Aristotle’s view of tragedy, the first and most important thing to understand about *Antigone* is that the “hero” of the play is Kreon, despite the title. At the beginning of the play, he is introduced as the newly made King of Thebes, who has just saved the city from an invading army. He enjoys the support and even adoration of his subjects, represented by the Chorus, and he himself is convinced that his actions are righteous. His decree that Polyneices should remain unburied is in the interest of his people; it must be clearly
demonstrated that he will protect them from any threat, especially those from within. Only Antigone speaks against him, and her opposition is the catalyst for his ruin. Antigone remains entrenched in her position throughout the play; she experiences no reversal of fortune because she is doomed from the start. Her death is the culmination of her ambition. On the other hand, Kreon’s inflexibility and self-righteousness lead him to great loss; by the time he does change his mind, he has already lost his wife and son, the support of his subjects and even his own sense of self-worth.

Though Antigone is not the protagonist of her eponymous story, her role is vital. Sophocles has set up Kreon and Antigone as two opposite poles. Each character represents a particular set of values and their conflict serves to explore several larger questions, such as: loyalty to the state versus loyalty to the family, obedience to the law versus obedience to one’s own conscience and human law versus divine law.

Antigone insists upon burying her brother despite Kreon’s edict and despite his betrayal of her state. She insists that her duty is to her brother and her own moral sense, and that Kreon is morally wrong for demanding that Polynices remain unburied. Kreon counters with an argument that what he does is best for the state and its citizens, and that one’s loyalty to any individual must always be second to her loyalty to the state. He says that, as king, he is the embodiment of the state and therefore his every word must be obeyed. To disobey him would be an act of treason because it undermines the state’s ability
to protect its citizens. Antigone furthers her case by arguing that the gods demand that the dead be treated with respect. She accuses Kreon of creating laws that go against the will of the gods, suggesting that good and bad are not looked upon the same way in the underworld. Kreon responds by again asserting himself (the sole representative of the state) as the supreme authority and his laws as immutable.

When Antigone is unsuccessful at changing Kreon’s mind, other characters enter with their own challenges. Kreon meets each challenge by digging in deeper and becoming more and more unreasonable in his responses. By the time he has dismissed Antigone, he has already resorted to attacking her and her sister Ismene on the basis of their gender. He continues this attack when his son Haimon confronts him, warning him against “a treacherous wife” (791), saying that as men they must “never let women get the better of us” (822). When Haimon tells Kreon that the people of Thebes believe that Antigone did the right thing, Kreon dismisses him on account of his age. Haimon and Koryphaios, the leader of the chorus, exhort him to be willing to listen to the advice of others. Kreon responds with disdain, saying, “will the nation tell me what orders I can give? ... It’s my job to rule this land. There is no one else” (883, 885-86). Finally, Tiresias the prophet warns Kreon that his hubris and refusal to bend will cause the downfall of the state. Increasingly incoherent, Kreon accuses Tiresias of greed and immorality, even hinting at senility. It isn’t until Tiresias has left that

1 All citations from Antigone refer to the translator’s line numbers.
Kreon begins to doubt himself, and by then it is too late; the deaths of Antigone, Haimon, and Kreon’s wife Eurydice are inevitable.

By telling Kreon’s story, Antigone does not suggest that either side of any of these questions is objectively and exclusively the right side. Instead, what is important is that both sides of each question must always be carefully and honestly considered. Kreon consistently refuses to do so. In his opening speech, he says that “he who rules in a state and fails to embrace the best men’s counsels ... is the worst man there” (217-219). He fails to live up to his own ideal as he steadily isolates himself further and further from his subjects, his advisers and his family. As a result, his once-ordered world descends into chaos until he is left alone and broken.

Throughout the story, the Chorus acts as a barometer for Kreon’s control over his world. The choral odes illuminate the arc of Kreon’s descent from structure to chaos with poetic language. The first two odes speak of the recent victory in battle and of the marvels of humanity and its achievements. However, as Kreon begins to lose his grip on reason, the odes begin to be more dire. They issue warnings about the consequences of angering the gods. They speak of the way desire can twist men to commit evil acts. The final ode, in a complete reversal of their earlier praise for man and his laws and order, is a wild hymn to Bacchus, a god who embodies chaos and madness, exhorting him to heal the nation from its “violent sickness” (1314).
With its rich themes and relatively simple story, *Antigone* poses a compelling challenge for the sound designer. The script itself does not directly call for any specific sound cues; the dialogue does not make overt references to sounds that do not come directly from the characters. The plot of the play does not offer an obvious framework upon which to build a design. However, the play’s thematic material offers strong structural possibilities. Walchuk’s task will be to identify those possibilities, choose the elements that will be most effective, and translate them into an effective sound design. This provides him with a high level of creative freedom, but with that freedom comes extra pressure to work especially closely with the director to ensure that the resulting production has a unified vision.

One of the most basic functions that the sound design can serve, and a good starting point for the design before exploring the conceptual application of the play’s themes, is to help establish the time and place of the play. Fortunately, the dialogue of *Antigone* does provide specific details in this regard. The play is set in Thebes, Greece, sometime after the rule of Oedipus came to an end. The first choral ode tells of a battle in which Argos attacked Thebes and was repelled. This battle, in which Antigone’s brothers Eteokles and Polyneices, the traitor, killed each other, is the catalyst for the play’s action. The designer believes that the significance of these events can be supported through sound. He is interested in creating some auditory representation of the battle itself, such as the sounds of fighting, or at least of the aftermath, such as the sounds of fire and wind, or a
combination of the two. This could be particularly effective in conjunction with Smith’s lighting. Whether this is employed as an obvious introduction to the play or a subtle underscoring beneath the first few seconds, the designer plans to pursue this approach as a method of helping to create the world that the audience experiences. The play also follows the Greek convention, noted by Aristotle in his *Poetics*, of taking place over the span of a single day. This could be another opportunity to provide audible support. The use of ambient natural sounds such as birds and insects can help to indicate the time of day. The designer will consider the use of such sounds as he learns more about the director’s concept and sees the ideas presented by the other designers. He does not consider this element to be crucial, as he does the sounds of the battle or its aftermath. Other design elements could accomplish this much more effectively, but it is possible that sound could provide useful support.

Beyond the setting of time and place, the designer feels that the episodes do not call for a significant amount of sound support. In this translation in particular, the characters’ impassioned speeches and arguments are delivered in plain, forceful language. The emotions and ideas of the characters will be most effectively conveyed by the actors’ delivery. The designer feels that any music or other sound played in a deliberate effort to support the characters’ speech will do more to distract from the performance than to enhance it. Worse, it could easily come across as crassly manipulative. While the designer recognizes that this may
turn out to be a flawed assessment, his initial instinct is to leave the episodes largely to the actors.

The choral odes reflect a shift in focus from the immediate events of the play’s action to the larger ideas that are at stake. The lofty, poetic language and the unison delivery of many of the lines contribute to an abstract tone that invites a more spectacular production approach than the episodes allow. Walchuk feels that the odes are the appropriate vehicle for his own conceptual expression of the play’s thematic material. As long as he is in close communication with the rest of the creative team, particularly the lighting designer, the movement coach and the director, the choral odes could employ a stronger emphasis on spectacle to provide contrast to the episodes and maintain audience interest.

There are two major structural elements to the themes discussed above that the designer can take advantage of while he is developing content for the odes: the binary nature of the many *this-versus-that* questions and the long downward arc of order devolving into chaos. Walchuk’s intended approach is to use the former to guide his choice of material and to use the latter to guide the implementation of that material.

The dichotomy of ideas (human versus divine, man-made versus natural, state versus individual, etc.) should be supported by the use of contrasting sounds. These sounds could be chosen as directly representative of the ideas presented, or they could have less obvious connections. Some of the more apparent ideas would involve the juxtaposition of the sounds of nature against
man-made sounds. Wind, birds, insects, and other animal sounds would be used to represent Antigone’s point of view. More artificial sounds, such as the ringing of metal or glass, or even anachronistic industrial sounds like steam or gas engines, would represent Kreon. Another potential approach is to represent Kreon with sounds that are ordered and structured, such as rhythmic, percussive, or musical sounds, and to represent Antigone with more organic sounds; sounds that are more sustained and change pitch and duration more erratically. This is still a somewhat literal application in that it directly recalls the themes of order versus chaos and man-made versus natural, but the sounds themselves are more impressionistic. Along the same lines would be placing clean sounds in contrast with distorted sounds. The impressionistic approach could be taken further by pursuing sounds that reflect the themes on a purely emotional or conceptual level. For example, using high-pitched sounds versus low-pitched sounds would not invoke a direct literal connection to any of the major themes. In fact each of the opposing characters thinks him-or-herself higher than the other, so one variety of sound could not be directly tied to one specific point of view. However, the idea of polarity is still strongly supported.

Once the sounds are chosen, the task remains to arrange them. The theme of devolution and loss of control runs throughout the play. From this theme the designer can create a logical pattern with the use of his chosen material. The designer has already decided that the choral odes are the most conducive moments for conceptual sound support due to their poetic nature. The odes also
reflect the decline of Kreon’s world throughout the play. The designer has a strong first impression of how to exploit this structure. Walchuk plans to begin with the first ode by arranging his sounds with a strict order or pattern. The sounds will not spill outside of the ode at all, and they will consist entirely or almost entirely of the sounds chosen to represent Kreon. As the play progresses, the pattern of sounds will become less rigid. The ratio of “Kreon” sounds to “Antigone” sounds will tip in Antigone’s favor. The sounds may also begin to occur outside of the odes. By the last ode, the structure will have collapsed entirely and most, if not all, of the sounds will be those representing Antigone. It may also be interesting to use distorted versions of Kreon’s sounds. The key to making this approach successful will be to tie it closely to the blocking and choreography of the odes and, to a lesser extent, the text. If the sound appears to be responding organically to the action, or vice versa, it has the potential to have a profound impact on the overall delivery of the choral odes.

When the sounds for the play have been chosen and arranged, the designer must plan the actual physical layout of the sound system. It is important to decide where the sounds are placed in the timeline of the production, and it is equally important to decide where they are placed in the performance space. This production will take place in the Andreas Theatre, which is a flexible space with movable seating. In this case, it will be arranged in what’s known as the “alley” or “court” configuration. There will be seating arranged in straight rows on risers, on two opposing sides of the playing space, leaving a long, narrow
“stage” in the middle. This is a more difficult configuration to approach than the traditional theatre setup, which has all of the seating on the same side of the stage. With the audience facing in from opposite sides, it becomes challenging to ensure that every person in the audience is hearing the sound in the same way.

The speakers must be a certain distance away from the audience in order to achieve the best angle; ideally, most of the sound should appear to be coming from the stage, or at least from some point in front of the listener, rather than from far above the listener. The Andreas Theatre has a very high ceiling, and the ceiling (or, more specifically, the “grid” of pipes hanging below the ceiling, but still 24 feet from the ground) is the most practical place to put speakers. Due to this height, the optimum distance from the audience would put the speakers on the opposite wall. Even at that distance, it would be better to have them lower than 24 feet. In the alley configuration, putting the speakers in their optimum position for one side of the audience would mean that, for the other side, the sound would be coming from directly behind and above. This is not the effect the designer wants, at least not for the majority of the sound in the play. In light of this, compromises must be made.

The speakers will have to be moved closer to the audience. They will still need to be hung from the pipe grid; large speakers on tripod stands on the floor would interfere with the set and block the audience’s view. The designer has considered a few options for the arrangement of the speakers, and he has settled on two likely courses of action. It might be effective to hang a set of speakers over
the very center of the playing space, pointing straight down. If the dispersion angles\(^2\) of the speakers are wide enough, they may be able to provide adequate coverage to the whole audience. If microphones are used, however, this could be problematic. If a microphone picks up the signal from the speakers, it can create a feedback loop that would, in this case, be very difficult to manage. It is also unlikely that the speaker's angles are wide enough to provide even coverage all the way to the back rows. The other option is to have two separate sets of speakers, each offset from the center and pointed at one half of the audience. In this case, if microphones are used the stage area will not be directly in the coverage pattern of the speakers and feedback will therefore be more manageable. The chief difficulty of this option is that it requires more speakers, preferably all of the same type. The large custom speakers from Innovox are the best-sounding speakers in the Andreas Theatre’s inventory, but there are only three of them. Again, compromise is required. The designer will most likely use one of these for each side and supplement them with other speakers, most likely the smaller speakers from the same manufacturer.

Since the main speakers will be so close to the audience, the sound they produce will appear to be coming from overhead. In order to attempt to correct this, the designer would prefer to put some smaller speakers in lower positions. The placement of these speakers will be largely dependent upon the arrangement

\(^2\) A vertical and horizontal measurement from the speaker which determine the speaker’s coverage area (sometimes referred to as its coverage pattern), the zone in which the sound is most audible and intelligible for the listener.
of the set. It may be possible to hide speakers inside of permanent set pieces. Another option would be to hide them underneath the first or second row of seating risers. In order to be small enough to hide, these would be speakers that would be too small to produce a satisfactory output on their own. However, used in conjunction with the large speakers overhead they can help to create the illusion that the sound is coming from somewhere in front of the audience. The designer can take advantage of some of the peculiarities of the behavior of sound waves and the way the human ear and brain process sound.

The nature of sound is such that higher frequencies (which produce higher-pitched sound) tend to travel in a more restricted path than lower frequencies. In the aforementioned dispersion pattern of a speaker, the actual angle of the speaker’s output is narrower at high frequencies than it is at low frequencies. Therefore, it’s easier for a listener to locate the source of high frequencies. Another property of high-frequency sound, specifically in relation to human hearing, is that higher frequencies are the most important for intelligibility of sound. Particularly with speech, but with other sounds too, high-middle to high frequencies are the most important in enabling the listener to understand what he is hearing. Thanks to these properties, it is not a problem that the speakers at floor level cannot reproduce low pitches well. The low and low-middle frequency sound from the ceiling speakers will not necessarily be perceived as coming from only overhead. The addition of high frequencies without accompanying low frequencies from the floor speakers will, if properly
balanced, increase intelligibility without causing the sound to seem unbalanced or harsh.

The speakers on the floor, being smaller and less powerful, will not be capable of producing as much volume as the ceiling speakers. If they are producing the exact same sounds at the exact same time as the speakers above them, they will not be very effective, as they will be obscured by the more powerful speakers. The sound will still appear to be coming only from overhead. In order to achieve the desired effect, the designer must exploit another characteristic of human hearing. If the same sound is heard from multiple sources, the human brain will identify the main source as the one that arrives at the ears first. The brain is acutely sensitive to this timing, so the effect can be quite subtle. In order to exploit this, the designer must consider the placement of the speakers in relation to the audience, then introduce an artificial delay to the speakers that he does not want to appear to be the source. In this case, the speakers on the floor will be closer to some audience members than the ceiling speakers, but not necessarily all. In order to ensure that all of the audience members hear the floor speakers first, he must delay the sound coming from the ceiling speakers. By knowing the speed that sound travels, the designer can calculate how much to delay the speakers based upon their distance to the audience members, relative to the small speakers’ distance. Then, by experimenting with more or less delay, this effect can be fine-tuned to make the
sound appear to originate somewhere in front of the audience; the source will not
appear to be the floor or the ceiling, but somewhere in between.

Finally, the designer must decide whether to employ additional speakers
to create spatialization (“surround-sound”) effects. In this case, the designer is
strongly disposed towards giving some of the sounds the illusion of occurring
behind or to the side of the audience. He will also want some of the sounds to
appear to move throughout the space, such as the sound of a horse that starts in
the distance and approaches the audience, or the sound of a bird flying overhead.
Walchuk has used variations of this approach on many productions in the
Andreas Theatre. He has employed speakers in many locations, including the
pipe grid, the mezzanine level, and the floor under or behind the seating risers.
Each of these had strengths and limitations. As the design develops and
particular effects are identified, the designer will decide which locations will be
most effective.

*Antigone* is a play that uses a relatively simple story in order to explore
expansive themes that transcend the story’s time, place, and cultural setting.
They continue to be not only relevant but important to all human civilization.
Through his sound design, Walchuk’s primary goal is to help Caron and the rest
of the design team to present these themes and this story in a way that will
engage a modern audience. In order to achieve this goal, he will need to continue
to analyze the script, especially as it is filtered through the director’s vision. He
will need to communicate his analysis with the director, particularly where it
informs his sound design decisions, as well as being sure to understand the
director’s analysis. A similar exchange of ideas will be important with other
members of the design team. This communication will ensure that the designer
is working with and not against the production as a whole. He will also need to
be flexible and open to re-interpreting the play or adjusting the way he supports
the director’s interpretation. A flexible mindset combined with a focused vision
will be the key to Walchuk’s success in this design.
Sophocles’s *Antigone* was first performed in 442 BC, nearly 2,500 years ago, and it continues to be popular. Clearly, there is something in the play that resonates with modern audiences. It deals with large themes that are, in many ways, universal to the human experience regardless of time and place. However, it was of course written in a very specific setting. An understanding of the play’s significance within the context of Sophocles’s world affords modern theatre artists an idea of the impact that it would have had on its original audience. From there, the artists can develop a sense of how their audience is different from or similar to Sophocles’s and focus their production in ways that connect most strongly to contemporary theatregoers. The purpose of this chapter is to provide cultural and political information about ancient Greece, with a focus on Athens, where *Antigone* was first performed. The author will discuss the nature of the Greek citizen’s relationship to his or her household and state in terms of his role in all aspects of Greek society, in order to gain insight into *Antigone*’s original audience.

In 5th century Greece, the most fundamental unit of society was the *oikos*, translated as family or household. At the head of the *oikos* was the *kurios*, the man in charge. Included in the *oikos* were not just immediate family members,
but slaves, servants and even the livestock and the house itself. The goal of this unit was to be as self-sustaining as possible; most oikoi were sustained by farming, rather than other trades such as crafts and manufacturing, which were largely the domain of slaves and lower-class Greeks (Pomeroy 177). The oikos operated on the understanding that each member was expected to contribute to the good of the household, regardless of personal interests. The nature of that contribution was strictly decided by gender. The men of the oikos worked outdoors. They raised “agricultural products such as fruit, grain, vegetables, and raw wool” (175). The women, in turn, worked indoors, using the raw materials the men provided to cook and weave fabrics. The wife was in charge of the internal affairs of the household, including the management of their goods to ensure that the oikos would never lack necessities, even in times of economic difficulty. In addition to a separation of labor between the sexes, the living space itself was separated into men’s and women’s quarters. Even if the house only had two rooms, “one upstairs and one on the ground floor, the upper room was the women’s quarters and lower room the men’s” (175). Guests were entertained in the men’s quarters and would only meet the male members of the oikos. In the presence of strangers, “women and girls would withdraw to the secluded parts of the home and not even be mentioned by name” (175). Such was the level of separation that the husband and wife did not sleep in the same room. All of the women of the household slept in the women’s quarters, all the men in the men’s.
This division of sexes was pervasive in Greek society, not least in their attitudes towards the institution of marriage.

Marriage was important in the life of the oikos, because it was the means by which the lineage was continued. The purpose of marriage was “the continuation of the husband’s oikos through the begetting of children” (Beer 5). The Greeks did not marry for love. There was usually a marked age gap between the husband and wife, because a younger wife had a greater chance of bearing more children and, therefore, continuing the husband’s line. Inheritance in Greek society was traced through the males of the family, but the lack of a son did not necessarily mean the end of a family line. If there was no son, or the son died before he had a son of his own, “the obligation to perpetuate the oikos fell on the daughter, called an epikleros” (Pomeroy 174). The epikleros was expected to marry her father’s closest male relative. If the epikleros was already married to someone else, she was required to divorce him. The same was true of the relative, who was usually an uncle or a first cousin. The children from that marriage would then be considered heirs of the epikleros’s father. The roles of managing the household and providing children were essential to the survival of Greek society, but for women the participation in that society largely began and ended with their oikoi.

The men were the representatives of the oikos to the larger society. When a son was born, he had to be presented to and accepted by a slightly larger group, the father’s phratry (translated as “brotherhood”) and, from there, his deme,
which is akin to a modern “city ward or country village” (Pomeroy 171). This was an important step, as it determined whether the boy would become a citizen. In 5th century Athens, a law introduced by Pericles, one of the most influential Athenian leaders, made citizenship dependent upon both parents being Athenians. Therefore, when the father presented his son to his phratry and deme, he had to vouch for the mother’s Athenian lineage. As the son grew up, he was then expected, like his father, to play a role in the polis, or city-state. At age 16 he was again formally presented to his father’s phratry and, if accepted, could become a citizen at age 18. However, he was not granted full citizenship until he completed the ephebia, a period of “one or two years of public service” (Mikalson 153).

While the polis could not exist without the oikoi from which it was built, the oikoi were dependent on the polis for protection, social and cultural development, and economic stability. This codependency between oikos and polis was based upon the contributions of male members of the oikos to the polis. One of the most vital obligations of the oikos was to provide soldiers for the common defense of the polis (Beer 6). Unlike modern-day United States, Athens did not have a professional military (at least, not in the lower ranks and not in the same sense as the US military); citizens were expected to fight for their polis. Those who distinguished themselves in military service often went on to serve the polis in politics. One of the major administrative bodies in Athens at the time of Antigone’s writing was a board consisting of ten generals, each of whom
represented one of the ten demes of Athens. These generals, or strategi, were elected to their positions on a yearly basis, with no restrictions on re-election. One of the most famous is Pericles, who served for 15 years (Ehrenberg 226). This was just one of the many positions an Athenian citizen could hold. In fact, there were so many different positions that “most citizen males by the time they died had held some public office … and a good number had held several” (Pomeroy 162). These positions included administrative jobs and membership in various boards, and were awarded both by election and by lot. The most influential positions were held by the wealthiest Athenians, but under Pericles many of the positions of service towards the polis, including serving on juries and participating in the democratic assembly, became paid positions. This meant that poorer citizens could afford to play a bigger role in the polis. The wealthiest, too, did not enjoy their positions without the expectation to provide more significant services to the polis. The wealthiest Athenians were expected to fund liturgies. A liturgy was a major public service, which could take many different forms: paying for the maintenance and crewing of a trireme3, funding delegations to religious festivals outside of Athens, throwing a large banquet during a religious festival, or training the chorus for one of the major dramatic festivals (163). Even without an official position, all Greek (male) citizens were allowed to participate in the ekklesia, the assembly of Athens, which could be likened in function to the legislature in a modern state. The issues discussed at

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3 A Greek warship.
meetings of the *ekklesia*, which were frequent, included every possible facet of running a state, from internal decisions about use of resources to foreign policy. All citizens were encouraged not only to attend, but to actively participate. Any citizen could “address the people on whatever subject he likes, whether private or public” (Kagan 52). Both within the *oikos* and within the *polis*, Greeks were expected to function as a part of the larger unit. “The idea that an individual could simply opt out and do his own thing, without performing the minimum requirements of his duty as a citizen, was scarcely countenanced” (Beer 6).

The relationship between the *oikos* and the *polis* was a codependent one, with the *oikos* providing the people and services the *polis* needed and the *polis* providing the security, economic and cultural support that the *oikos* needed. However, while it may have been considered that “the life of man is fully human only within the framework of the *polis*” (Segal 5), the relationship between the two institutions was not always a smooth one. The *oikos*, as a unit, was far older than the *polis* (Beer 5), which had only emerged about 200 years earlier “after Mycenaean feudal monarchies declined” (Vivante 24). As a result, the many *oikoi* that comprised Athens, particularly those who traced their lines back before Athenian democracy, had traditions that were sometimes at odds with the laws of the *polis*. This sparked a considerable amount of debate about which had more weight, the written laws of the *polis* or the older, unwritten customs of the *oikos*. These debates also frequently pitted both law and custom (collectively referred to as *nomos*) against natural law (*phusis*) and the wills of the gods. Modern
Western society, influenced as it is by Christianity, has in large part set these types of arguments in the context of a single God and a comprehensive religious text (the Bible) that offers definitive moral instruction. Greek religion, however, was a messier proposition.

The Greeks shared a common, polytheistic faith, but it was far from the hierarchical institution that Christianity became. The Greek religion was one of deep ancestral tradition and had as much variation as there were Greek families. There was no central text and, in fact, very little written down that was shared among all Greeks. There are, however, two highly influential literary sources: Homer and Hesiod. Homer’s *Odyssey* and *Iliad* and Hesiod’s *Theogeny* and *Works and Days* are considered to be the sources of much of the Greeks’ general knowledge of their gods (Price 6). It was these two writers who established the familial relationships between the gods, with Zeus as their king, as well as the generally accepted anthropomorphic appearances of the gods. Most paintings, engravings, and statues of the gods are based upon descriptions from Homer or Hesiod. However, it is important to note that neither author claimed divine inspiration (unlike the writers of the Bible), and neither author’s works are considered definitive. The myths evolved over the centuries, with contributions by many others. These gods of literature, which included the 12 major *ouranic*, or Olympian, gods as well as the *chthonic* (of the Earth) gods, are regarded as Panhellenic: any Greek from anywhere would recognize them. Thanks to the Panhellenic pantheon, Greeks from different city-states could worship together if,
for example, they were members of a combined army or were simply travelling. However, the true, everyday religious practice of the Greeks was focused locally, and this is where the system becomes truly complex.

Every region in Greece had its own sanctuaries to the gods, and the gods they worshipped were highly specific to the needs of that locality. The gods worshipped in a given area would have the same names as the Panhellenic gods, but would also be given an epithet which told of the specific aspect of that god that was being worshipped. For example, a coastal region might have a sanctuary to Poseidon Soter. Poseidon is the god of the sea, and the epithet Soter means savior. For that locality, it was important to worship a version of Poseidon who specifically protected sailors. The sanctuary would be the base for that god’s cult, the group of people who worshipped him. The god’s name would also include the place at which the cult was established, so there could be the same god, with the same epithet, with two different cults. Each cult would have its own mythology of Poseidon that focused specifically on his significance to that region. Another area might worship another aspect of Poseidon with a different epithet. Their cult of Poseidon would have even more variation in its myths (Mikalson 33).

Furthermore, one region would have more than one cult. While they turn to Poseidon for protection for their sailors, they might also have agriculture and have a cult of Demeter in order to protect their grain, and another of Dionysus for their vines. Different aspects of the same god were essentially treated as different gods, and when one considers that even the different demes of Athens had their
own cults, it becomes clear that the relationships of Greeks to their gods varied widely from place to place.

In addition to these gods, the Greeks worshipped heroes, legendary mortals who had done some great deed or deeds. Heroes, unlike gods, could only have one cult. Since they were ostensibly real people, the cults of heroes were centered around their tombs. This meant that the benefits of sacrifices to any given hero were only believed to be given to the immediate area of his or her tomb.

However disparate their understandings of each god might be, however, the Greeks had many common traditions and the everyday practice of religion shared elements across Greece. Religion in Greece was inextricably tied to every other aspect of life and its practice began in the \textit{oikos}. The various members of the household each had his or her role in the practice of religion, but the majority of the duties fell on the father and the mother.

The father was responsible for making daily offerings and sacrifices to the gods of the home. In the family’s storeroom, where the goods were kept, would be an altar to Zeus Ktesios, or Zeus of Property. According to Jon Mikalson, “Zeus Ktesios appears more the ‘Giver of Wealth’ . . . than the ‘Protector of Wealth,’ and, to judge by his ‘jar’ and his location in the storeroom, that ‘wealth’ was . . . conceived of primarily as agricultural produce” (135). So this daily duty to Zeus Ktesios ensured that the \textit{oikos} continued to successfully farm and amass the goods it needed to survive. In the courtyard would be the altar Zeus
Herkeios, or Zeus of the Fence, who protected the household from within.

Finally, the father would make offering to a god who stood at the gate to protect the household from the outside. This was usually Apollo Agyieus (Apollo of the Street), but often in Athens would be the hero Heracles instead. “[B]oth were thought of as ‘Averters of Evil’” (135). The father would also make sacrifices to Hestia, the goddess of the hearth. In addition, he was responsible for bringing offerings to the tombs of his ancestors. The mother, though her secular duties were restricted to the household, actually went outside of the home to perform her religious duties. Mothers participated in cults outside the home, offering sacrifices to those gods and goddesses who would provide fertility to their land, livestock, and people. They would do so at the local sanctuaries of such deities as Artemis, Athena and Demeter. The other members of the household, particularly sons and daughters, would play minor roles in the family religious practice. In some oikoi, even slaves were allowed to participate, but never to make offerings themselves.

These household religious duties were considered sacred obligations based on “ancestral customs,” and any who failed to perform them considered impious. “Funeral rites and later offerings at the tomb were also ‘ancestral customs,’ and a relative who neglected them was impious” (Mikalson 183). As with all other aspects of Greek life, funeral duties were divided along lines of gender. Women older than sixty and women who were close relatives of the deceased prepared the body in the home by washing it, anointing it, and dressing it. When the body was
presented for a day in the courtyard, the women would keen and lament, “tearing their hair and striking their heads and breasts” (145). Sometimes professional mourners would be hired to perform this function as well. After the day of display, the body would be taken to its tomb in a funeral procession. At this point, the women would retreat to the back of the procession and the men would take over. The men would carry the body to the tomb, perform the cremation or burial, and make the required offerings. A curious aspect of Greek funeral practice is that it seems to be performed almost entirely for the benefit of those still living, not for the good of the deceased. Unlike Christian burials, there seemed to be no concern for the well-being of the person’s soul. Despite famous stories such as Odysseus’s journey to the underworld, there is little evidence that the Greeks believed in any punishment or reward after death. In fact, “to judge from the non-poetic sources, Greeks foresaw no meaningful existence after death” (Mikalson 191) but rather “some shadowy and unpleasant existence with Hades and Persephone” (Price 101). Different cults had different beliefs about the afterlife, particularly the Eleusinian mystery cult which claimed something better for its initiates, though it is not now known what that entailed. Regardless, the conception of the afterlife is the one area with the least agreement throughout Greek culture.

Religious activity began at the oikos for the Greeks, but religion was practiced at the polis level as well. The state maintained sanctuaries for each major god that represented their needs, in much the same way as smaller
localities did. It is important to note that, in these state sanctuaries and in rural ones throughout Greece, there was no professional clergy. With a few rare exceptions, the priests and priestesses of each cult were simply members of the families who worshipped there. The *polis* provided animals for sacrifice, built and maintained the sanctuaries, and “had general oversight over the performance of ritual activities” (Mikalson 160). The most significant way religion was practiced in the *polis*, however, was in the religious festivals that occurred throughout the year. There was no such thing as a unified Greek calendar, as calendars differed between regions of Greece, but they did share certain commonalities and they were all built around religious festivals. There were many festivals celebrated, including four which were Panhellenic, two held every two years and two every four years (Price 26). Each festival had its own focus, generally a specific god, but they shared a loose structure consisting of a procession, sacrifices and hymns, and usually contests of some sort. Often these were athletic, musical, poetical or, importantly for the topic at hand, dramatic.

The processions for festivals at Athens were huge and elaborate and wound their way through all ten *demes* of the city. Young boys and girls from each *deme* were expected to be a part of the procession, which also included “the sacred objects, the torches, the baskets and the incense” (Price 30) and the sacrificial animals. When the animals were sacrificed, the meat was distributed first to those holding high civic offices, but then to all of the citizens in attendance so that everyone could participate in the public sacrificial meal. The competitions
varied depending on the festival, but they were noteworthy in that they were open to any competitors and included such diverse events as “reciting Homer, music, athletics, equestrian events, team events for tribes, a torch race, and a boat race” (39). Dramatic competitions at the City Dionysia and the Lenaia were very important. “Here all Athenian tragedies and comedies were performed” (Price 43), and here playwrights such as Sophocles made their names. A production at the City Dionysia, which was concerned with tragedies, was a year-long affair. Tragic playwrights would have submitted a tetralogy of plays, consisting of three related tragedies followed by a satyr play and, if chosen for the festival, would have been “allocated their principal actors, their chorus, and also their choregos” (Hall 21). The choregos was a wealthy citizen who was responsible for funding the training of the chorus of citizens who would perform in the plays. This was one of the more expensive of the aforementioned liturgies that a citizen could undertake, but it brought with it the potential for prestige if the production won the competition.

The chorus is an aspect of tragedy that bears considerable interest in the context of the rest of Greek culture, because it was made up of amateurs from the polis, as opposed to the principal actors, who were professionals. Participating in the chorus was another form of participation in public life for “young men in their late teens and early twenties, for whom choral training was bound up with the formal passage from boyhood to manhood and military induction” (Hall 29). So,

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4 A lighter-toned work, often a parody of someone else’s tragedy.
the members of the chorus are essentially taken from the general constituency of the festival, binding them closely to the audience. Even more interestingly, the way the chorus was written often reflected that bond. In many tragedies, including Antigone, the chorus represents the polis. So, while Antigone is set in Thebes, not Athens, and it is set many years prior, the polis of Thebes is being portrayed by the polis of Athens, which gives extra significance to the events for the Athenian audience and eliminates some of the distance that the difference in setting creates.

After examining the family, political, cultural and religious life of Greeks in the fifth century BC, it is important to consider how that life would affect the audience’s experience of a play like Antigone. The clear separation of gender roles would have an impact on the perception of the struggle between Antigone and Kreon. Kreon breaks tradition by denying Antigone’s traditional responsibility to care for Polyneices’s body, but by insisting on burying her brother Antigone is encroaching on duties reserved for men. Sophocles makes sure that neither side of the argument bears all of the blame or all of the virtue. An Athenian audience would recognize Antigone as epikleros, so they would see her marriage to Haemon as a cultural imperative. According to the tradition of epikleros, any children born to Antigone and Haemon would be considered part of the line of Oedipus, not Kreon. Haemon is Kreon’s only surviving son, so the audience could very well see Kreon’s actions as an attempt to avoid losing his own line of succession. In the Athenian view, both this and Antigone’s claim to right
of burial illustrate the possible conflicts between the interests of the oikos and the polis. These conflicts abound throughout Antigone, with a cultural complexity that make it impossible to make an absolute judgment of who is right and who is wrong. This is complicated by the diversity of the Greek pantheon. Not only are there many gods, but there are many aspects of each god which are often contradictory to one another. By the end, however, the audience would most likely be squarely against Kreon. His actions eventually go beyond the questions of internal cultural conflict and become truly opposed to Greek values. Much more so than modern Americans, the Athenians of Sophocles’s time were immersed in a society that was democratic in all its aspects. Greeks were expected to participate fully in the economic, social, and spiritual life of the home, the community, and the state. They joined without a second thought in the political and military affairs of their polis. Even in drama, which was itself deeply intertwined with religious and political life, Greeks were encouraged to participate as members of the chorus. In such a culture, individual pride and arrogance have no place. Kreon’s refusal to listen to any advice show not only pride and arrogance, but hypocrisy. His actions directly contradict his lofty, idealistic statements about the state and its leadership. His insistence that the person in power is the sole ruler and that his decisions, right or wrong, must be obeyed, fly in the face of Athens’s newly formed democracy. The audience of Athens would recognize the harm that Kreon is doing to his people and they
would feel a strong empathy with those people, especially because they are represented by the audience’s own peers in the Chorus.

The major difference between an Athenian audience and a modern American one, then, is that the close connection an Athenian would have felt to the tragedy through the Chorus will come much less naturally to Americans. In order to help make a play like Antigone anything near as relevant to a modern audience as it was to an Athenian audience, this author believes that they must be made to feel the same strength of connection to the Chorus. Two points need to be emphasized. First, it must be made clear that the Chorus represents the people of Thebes just as the audience represents the people of the United States of America. Second, it must be obvious that the troubles experienced by the Chorus are a direct result of Kreon’s transgressions, just as poor leadership does great damage to the people of America. If they can identify with the plight of the polis of Thebes at the hands of a tyrant, they may be able to draw connections to the political life of their own polis. They may even consider the benefits of becoming a more active citizen.
23 September 2015

This morning, Director Matthew Caron presented his concept for Antigone. He has clearly put a considerable amount of thought into this production; he already has a very strong sense of his vision for the play. Caron sees this play as a story of cosmic conflict: the laws of the old gods versus the new laws of man. He also made it clear that this is Kreon’s story, not Antigone’s. Kreon fulfills Aristotle’s requirement that a tragedy tell the story of a great man who falls from greatness.

Caron has a very specific aesthetic vision for this production. He wants to make it clear that the story is set in a city that has just experienced war. The set should show a broken place, dirty and covered with ash. The style of the set should not necessarily represent a specific time. Caron wants to evoke a primitive feeling, rather than a classical Greek feel. He envisions heavy use of stone in the architecture and animal skins in the costumes.

Caron placed importance on the passage of time. The story takes place over the course of a single day. Lighting in particular should help to make the time of day absolutely clear.
Caron did not have many specific ideas for sound, but he did suggest that he likes the sound of certain instruments in a selection of pieces from the soundtrack of the television series *Battlestar Galactica*. These pieces and Caron’s other conceptual ideas will be helpful as I begin to explore options for the sound design.

**30 September 2015**

I found this morning’s meeting very exciting. The primary draw of theatre, for me, is the creativity that arises from open collaboration with other artists. Today’s meeting was the most collaborative that I have experienced since I began here. Together, the production team created a plan for the beginning of the play that will set a grand tone. While the house lights are still up, the sound of marching will begin and slowly build to a very loud volume. This will serve to get the audience’s attention. When the boots stop, there will be a beat of silence, followed by a loud hit of war drums. The lights will snap to black with the drums. When the lights come up, there will be smoke on stage, released by stagehands during the blackout. The idea itself is exciting, but what was most gratifying to me was the way it was created. Everybody involved contributed to the idea, and nobody was territorial or protective over his or her own specific area of expertise. I sincerely hope that this atmosphere continues throughout the production process.
I also presented two musical ideas today. One was a piece by Colin Stetson that featured a bass saxophone. The piece is dissonant, repetitive, and highly distorted. The other piece was a choral work by a Bulgarian folk choir. This piece features female voices singing in a style that blends Eastern and Western sounds. Caron liked the second piece and did not feel that the first one fit his vision. I was pleased with this outcome.

7 October 2015

Scene designer David McCarl presented sketches this morning. He is planning to create three set pieces. He intends to have a rough stone structure at either end, similar to the formations at Stonehenge in their construction, but functionally more like niches or grottoes. In the center of the stage will be a platform with a sort of altar on top of it. However, rather than a stone-topped altar, it will be filled with dirt and sand. The theatre will be set up in what is known as the “alley” or “court” configuration, in which the playing space runs east-to-west across the middle of the room, with seats to the north and the south. The eastern and western ends extend to the edges of the main theatre space. This layout presents a unique challenge for sound. I will have to design a sound system that provides the same experience to audience on both sides, which essentially means that it will need to be two identical systems aimed in opposite directions. My principal concern at this point is that we do not have enough
matching speakers in our inventory to do this. It will require careful planning and a creative use of resources to make this design successful.

14 October 2015

This morning’s meeting involved some discussion of the choral odes. These are the poetic speeches delivered by the chorus in between the “episodes” that comprise the main action of the play. Caron’s plan is for the odes to be treated as being outside the normal passage of time occurring in the episodes. Lighting designer Steven Smith intends to accentuate this with lighting. I see this as an opportunity for some creative sound design that will support the themes of the odes. I have suggested that I work closely with Caron and movement coach Ian Lah so that I can develop my design in tandem with the choreography of the odes. Caron envisions highly stylized movement and speech and I think that underscoring, whether it be ambient sound or music, would be appropriate to flesh out the odes.

21 October 2015

Smith presented a computer visualization of a part of his design today. He intends to use lights to simulate the movement of the sun from East to West over the course of the play. Such a strong, unified approach for the episodes will help to set the odes apart, providing more opportunities to treat them in a less naturalistic manner. Having reflected more on Caron’s concept of a bleak post-
war landscape, I am considering the use of sounds like wind and fire in order to help to create a feeling of desolation.

Caron has presented the idea of having Tiresias speak in ancient Greek, with the boy who attends him translating into English. This would set Tiresias apart as something more, or at least other, than a normal human. If we do this, I am considering putting a microphone on Tiresias so that I can put some reverberation or echo on his voice to enhance the effect.

30 October 2015

Caron and Lah were kind enough to let me sit in on their meeting discussing the odes today. Together we arrived upon a concept that will be key to my sound design for this play. We observed that there is a sense of decay from the beginning of the play to the end, reflected in both the episodes and the odes. At the beginning, Kreon is the absolute leader and Antigone his lone challenger. The chorus supports the king in everything. However, as the play goes on, things begin to fall apart and slip from Kreon’s control. The chorus begins to question his words and actions. By the end, Kreon is left utterly alone, without even his own confidence. Caron and Lah decided that the movement of the chorus during the odes should reflect this decay. The first ode will feature well-organized, ritualized movement, but by the final ode the movement will be wild, primitive and Dionysian. To support this, I will introduce sounds throughout the odes that are evocative of the wild power of nature. Rumbling of both earth and sky, wind
and fire will all be inspirations for sounds that will find their way increasingly into the odes. This meeting was fantastic for me, because it confirmed many of the ideas that I was already forming. It also helped me to give my ideas some more specificity and established a very definite direction for further development.

11 November 2015

I have created a first draft of the opening sequence. I presented it to the cast last night and this morning at the meeting. Caron is pleased with it so far, but he and I both agree it is not finished yet. The sequence begins with marching feet, which currently sound like a small group of marchers. I need to elaborate on it, making it sound like a large army. In my research I discovered that the primary military musical instrument for the Greeks was not a horn, as in many ancient cultures, but an instrument called the aulos. This is an instrument that sounds very similar to a bagpipe and is capable of producing two notes at once. I found an example of this instrument being played loudly with a very unsettling dissonance between the notes. I put this at the beginning of the battle sequence, immediately after a voice shouting for a charge. Caron liked it, but feels that it sounds enough like a bagpipe to evoke a Celtic scene. I agree with him, but I think the sound is still very effective. He would like to hear more low-frequency sound, so my intention is to find the sound of an ancient battle horn and mix it with the aulos.
The final section of the opening sequence features a brief piece of music. I have done extensive research over the past few weeks in order to choose the appropriate music to use throughout the production. I was guided by Caron’s original examples from *Battlestar Galactica* as well as the Bulgarian piece that I presented earlier. Caron has also stated that he does not like the music that historians have presented as “authentic” ancient Greek music. I have decided to approach the selection of music from a broader perspective, searching through folk and traditional music from the entire Balkan region. I listened to examples of many traditional instruments, played in many styles, and have settled on solo recordings of an instrument called a doudouk. The doudouk (sometimes written as duduk) is similar to a clarinet in sound. It is neither very high-pitched nor very low, and the music that I have found has a mournful, haunting quality that I believe fits Caron’s vision perfectly. Caron, the rest of the design team, and especially the cast responded very favorably to it.

Tomorrow I begin technical rehearsals for *Time Stands Still*, another play that I am designing, so my work on *Antigone* will move slowly for about a week. When that is done, I intend to start attending some of the chorus rehearsals so that I can develop more concrete ideas for my design. I look forward to further collaboration with Caron and Lah.
18 November 2015

This morning we discussed two moments in which the director wants keening to be heard from off stage. In one moment it will be Antigone, in another it will be Kreon. We have decided that the sounds should be pre-recorded and come from the mezzanine level, because if the actors keened live from off stage it would have to come from the corners of the room behind the seating. I think this would make the audience too aware of the theatre space itself, taking them out of the world of the play. I plan to record the actors, rather than finding a generic sound effect.

Tomorrow night I will attend a rehearsal in order to see some of the work that has been done on the choral odes. Caron and Lah said they can show me at least the first, middle, and final odes to give me an idea of the arc that they will follow. Caron has also asked for my input; they have been developing some ideas using body percussion and vocalization. Next week I will also get an opportunity to see the episodes in rehearsal. For me it is always at this point, when I am able to see how the director is bringing the script to life, that my design begins to move from concept into actual form.

19 November 2015

I attended the first part of rehearsal this evening and was able to see all of the odes except for the fourth. Despite missing one, this gave me a very solid impression of the overall arc that the odes will follow. The first ode is
characterized by formal, ritualistic movement. The chorus speaks both individually and in groups, but either way it is well-organized and formal. The chorus is also singing in the first two odes. There is a long entrance in the first ode during which the men of the chorus begin singing. The women speak the first stanza or so, then the men take over and the women sing. The singing continues throughout by chorus members who are not currently speaking. The second ode contains similar vocalization throughout. I think that the general idea is strong, but at the moment the improvised vocalizations have a haphazard, directionless feel. I mentioned this to Caron. He feels the same way, and has asked if I would be willing to work with the chorus at some point to give them some direction. I told him I would be happy to, given my musical training and the fact that I did similar work with Caron on *A Piece of My Heart*.

By the third ode, the movement has become somewhat erratic. The chorus members who are not speaking begin to make sounds that are clearly not a part of the text, such as moans and whispers. This marks the beginning of the descent from order into chaos.

The final ode is more extreme than I imagined it would be. It begins with wild keening, and one chorus member careers, screaming, across the length of the playing space. The rest of the chorus follows suit, moaning, hissing, and wailing when they are not speaking lines.

I left rehearsal with a strong inclination of the shape that my design will take. The first ode will be solemn and subdued, most likely with some higher-
pitched sounds providing accents. I am considering using sounds like the ringing of a finger on a glass. This type of sound is clean and pure, made with man-made objects, representing Kreon and his focus on man’s laws. The exact placement of these sounds will be based on the chorus’s movements and diction: less on the text and more on the inflection that the words are given. As the odes progress, the high-pitched, man-made sounds will be phased out and replaced with low, visceral rumbles, fire, and wind. These natural sounds represent Antigone and her focus on the gods and their laws, particularly the chthonic gods (the gods of the underworld).

23 November 2015

I was able to watch a full run-through of the play tonight. I had already been planning to concentrate most of the sound around the choral odes, and seeing them in the context of the rest of the play has solidified that plan. The episodes consist of a mixture of long, pontificating speeches, heated philosophical arguments and plot exposition. This all needs to be presented to the audience as clearly as possible, especially because most of them are likely carrying a bias against Greek theatre; they assume from the start that they won’t understand it. The actors in this production are working very hard to speak articulately, and the translation that Caron chose is written in relatively straightforward language for a modern audience. Even so, the challenge is an imposing one, particularly in the first few episodes. Extra sound during the episodes is more likely to distract than
to enhance. The odes, on the other hand, are a step removed from the story and provide an opportunity for poetry and spectacle to take over. The stylized movement and language of the chorus are natural candidates for heavy support from sound without causing confusion for the audience.

Before the run-through, the chorus rehearsed each of the odes, which gave me a chance to take videos of them. This will be very helpful for me when I put together the sounds for the odes, as I won’t have to rely solely on notes hastily taken during the run-through.

3 December 2015

I have spent the last two evenings working with the chorus to give them some structure for their singing in the first two odes. My approach was to choose just one scale, an A minor scale, and assign each member of the chorus just two or three notes from that scale. They are free to improvise, but only using those notes. In addition, I asked them to spend the most time on notes that are part of an A minor chord, moving quickly away from any other notes. This ensures that they will always be singing notes that fit well with each other. I chose a minor scale because it reflects the somber nature of the play. It also matches ritualistic elements of the movement, evoking mystery. We chose a slightly different approach to this for each of the two odes that contain singing. The first ode will start with just the very lowest note, along with the men stomping their feet in a slow rhythm. The other notes will be added in over the course of the first few
stanzas, first with the men then, after they’ve spoken the opening lines, the women. The singers will use long notes with smooth transitions between them. The higher notes can move a little bit faster, but should still be smooth and connected. In the second ode, the singers will begin within a few seconds of each other, and they will use shorter notes. I asked them to overlap with each other so that the singing will still be continuous, but it will have a slightly more disjointed feel than the first ode. I have also had them record the singing for each ode so they have something to practice with. We are about to start winter break, so they will need to have a way to practice on their own for the next month.

6 January 2016

I have spent the past week finalizing the sounds for the production. I went over all of the notes that I took during rehearsals and watched the videos of the odes carefully. In my work, there are several early ideas that I ended up changing or abandoning altogether.

First of all, I have decided not to put a microphone on Tiresias. I envisioned him speaking his Greek in a booming, imposing voice. This would have worked well with an effect of some kind. However, the actor has chosen to speak in a sort of wheezy whisper. I don’t think that lends itself well to the sort of treatment I had in mind.

Second, I have done away with the idea of using glass-like sounds in the first few odes to represent Kreon’s values of order and man-made law. I spent a
lot of time weighing the effectiveness of such sounds and I could not find a way to fit those sounds naturally in the odes. They simply didn’t integrate well with the chorus’s movement and speech. Instead, I added some percussion to the first two odes. I used the sounds of small drums, bells, and tambourines that enhance the ritual feel of the odes. In addition, I have added a low drone throughout the odes. This drone is the root note of the scale that the chorus members are using in their singing. The drone and the percussion both support Kreon by giving order and structure to the odes. They have the added benefit of helping the chorus members maintain their notes and, in ode 1, the rhythm of their stomping feet.

Finally, I have expanded my concept for my overall design. As originally intended, the first part of the play will only have conceptual sound (there may be a few practical cues) during the choral odes. However, as things begin to descend more and more into disarray, the lines between ode and episode will blur and the sounds will continue beyond the odes. By the end, there will be near-constant rumbling, droning, and wind and fire sounds. The combination of sounds and the volume level will be in constant flux so that the soundscape morphs slowly but steadily throughout the last third-to-half of the play. My goal is for the sounds to respond to the chorus, as if nature has a sympathetic connection to them. So, for example, if Antigone screams there might be a large rumble, but it will not happen with Antigone’s scream. Instead, it will coincide with the chorus’s collective reaction to her scream.
8 January 2016

With the sounds created, I turned my attention the last two days to putting together the sound system itself. As mentioned previously, this was a challenging system to design because there are audience members on both sides of the stage area. It’s also difficult because, for the most part, the speakers must be placed far above the audience. This can make it difficult for the sound to feel connected to the play, so I had to find a way to make the sound seem like it was coming from lower down. Ultimately I created what amounts to three sub-systems: main speakers, effect speakers, and subwoofers.

The main speakers will produce all of the music in the play, some of the more prominent sound effects, and the drones and percussion during the odes. This required the most careful planning as well as a bit of experimentation. I needed these speakers to provide the same listening experience to everyone in the audience. Due to the unique arrangement of the audience, this meant creating two identical systems pointing in opposite directions. I had previously worked out, through drafting a preliminary speaker plot, that I would need three speakers for each side in order to evenly cover the whole audience. Unfortunately, I did not have six of any given speaker. So, I chose to put one of the biggest, best-sounding speakers we have in the center on each side. This large speaker was then flanked by two smaller speakers that are very similar in sound quality. The major difference is that the smaller speakers don’t reproduce low frequencies as well. Since low frequencies tend to be less directional than
high frequencies, placing the large speaker in the middle actually provided adequate low-frequency coverage throughout the audience, while the two smaller ones helped to keep the high-frequency coverage even. I then needed to solve the problem of sound coming from high overhead. I chose three small speakers per side and put them on the floor underneath the seating risers. I lined them up with the corresponding speakers above. By sending the same sound through the lower and upper speakers and experimenting with their relative volume levels, I was able to create the illusion that the sound was coming from somewhere more or less directly in front of the audience. This is because the floor speakers are closer to the audience than the ceiling speakers, so the sound from those speakers hits the audience very slightly sooner than the higher sound. This causes the audience members to perceive the source as being lower down, even though they are not as loud as the higher speakers. Changing the balance between lower and upper speakers very slightly can move the perceived sound source up or down.

The effect speaker system is designed for particular sound effects to appear to be coming from specific directions. For example, I might want one gust of wind to come from the northwest corner of the room, while another one comes from the south side, or appears to move from one side to another. To achieve this, I put one speaker in each corner of the room. By sending sounds to different combinations of speakers, I can make sounds appear to come from any side of the audience. This system also includes a speaker on the west mezzanine that is
specifically for the aforementioned prerecorded keening sounds from Antigone and Kreon.

The subwoofer system will be a major component of this design, producing the low-frequency rumbles and booms that punctuate most of the second half of the play. This system consists of two large subwoofers that are permanently installed at the ceiling level as well as two smaller subwoofers on the floor. I have placed one behind the center of each seating section. This placement makes the rumbles sound like they are coming from everywhere at once, accentuating the conceit that the sounds are coming from the earth itself.

9 January 2016

Now that the sounds have been created and the system has been installed, the only thing left to prepare for the first technical rehearsal is to put the two together. I spent the day today in the theater putting the sounds into QLab, the software that will be used to play the sounds. This process involved setting volume levels for each sound as well as setting the timing between each. Many of the sound cues in this play actually consist of many sounds played either together or in a sequence. QLab allows me to create those cues in a way that is flexible and easy to edit if necessary. Putting a show together in this way is one of my favorite steps in the design process. It is the step that most employs both my creative skills and my technical skills, and it is always gratifying when my designs begin to
take actual shape. This particular design is a complex one; I ended up with 70 cues that are collectively comprised of nearly 300 smaller components.

11 January 2016

Tonight was the first technical rehearsal (colloquially referred to simply as “tech”), which is the stage in the process when sound and other technical elements are first integrated into rehearsal. Tonight’s tech was specifically for sound; lights will be two nights from now, then scenery, then costumes. This is the first time the production stage manager, Jayme Caye Beerling, will be calling sound cues. This means she must follow along with the script and tell the sound operator, Cam Pederson, when to play each cue. This is an important step in the rehearsal process for her because she is also responsible for directing the other technical elements of the production. Technical rehearsals give me the opportunity to make sure I have communicated my design with absolute clarity to the stage manager. The success of my design is ultimately in her hands.

On past productions, my design often does not completely take shape until partway through the technical rehearsal process. I tend to have many of my best ideas while collaborating with the actors, director, and other designers and responding to their work. Frequently the tech process is the most fertile ground for my design approach. On this production, however, I feel like I am coming into tech rehearsals with a design that is much closer to being complete than normal. The reason for this is undoubtedly that I have been attending rehearsals
and working closely with the director and actors from the very beginning of the rehearsal process. At the very beginning of the production process, I expressed excitement at the level of collaboration that was happening. I also expressed hope that it would continue. It did, and as a result I am more confident with this design than I have been with any other play I have worked on.

Having said that, the tech process is still important for perfecting my work. Even though I have videos and detailed notes from previous rehearsals, the performance itself is in constant development and requires close cooperation to reconcile all of the technical elements with it. Over the course of rehearsal I have identified several sound cues that need to be called differently. I have also decided that four cues need to be added. In addition, many of the cues needed to have their volume levels adjusted. These types of changes are typical during tech and I expect to continue making them throughout the next week and a half of rehearsals.

14 January 2016

This week’s rehearsals have been, as I suspected, a gradual but steady process of making small adjustments to the design. I am still feeling very confident and, as other elements have been added, very proud of everybody’s work on this production. One of the most significant adjustments that has been made has been the result of ongoing conversation between Caron and me about the chorus’s singing. He has been feeling that the singing in the first ode,
particularly once the women have entered, is unfocused and distracting. I agree with him, and we also agree that the second ode is working much better. The singing in the second ode has evolved into a very simple version of what we originally envisioned for the first ode: long-held notes with smooth transitions between them. After consulting with me about it, Caron has asked the chorus to do the same thing for the first ode as well. The only difference is that the first ode will still build from the bottom note up as it did before.

This work with the singing of the chorus places me in a slightly unusual position. I am the sound designer, not the musical director, and under normal circumstances I would not necessarily be in a position to ask actors to change the way they are singing. However, we don’t have a musical director and Caron knows that I have a background in music. So, when I am working with the singers it is in a consulting capacity to the director rather than as the sound designer. This is actually advantageous to me, because I do not mind the work and it allows me greater control over some of the sounds in the play that are not part of the sound design. I have filled this role for Caron in the past, on a production of *A Piece of My Heart*. I mention this here because I find it interesting to observe how my relationship with a particular director can affect the role that I play on a production. Often the lines of responsibility between different roles are blurred in the service of collaboration; this is one of the major reasons I love working in theatre.
24 January 2016

I and most of the rest of the people involved with Antigone have just spent a week at the Kennedy Center American College Theater Festival. This is one of the unfortunate aspects of working on a play in this particular slot in the production calendar. After a week off, some of the progress made during the first week of tech will need to be re-made. All told, however, tonight’s rehearsal did not go poorly at all. In fact, I have found it useful to have a week away from the play. I noticed a few things that I had not previously noticed, and made improvements to my design accordingly. This involved adding a cue and making some volume adjustments.

We did have a few instances of sound cues going too early. In one case, this had a major effect on the play. The way the cues have been put together, some of the sounds run for several minutes while other sounds are being played. If the sound operator fires a cue too early, panics, and hits the escape key on the computer, it will stop everything that is playing, not just the cue that went too early. As a result, the low drones and rumbles that were supposed to continue throughout the next scene stop and the programming is too complex for him to be able to quickly figure out how to start them again. This is what happened tonight. I had a conversation with Pederson, informing him that he should never use the escape key during the show. If he goes too early on a cue, it does less damage if he just lets it go.
25 January 2016

Tonight’s rehearsal was, from a sound perspective, a train wreck. Many cues were called at the wrong time or missed altogether. I spoke with Beerling afterwards about what went wrong. The impression that I got is that the pressure she was feeling to perform her job well had built to the point that it overwhelmed her a little bit. Once she made a mistake, she became flustered and continued to make mistakes. I am not concerned about this, and to be frank I am glad it happened. I believe that this acts as a relief of pressure for Beerling that can help her to be more confident in the future. The key, of course, is in how I, as the designer, deal with the mistakes she made. I made sure to emphasize that I think she is doing a good job, while impressing upon her the importance of the timing of these sound cues. I believe that if I were to simply tell her she is doing a good job and dismiss the mistakes outright, it would only undermine her confidence further. She is intelligent and capable and she knows she made mistakes. By talking to her directly about those mistakes without yelling at her, I am telling her that I am aware that she knows what went wrong and I am confident in her ability to correct it. If I simply dismissed the mistakes, I would be sending a message that I don’t take her seriously.

27 January 2016

The student preview performance is an important night for me as a sound designer. At this performance, theatre majors and minors are invited, along with
many members of the community. This is the only opportunity I have to hear my design with an audience before the official opening of the play. This is important, because when the room is full of people the sound behaves differently. People are soft, so they absorb sound rather than reflecting it. Therefore, the student preview performance helps me to know which sounds need to be turned up or otherwise adjusted. Fortunately, we had a reasonably large audience tonight so I got a good idea of what I need to change. Unfortunately, an older gentlemen had his hearing aid turned up too loud, resulting in high-pitched squealing throughout the entire performance. The squealing was too high in frequency for many of the older audience members to hear (the older a person gets, generally the more high-frequency hearing loss they experience), but for everyone else it made for a very uncomfortable experience. I imagine there is not a specific policy for this type of occurrence, but I think it would be a good idea to formulate a plan with the house management staff in case it happens again. A simple announcement asking patrons to check their hearing aids may or may not be effective, but I think it is worth trying.

4 February 2016

I attended tonight’s performance and I am pleased to say that the actors, the crew, and the stage manager have maintained a high standard of work. My design was executed as near to flawlessly as could be expected. This production has been an exciting challenge. Everyone involved, from the director and design
team to the backstage crew, has worked hard to create a high-quality production. The audience response has been a testament to this. Despite the challenge of presenting Greek theatre to a modern audience, the show has sold well and (anecdotally, I admit) everyone I have spoken to has professed enjoying the play well beyond their own expectations. That is the ultimate validation for all of the hard work that we as theatre practitioners do; theatre cannot exist without an audience.
CHAPTER IV

POST-PRODUCTION ANALYSIS

In his early assessment of *Antigone*, Sound Designer Luke Walchuk stated that his main goal was to help Director Matthew Caron to make the play relevant to a modern audience. In order to achieve that goal, he understood that it would be necessary to maintain an ongoing analysis of the play’s themes. He knew that he needed to be open to changing his interpretation of the play to account for the interpretations of the director, other designers, and the actors. Upon reflection, Walchuk acknowledges that it was this willingness to change that enabled him to create a design that fit within a unified vision for this production.

Walchuk’s original analysis was based upon Aristotle’s *Poetics*. He asserted that Kreon is the protagonist of the play because he fits Aristotle’s description of a virtuous-but-flawed hero who experiences a great downfall. However, as the production process went on, the designer found this explanation to be inadequate. Placing Kreon at the center of the story makes his personal loss the most important consequence of his actions. This does not give proper recognition to the damage he causes to his entire community. Ancient Greek society, formed as it was around the *polis*, or the state, would have had little room for one man’s personal ambitions for power. Kreon himself speaks out against the man who puts individual concerns above the needs of the state. Sophocles
sets up Antigone to be opposite of the *polis*-centered worldview, in which the *oikos*, or family unit, commands the strongest allegiance. However, even from her “opposite” point of view, Kreon’s self-centered actions are unthinkable. Therefore, it is wrong to approach a production of *Antigone* with the assumption that Kreon is either protagonist or hero. This applies to ancient Greek sensibilities, but it also reflects modern American attitudes towards society and its leaders. Despite strong cultural biases towards individualism and widespread mistrust in anything that suggests socialism, contemporary Americans generally expect their leaders to behave in the best interests of the people they represent. Leaders who have used their positions to pursue personal ambition, from Richard Nixon’s infamous Watergate scandal to Chris Christie’s more recent “Bridgegate” scandal, tend to face condemnation from American citizens.

In order to better appeal to a contemporary audience, then, Walchuk reached the conclusion that the true protagonist of *Antigone* must be Thebes itself, represented by the Chorus. Rather than acting simply as opposite entities clashing against one another, Antigone and Kreon become representatives of larger forces that act upon the people of Thebes. As Walchuk discussed in his initial analysis, Antigone represents the duty to *oikos* and to the ancient laws of the gods and Kreon represents the duty to the *polis* and the modern laws of man. Prior to the conflict of the story, Thebes has functioned with a reasonable balance between these two. Kreon’s decree that Polyneices should not be buried is effectively an assertion that the *polis* should no longer exist in balance with the
oikos, but should replace it entirely. Antigone pushes back against Kreon, putting Thebes in the middle of the struggle between these two forces. Kreon then complicates the conflict by asserting himself, an individual man, as the one-and-only source of the state’s authority. Kreon is now representing a third ideal: duty to a ruler. The people of Thebes are now being pulled in three directions by three forces that refuse to concede any power to either of the other two. The effect of this upon the Thebans is borne out by the behavior of the Chorus. Caron’s direction and movement coach Ian Lah’s choreography reflect this idea strongly.

At the beginning of the play, the actions of the Chorus are orderly and ritualistic. They walk upright and speak clearly; they are almost immediately confronted with conflict, but in the early stages of the play they attempt to resolve it with reason and dignity. As Kreon’s betrayal of his own principles becomes clear, however, the strain on the Chorus begins to break them down. The Chorus members move erratically. They become stooped and disfigured in their postures. By the final episode, the Chorus is nearly unrecognizable as human beings: they stagger, hiss, and moan, alternately crawling on the floor and running screaming around the stage. It is only when Kreon’s destruction is complete that they recover their humanity. Then, the Chorus performs one last ritual, delivering words of judgment. The leader of the Chorus gives Kreon a symbolic burial by sprinkling earth on his head, and the people of Thebes leave him behind, hopefully to reattain balance in their lives.
Once Walchuk adopted this approach to the story of *Antigone*, he found many parallels between his design concept and Caron’s directorial choices. His original decision to focus his sound design on the choral odes was based primarily in aesthetics and a desire not to interfere with the clarity of delivery of the episodes to the audience. Treating the Chorus as the protagonist strengthened his design by giving it a deeper conceptual foundation. This foundation, in turn, helped him to make decisions about which of his initial ideas he should keep, which he should abandon, and what new ideas he might introduce.

Walchuk stated in his initial analysis that one of the most basic functions of sound design can be to help establish time and place. He considered several ways to achieve this, but ultimately found it unnecessary to contribute much in this regard. Lighting Designer Steven Smith created a lighting design that evoked the movement of the sun from East to West throughout the play. This was a strong establishment of time of day, and the designer felt that there was no need for additional support from sound, such as insects and birds. In terms of establishing the place, the language of the play is so explicit and David McCarl’s scene design so evocative that Walchuk felt there was nothing he needed to add. There was only one element that the designer chose to contribute. In collaboration with Smith, he created a prologue which consisted of the sounds of
the battle between Thebes and Argos. The prologue began with the house lights still on: the sounds of marching feet gradually approached until they were quite loud and present. A loud boom followed, the lights turned off, then the sounds of battle were heard. The designer then chose to use a melancholy piece of music, along with the sounds of wind, to bridge the transition between the introduction and the start of the play itself. This introductory sequence helped the audience to understand that the action of the play takes place after a battle, with the subsequent dialogue filling in the details. The music and wind helped to establish the sense of desolation that follows war and destruction.

One of the initial decisions that the designer made was to focus the majority of his design on the choral odes. One of the main reasons for this was to avoid distracting from the language and story being told in the episodes. The odes are somewhat outside of the main story, and their poetic language and the traditional choral movement make them naturally more spectacular; adding a soundscape makes sense in that context. As Walchuk came to the decision to treat the Chorus as protagonist, it became even more effective to use stylized sound to help bring focus to the odes. The odes reflect the issues on the minds of the Chorus while not being integral to the plot: they serve as character development for the protagonist. In creating his design, Walchuk stood by his decision to focus on the odes. At first, with the exception of the introductory

5 Lights that are not part of the play’s stage lighting. These lights help the audience move safely in the theatre before the play begins.
battle soundscape and Antigone’s off-stage scream, the only sounds that occurred happened within the odes. However, this was only true until the Chorus began to break down. Starting with the third ode, the designer’s stylized soundscape began to “leak” out of the boundaries of the odes. The effect was tentative at first, but by the end of the play there was constant sound. This also helped to convey the overarching descent from order to chaos that the designer identified in his initial analysis. Viewing the Chorus as protagonist enabled Walchuk to develop a focused and justified plan for the placement of his sound.

The designer’s evolved analysis also helped him to choose the sounds themselves, especially as he began to see how his concept made sense alongside Caron’s and Lah’s choices for staging and choreography. Walchuk wanted to use sound to emphasize the theme of dichotomy that pervades *Antigone*. Many options were considered, including the idea of choosing sounds that specifically symbolize the ideals that Antigone and Kreon each represent, or simply choosing contrasting sounds that represent divisions on a more emotional, less specific level. One of the ideas that the designer was leaning towards strongly was to use orderly, man-made sounds towards the beginning of the play to represent Kreon and to introduce more chaotic natural sounds as the balance began to tip towards Antigone. He discussed sounds for Kreon like ringing metal or glass, or even industrial sounds like combustion engines. He considered using wind, birds, and insects for Antigone. Ultimately, Walchuk’s choices were heavily influenced by the movement and vocalizations of the Chorus. In the first two odes, Caron had
the members of the Chorus underscoring their own lines by singing wordlessly when they were not speaking. In addition, their movements were organized and ritualistic. In the first ode, they incorporated a rhythmic stomping through the first part of the ode. It was during these first two odes that Walchuk was planning to use his “Kreon” sounds, but he found that none of his ideas worked well with what the Chorus was doing. He thought their vocalizing was effective, but it left no room for the kinds of sounds he wanted to use. However, the Chorus were having some trouble singing in the same key and keeping their rhythms consistent. This problem became an opportunity for the designer, and he replaced his original sound ideas with sounds that could help to solve the Chorus’s problem. He added a low, droning note that gave the Chorus a reference to sing from; he also added percussion to help them keep their stomping in time with one another. By solving the Chorus’s problems with pitch and rhythm, he solved his own problem. The sounds he chose helped the actors in the Chorus and enhanced the feeling of ritual and mystery in those first two odes.

Walchuk’s approach to his “Antigone” sounds also ended up being based on the movement and vocalization of the Chorus. He chose primarily low, rumbling sounds that evoked the raw power of nature and the chthonic (underworld) gods that Antigone invokes throughout the play. In addition, he used wind and fire to convey a sense of a world becoming consumed by natural forces of chaos and destruction. These sounds were then employed in a way that
directly correlated with the actions of the Chorus. In keeping with the idea of Chorus as the central character of the story, Walchuk devised the conceit that the earth itself was reacting in sympathy with the Chorus to everything that was happening. Significant words and actions from the Chorus would prompt a rumble or a gust of wind. When the Chorus reacted strongly to the words or actions of another character, sounds would be triggered. Walchuk was very careful to make sure that it was the Chorus’s reaction that triggered the sound, not the other character’s speech or action.

Another factor that influenced the designer’s choice of sounds was an accidental collaboration with the costume designer and the scenic designer. Heather Grandprey’s costumes for the Chorus were made of a fabric that generated a considerable amount of noise when the Chorus members moved. The sound was reminiscent of dry leaves or branches in the wind. At the same time, David McCarl’s choice to use dirt in the set meant that every step taken by the actors made a gritty scraping sound. This intensified as the play went on and actors continually threw dirt around the stage. On another production, the designer’s reaction to these sounds might have been to ask Grandprey and McCarl if those sounds could be reduced, or to try to cover them with another sound. In this case, however, Walchuk found that these sounds contributed to his vision of a deteriorating world in which natural forces were taking over. As a result, he integrated those sounds into his design by abandoning plans to use pre-recorded sounds that were similar. He removed many of the higher-pitched
sounds that he originally planned to use and let the fabric and the dirt fill their place. He was pleased with the way they balanced the low-pitched rumbles that ultimately made up most the pre-recorded sound design.

In the end, Walchuk’s continued analysis of the script and close collaboration with the director and other members of the team (accidental and intentional) enabled him to achieve his goal of intimately connecting the sound design to the Chorus.

The effectiveness of any sound design depends heavily upon the physical sound system that is used to deliver it. For this production, though Walchuk’s conceptual approach to the design evolved considerably, his original vision for the sound system remained largely unchanged. The designer had discussed two options for the main component of the system: one set of speakers hung directly in the center of the room and pointing straight down, or two sets of speakers, each hung from the ceiling and aimed at one side of the audience. He chose the second option based upon drawings of the room and calculations of speaker coverage. Having one set of speakers directly overhead would result in more inconsistent sound throughout the audience. Those audience members seated at the top of the risers would have an inferior experience to those sitting closer to the stage. Having made this decision, Walchuk implemented his plan, as described previously, to put additional speakers underneath the first seating risers in order to bring the perceived sound source down from the ceiling. He supplemented this main system with subwoofers, using both the pair of
permanently installed subwoofers in the ceiling and another pair of smaller ones. These he placed underneath the last seating riser on each side, in the center. In addition to the main system, he placed a speaker in each corner of the room, also hung from the ceiling, each capable of being controlled separately. These provided the ability to create illusions of spatialization and movement in the sound effects. The designer found that his choices in system design served his concept well. By using the combination of ceiling and floor speakers in his main system, plus the subwoofers, the low, rumbling sounds filled the room; it was believable that these sounds could be coming from the Earth itself. The speakers surrounding the room enabled the designer to create the illusions of wind blowing around the periphery of the space or the marching feet of an army approaching from a distance. In combination with the main speakers, he was able to make a murder of crows “fly” overhead from one end of theatre to another. Walchuk’s system was flexible enough to allow specific directionality when needed and omnipresent, immersive sound when that was called for.

For a contemporary audience, classical Greek tragedy can be daunting. It is likely that audience members enter the theatre under the assumption that they will not understand the play they are about to see. Walchuk set out to create a sound design for Antigone that would help to convey the play’s story and, more importantly, its universal themes to such an audience. The designer worked in concert with a director, creative team and cast who were all strongly committed to the same goal. Walchuk and his colleagues each engaged in extensive analysis
and shared their ideas with one another, whether through direct discussion or through their design choices or both. As a result, *Antigone* was well-received by its audiences. Walchuk feels that he achieved his personal goals in this production while contributing to its overall success.
CHAPTER V

PROCESS DEVELOPMENT

Prior to becoming a Master of Fine Arts (MFA) candidate at Minnesota State University, Mankato, Luke Walchuk earned a Bachelor of Arts degree in Music Industry from Saint Mary’s University of Minnesota (SMU) before embarking on a career as a professional sound engineer. In his undergraduate education, Walchuk developed his skills and knowledge in music, recording and audio technology. Through classes and experience, he honed his sound engineering skills, as well as his knowledge of music theory, history and composition. In his honors classes, he was exposed to many works of drama, literature and philosophy that have served to support and enrich his appreciation and knowledge of his chosen field of theatre arts. In his senior year at SMU, he had the opportunity to design sound for their productions of *O Jerusalem*, *Remains* and *Macbeth*. His experience with these productions planted the seed of interest that would eventually lead him back to theatrical sound design. First, however, he spent the 7 years after his graduation from SMU as a professional sound engineer. His work with Valleyfair, Norwegian Cruise Line and TC Furlong, Inc. gave him strong technical knowledge as well as leadership and organizational skills. Walchuk eventually realized that, while he was enjoying the technical work he was doing, it lacked the creative element that he desired. This
realization led to his decision to apply for the MFA program in sound design at Minnesota State Mankato.

Walchuk’s experience at Minnesota State Mankato has contributed significantly to his growth as a theatre practitioner. This growth consists of three major areas of development. Walchuk has gained experience and knowledge of the theatre design process. He has significantly improved his foundational knowledge of the history and culture of theatre. Finally, he has expanded his general stagecraft skills.

Walchuk has now completed nine designs at Minnesota State Mankato, four at Highland Summer Theatre and three at SMU. The experience of working on these designs has proven invaluable. When Walchuk designed at SMU, he had no instruction in or previous experience with the production process, and he found himself having to figure out what he was doing on his own with very little guidance. Therefore, when he began his first Minnesota State Mankato design, *Betrayal*, he felt very much out of his depth. However, through the help of his advisor, George Grubb, he was able to quickly acclimate himself to the production process.

Since then, his work as a designer has been greatly helped by many of the courses he has taken at Minnesota State Mankato. John Paul’s Scene Design I class helped the student to understand the production process, as well as script analysis. Steven Smith’s Lighting Design I class further illuminated the process and, through Smith’s “point-of-view” approach, gave the student a very useful
tool for approaching a design in a creative yet focused manner. This approach involves coming up with a single sentence or short paragraph to summarize the play's thematic content, then creating a list of practical ideas that directly support the theme. Continuing through Lighting Design II and Virtual Lighting, Walchuk now has the advantage of significant training in a secondary design area. This not only makes him more flexible in his career path, but gives him greater insight into the work of other designers when he is working as a sound designer. An area of great challenge and, consequently, considerable growth for Walchuk was David McCarl’s Costume Design I. Costume design is the one discipline in which the student had no prior experience or interest. Through McCarl’s class, he gained considerable insight about the way a costume designer approaches his work. He learned to understand and appreciate the type of research and the particular set of knowledge and creativity required to produce a successful costume design. While the classes in other design areas helped Walchuk to broaden his understanding of theatrical design, classes in sound helped him to sharpen his focus on his own identity as a designer. In George Grubb’s Sound Design I class, the student was challenged to approach his own work critically and to examine every design decision in order to evaluate its effectiveness. Sound Design II took this critical thinking to an even deeper level. An important part of the learning process involved critiquing the work of others and receiving critiques of his own work. The critique process forced him to think about his design work from different perspectives, uncovering flaws and bad habits. In conjunction with his
work on actual productions, Grubb’s classes helped Walchuk hone his skills greatly over a relatively short period of time.

Beyond classes in individual design areas, Paul J. Hustoles’s Director/Designer Communication Seminar gave the student even more opportunity to experience the design process from the perspective of other members of the design team. In this class, he participated in the design process of several productions, playing a different role in each one. In addition to having another opportunity to work in each design area, Walchuk had the chance to fill the role of director. Playing the director was the most valuable aspect of this class, giving the student a glimpse of what it is like to be responsible for coordinating all aspects of a production. Walchuk learned an important lesson about the way a director must protect his own vision while allowing for the creativity and vision of his design team.

Walchuk’s sound design skills have also been improved through Heather Hamilton’s Theatre Research and Theatre Dramaturgy classes. Both classes have encouraged the student to develop his research skills, skills which are essential in creating accurate designs. These classes have also focused heavily on communication. Through practice in writing and verbal presentation and discussion, Theatre Research and Theatre Dramaturgy have equipped the student to convey his ideas clearly and efficiently to the directors, designers and others he will work with as a sound designer.
Prior to attending Minnesota State Mankato, Walchuk did not have a basic foundational understanding of the history and culture of theatre. Hustoles’s Theatre History I class was vital for his understanding of the context within which he is working and studying. Much of the language and everyday discourse within the theatre world is dependent upon a basic shared knowledge of certain plays, playwrights and historical facts. Hamilton’s Theatre History II continued Walchuk’s education. He developed a particular interest in nineteenth and twentieth-century theatre, as the accepted notions of theatre’s role in society began to expand. Hamilton’s Theatre Theory and Criticism class, taken in the same semester, complemented Theatre History II with in-depth explorations of the playwrights, critics, and other major figures of the Western theatre tradition. Prior to taking these courses, Walchuk was ignorant of nearly everything in theatre except William Shakespeare. Now, he feels that he has a well-rooted foundation in theatre tradition.

Walchuk had worked for many years as an entertainment professional, but his experience consisted mainly of cruise ship and amusement park entertainment and, with TC Furlong, sound shop work that included many church, corporate and musical events but almost no theatre work. Any theatre work he did, furthermore, was strictly as a technician contracted to set up, troubleshoot, and strike equipment. He was not involved in the theatrical process, nor in the theatrical business world. Hustoles’s Theatre Management class provided Walchuk with valuable insight into the business side of the theatre
world. The student learned how theatrical organizations are structured and managed. The class helped him to understand what it meant to work in theatre. McCarl’s Portfolio Seminar, meanwhile, helped Walchuk to understand the skills necessary to ensure a career within the theatre world. The student learned how to effectively market himself to potential employers and gained insight into what those employers value in an employee.

Until he came to Minnesota State Mankato, Walchuk had very strong skills with regards to audio equipment and other stage technologies, such as lighting and stage automation, but he had almost no experience with carpentry and general stagecraft. As a graduate assistant in the scene shop, Walchuk has developed a broad base of knowledge. He is now comfortable with common carpentry techniques and tools. He knows how to perform basic welding and other metalwork tasks. He has learned to operate a counter-weight fly system. More importantly, he has learned the terminology and procedures to do all of these things safely. Furthermore, the student is confident enough in these skills that he can teach them to others. As a graduate assistant in the sound department, Walchuk has learned a great deal beyond simply operating and troubleshooting audio equipment. The sound assistantship has forced him to learn how to manage a venue, including developing skills like recognizing and prioritizing the maintenance needs of the sound department. Walchuk has learned to look at the sound department as a whole in order to balance long-term needs against short-term needs. The sound assistantship has also been a strong
teaching opportunity. The student has begun to learn how to make his technical knowledge understandable to someone with no technical background. He is also learning how to organize and prioritize the knowledge that he presents in order to avoid overwhelming and confusing the undergraduates who work under him. He is currently enrolled in George Grubb’s Drafting for the Theatre class, which is providing him with vital tools for communicating design and construction ideas to anyone from directors and producers to employees and coworkers.

Finally, in this last semester of graduate school, Walchuk has been given the chance to teach in a classroom setting. Dance Production: Sound is a class that is intended to give dance majors the skills necessary to make sure their sound needs are met, particularly in the context of opening and running a dance studio. The goal of the class is to make sure they have a basic understanding of sound systems so that they can operate their own systems, perform minor troubleshooting, and communicate knowledgeably with sound professionals. Furthermore, they will be able to use audio editing software to create their own musical programming; they will also understand the legal obligations they face when using copyrighted music in performance. This is Walchuk’s first experience teaching a class. He is learning how to draw on his own knowledge and convey it to a large group, which is a very different endeavor than the one-on-one teaching he has done as a graduate assistant. Walchuk is learning the challenge of creating lessons that keep the interest of a class and help them retain information. He is striving to find the best ways to motivate his students to learn. Walchuk expects
that he will make many mistakes, but is fully prepared to learn from this experience; it is not only helping him to discover how to be a better teacher, but by teaching his craft he is learning to understand it better himself.

Walchuk’s experience at Minnesota State University, Mankato is nearly finished. He chose to attend graduate school in order to learn more about the theory, history and practice of theatre, improve his existing skills, and learn as many new skills as possible. Through his classes, production work, assistantship work, and teaching, Walchuk has achieved his original goals as well as setting and achieving many new ones along the way. He believes that he is leaving this program with the experience and skills to be a valuable asset to the larger theatre community. Most importantly, his experience at Minnesota State Mankato has given him the confidence that he is capable of achieving both the creative and technical fulfillment he desires in his career.
## APPENDIX A

### PRELIMINARY SOUND PLOT

<table>
<thead>
<tr>
<th>Q#</th>
<th>Page #</th>
<th>Description</th>
<th>Cue/notes</th>
</tr>
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<tbody>
<tr>
<td>21</td>
<td></td>
<td>Pre-show announcement</td>
<td>10 minutes before curtain</td>
</tr>
<tr>
<td>25</td>
<td></td>
<td>Ode 1- Bass drone (upper and lower, but mostly lower) and drums</td>
<td>ISMENE: “...are right in loving you.”</td>
</tr>
<tr>
<td>26</td>
<td></td>
<td>Speed up drums</td>
<td>CHORUS: “…and plumes on their helmets”</td>
</tr>
<tr>
<td>26</td>
<td></td>
<td>Drums out</td>
<td>CHORUS: “…but then nothing”</td>
</tr>
<tr>
<td>27</td>
<td></td>
<td>Drums out/horn</td>
<td>CHORUS: “Makes the land tremble”</td>
</tr>
<tr>
<td>34</td>
<td></td>
<td>Ode 2- Bass drone (same mix as ode 1) and drums</td>
<td>SENTRY: “…but, thanks to the gods and praise them, I’m alive.”</td>
</tr>
<tr>
<td>35</td>
<td></td>
<td>Antigone keening offstage/drums and bass drone out</td>
<td>CHORUS: “…and home’s hearth.”</td>
</tr>
<tr>
<td>45</td>
<td></td>
<td>Ode 3- Bass drone (more lower than upper), single cymbal/tambourine hit</td>
<td>Just before CHORUS begins ode</td>
</tr>
<tr>
<td>45</td>
<td></td>
<td>Small rumble</td>
<td>CHORUS: “lacks no form of disaster”</td>
</tr>
<tr>
<td>45</td>
<td></td>
<td>Medium rumble</td>
<td>CHORUS: “stock of Oedipus”</td>
</tr>
<tr>
<td>45</td>
<td></td>
<td>Begin wind, low</td>
<td>CHORUS: “wailing, wind-worn”</td>
</tr>
<tr>
<td>45</td>
<td></td>
<td>Small rumble</td>
<td>CHORUS: “Principle turned frenzy”</td>
</tr>
<tr>
<td>45</td>
<td></td>
<td>Medium rumble</td>
<td>CHORUS: “the twinkle and blaze of Olympos…”</td>
</tr>
<tr>
<td>45</td>
<td></td>
<td>Thud and medium rumble</td>
<td>CHORUS: “without bringing disaster”</td>
</tr>
<tr>
<td>46</td>
<td></td>
<td>Gust</td>
<td>CHORUS: “what is bad is good”</td>
</tr>
<tr>
<td>46</td>
<td></td>
<td>Wind and drone out</td>
<td>CHORUS: “outside disaster”</td>
</tr>
<tr>
<td>52</td>
<td></td>
<td>Ode 4-5- Bass drone (only lower) and BG Rumble</td>
<td>Just before CHORUS begins ode</td>
</tr>
<tr>
<td>53</td>
<td></td>
<td>Medium rumble</td>
<td>CHORUS: “You shook the rift in one blood”</td>
</tr>
<tr>
<td>54</td>
<td></td>
<td>Big long rumble</td>
<td>ANTIGONE: “Niobe!”</td>
</tr>
<tr>
<td>54</td>
<td></td>
<td>Medium rumble</td>
<td>CHORUS: “But she was a god, descendant of a god”</td>
</tr>
<tr>
<td>54</td>
<td></td>
<td>Medium long rumble</td>
<td>ANTIGONE: “No!”</td>
</tr>
<tr>
<td>54</td>
<td></td>
<td>Wind in</td>
<td>ANTIGONE: “laughing at me!”</td>
</tr>
<tr>
<td>54</td>
<td></td>
<td>Medium long rumble</td>
<td>ANTIGONE: “under what kind of law”</td>
</tr>
<tr>
<td>55</td>
<td></td>
<td>Small rumble</td>
<td>CHORUS: “against the lofty pedestal of Justice”</td>
</tr>
<tr>
<td>55</td>
<td></td>
<td>Big Rumble and wind gust, followed by wind out and big rumble down</td>
<td>CHORUS: “Your devotion is a kind of reverence”</td>
</tr>
<tr>
<td>55</td>
<td></td>
<td>Big Rumble and Drone fade back in</td>
<td>ANTIGONE: “and there is no one I love who sighs over me”</td>
</tr>
<tr>
<td>55</td>
<td></td>
<td>Drone out, bg rumble in</td>
<td>KREON: “and her stay is over”</td>
</tr>
<tr>
<td>57</td>
<td></td>
<td>Big rumble</td>
<td>ANTIGONE: “their unjust justice”</td>
</tr>
</tbody>
</table>
### APPENDIX B

**FINAL STAGE MANAGER’S CUE SHEET**

<table>
<thead>
<tr>
<th>Q#</th>
<th>Page #</th>
<th>Description</th>
<th>Cue/notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>21</td>
<td>Pre-show announcement</td>
<td>10 minutes before curtain</td>
</tr>
<tr>
<td>5</td>
<td>24</td>
<td>Top of show</td>
<td>Battle sequence</td>
</tr>
<tr>
<td>10</td>
<td>25</td>
<td>Ode 4: Bass drone (upper and lower, but mostly lower) and drums</td>
<td>________is right in loving you.</td>
</tr>
<tr>
<td>15</td>
<td>26</td>
<td>Speed up drums</td>
<td>CHORUS: “...and phymes on their helmets”</td>
</tr>
<tr>
<td>20</td>
<td>26</td>
<td>Drums out</td>
<td>CHORUS: “... but then nothing”</td>
</tr>
<tr>
<td>25</td>
<td>27</td>
<td>Drums out/limn</td>
<td>CHORUS: “Makes the land tremble”</td>
</tr>
<tr>
<td>30</td>
<td>28</td>
<td>Ode 2: Bass drone (same mix as ode 1) and drums</td>
<td>ISMENE: “…are right in loving you.”</td>
</tr>
<tr>
<td>35</td>
<td>29</td>
<td>drums out</td>
<td>CHORUS: “... and plumes on their helmets”</td>
</tr>
<tr>
<td>40</td>
<td>30</td>
<td>Speed up drums</td>
<td>CHORUS: “... but then...”</td>
</tr>
<tr>
<td>45</td>
<td>31</td>
<td>Antigone keening offstage</td>
<td>CHORUS: “Victory comes”</td>
</tr>
<tr>
<td>50</td>
<td>32</td>
<td>Ode 3: Bass drone (more lower than upper), single cymbal/tambourine hit</td>
<td>SENTRY: “... but, thanks to the gods and praise them, I’m alive.”</td>
</tr>
<tr>
<td>55</td>
<td>33</td>
<td>Ode 3: Bass drum (more lower than upper), single cymbal/tambourine hit</td>
<td>CHORUS: “Lacks no form of disaster”</td>
</tr>
<tr>
<td>60</td>
<td>34</td>
<td>Small rumble</td>
<td>CHORUS: “What is bad is good”</td>
</tr>
<tr>
<td>65</td>
<td>35</td>
<td>Medium rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>70</td>
<td>35</td>
<td>Begin wind, low rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>75</td>
<td>36</td>
<td>Low gust of wind and small distant rumble</td>
<td>CHORUS: “Lacks no form of disaster”</td>
</tr>
<tr>
<td>80</td>
<td>36</td>
<td>Medium rumble</td>
<td>CHORUS: “What is bad is good”</td>
</tr>
<tr>
<td>85</td>
<td>37</td>
<td>Medium rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>90</td>
<td>37</td>
<td>Small rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>95</td>
<td>38</td>
<td>Medium rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>100</td>
<td>38</td>
<td>Small rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>105</td>
<td>39</td>
<td>Large rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>110</td>
<td>39</td>
<td>Medium rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>115</td>
<td>39</td>
<td>Small rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>120</td>
<td>39</td>
<td>Medium rumble</td>
<td>CHORUS: “Outside disaster”</td>
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<tr>
<td>125</td>
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<td>Small rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>130</td>
<td>40</td>
<td>Medium rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>135</td>
<td>40</td>
<td>Medium rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>140</td>
<td>40</td>
<td>Large rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>145</td>
<td>40</td>
<td>Small rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>150</td>
<td>40</td>
<td>Medium rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>155</td>
<td>40</td>
<td>Large rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>160</td>
<td>40</td>
<td>Small rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>165</td>
<td>40</td>
<td>Medium rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>170</td>
<td>40</td>
<td>Large rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>175</td>
<td>40</td>
<td>Small rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>180</td>
<td>40</td>
<td>Medium rumble</td>
<td>CHORUS: “Outside disaster”</td>
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<tr>
<td>185</td>
<td>40</td>
<td>Large rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>190</td>
<td>40</td>
<td>Small rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>195</td>
<td>40</td>
<td>Medium rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>200</td>
<td>40</td>
<td>Large rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>205</td>
<td>40</td>
<td>Small rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>210</td>
<td>40</td>
<td>Medium rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
<tr>
<td>215</td>
<td>40</td>
<td>Large rumble</td>
<td>CHORUS: “Outside disaster”</td>
</tr>
</tbody>
</table>

**NOTE on syntax:** Cues with underlined words should be called on that word.
APPENDIX C

SPEAKER PLOT (PARTIAL VIEW - NOT TO SCALE)
APPENDIX D

SPEAKER SECTION DRAWINGS (NOT TO SCALE)

1  Main Section View
Scale: 1/8" = 1'-0"

2  JFX100 Section
Scale: 1/2" = 1'-0"

Antigone
Director: Matthew Caron
Sound Designer: Luke Walchuk
luke.walchuk@mnstate.edu
Phone: 507-382-6651

Sheets: 2 of 3
Section View
Andreas Theatre
Scale: As noted

VECTORWORKS EDUCATIONAL VERSION
# APPENDIX F

## LS9 INPUT PATCH

<table>
<thead>
<tr>
<th>Channel No.</th>
<th>Channel Description</th>
<th>Console Input</th>
<th>Source</th>
<th>Output Bus</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Main Grid West</td>
<td>(Dante) Slot 1</td>
<td>QLab Output 1</td>
<td>Mix 1</td>
</tr>
<tr>
<td>2</td>
<td>Main Grid Center</td>
<td>(Dante) Slot 2</td>
<td>QLab Output 2</td>
<td>Mix 2</td>
</tr>
<tr>
<td>3</td>
<td>Main Grid East</td>
<td>(Dante) Slot 3</td>
<td>QLab Output 3</td>
<td>Mix 3</td>
</tr>
<tr>
<td>4</td>
<td>Main Floor West</td>
<td>(Dante) Slot 4</td>
<td>QLab Output 4</td>
<td>Mix 4</td>
</tr>
<tr>
<td>5</td>
<td>Main Floor Center</td>
<td>(Dante) Slot 5</td>
<td>QLab Output 5</td>
<td>Mix 5</td>
</tr>
<tr>
<td>6</td>
<td>Main Floor East</td>
<td>(Dante) Slot 6</td>
<td>QLab Output 6</td>
<td>Mix 6</td>
</tr>
<tr>
<td>7</td>
<td>Grid FX Southwest</td>
<td>(Dante) Slot 7</td>
<td>QLab Output 7</td>
<td>Mix 7</td>
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<tr>
<td>8</td>
<td>Grid FX Northwest</td>
<td>(Dante) Slot 8</td>
<td>QLab Output 8</td>
<td>Mix 8</td>
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<tr>
<td>9</td>
<td>Grid FX Southeast</td>
<td>(Dante) Slot 9</td>
<td>QLab Output 9</td>
<td>Mix 9</td>
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<td>10</td>
<td>Grid FX Southwest</td>
<td>(Dante) Slot 10</td>
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<td>Mix 10</td>
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<tr>
<td>11</td>
<td>Mezzanine FX</td>
<td>(Dante) Slot 11</td>
<td>QLab Output 11</td>
<td>Mix 11</td>
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<tr>
<td>13</td>
<td>Subwoofers Floor</td>
<td>(Dante) Slot 13</td>
<td>QLab Output 13</td>
<td>Mix 13</td>
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<tr>
<td>14</td>
<td>Subwoofers Grid</td>
<td>(Dante) Slot 14</td>
<td>QLab Output 14</td>
<td>Mix 14</td>
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<tr>
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<td>Reverb</td>
<td>(Dante) Slot 15</td>
<td>QLab Output 15</td>
<td>Mix 15</td>
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<tr>
<td>Ster 1</td>
<td>Reverb Return</td>
<td>Effects Rack 5</td>
<td>Effects Rack 5</td>
<td>Mix 1-10</td>
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</table>
# APPENDIX G

## LS9 OUTPUT PATCH

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<tr>
<th>Output Bus</th>
<th>Channel Description</th>
<th>Console Output</th>
<th>Destination Output</th>
<th>Amp Channel</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>Mix 1</td>
<td>Main Grid West</td>
<td>Slot 1</td>
<td>RO8 (1) Out 1</td>
<td>Crest CA6 (1) Ch. 1</td>
<td>(2) Innovox Small</td>
</tr>
<tr>
<td>Mix 2</td>
<td>Main Grid Center</td>
<td>Slot 2</td>
<td>RO8 (1) Out 2</td>
<td>Crest CA6 (1) Ch. 2</td>
<td>(2) Innovox Large</td>
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<td>Mix 3</td>
<td>Main Grid East</td>
<td>Slot 3</td>
<td>RO8 (1) Out 3</td>
<td>Crest CA6 (2) Ch. 1</td>
<td>(2) Innovox Small</td>
</tr>
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<td>Mix 4</td>
<td>Main Floor West</td>
<td>Slot 4</td>
<td>RO8 (1) Out 4</td>
<td>Crest CA6 (2) Ch. 2</td>
<td>(2) JBL Control 1</td>
</tr>
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<td>Mix 5</td>
<td>Main Floor Center</td>
<td>Slot 5</td>
<td>RO8 (1) Out 5</td>
<td>Crest CA6 (3) Ch. 1</td>
<td>(2) JBL Control 1</td>
</tr>
<tr>
<td>Mix 6</td>
<td>Main Floor East</td>
<td>Slot 6</td>
<td>RO8 (1) Out 6</td>
<td>Crest CA6 (3) Ch. 2</td>
<td>(2) JBL Control 1</td>
</tr>
<tr>
<td>Mix 7</td>
<td>Grid FX Southwest</td>
<td>Slot 7</td>
<td>RO8 (1) Out 7</td>
<td>QSC PLX1104 (1) Ch. 1</td>
<td>EAW JFX1100</td>
</tr>
<tr>
<td>Mix 8</td>
<td>Grid FX Northeast</td>
<td>Slot 8</td>
<td>RO8 (1) Out 8</td>
<td>QSC PLX1104 (1) Ch. 2</td>
<td>EAW JFX1100</td>
</tr>
<tr>
<td>Mix 9</td>
<td>Grid FX Southeast</td>
<td>Slot 9</td>
<td>RO8 (2) Out 1</td>
<td>QSC PLX1104 (2) Ch. 1</td>
<td>EAW JFX1100</td>
</tr>
<tr>
<td>Mix 10</td>
<td>Grid FX Southwest</td>
<td>Slot 10</td>
<td>RO8 (2) Out 2</td>
<td>QSC PLX1104 (2) Ch. 2</td>
<td>EAW JFX1100</td>
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<td>Mezzanine FX</td>
<td>Slot 11</td>
<td>RO8 (2) Out 3</td>
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<td>Mackie SRM450</td>
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<td></td>
</tr>
<tr>
<td>Mix 13</td>
<td>Subwoofers Floor</td>
<td>Slot 13</td>
<td>RO8 (2) Out 5</td>
<td>N/A</td>
<td>(2) JBL Eon Subwoofer</td>
</tr>
<tr>
<td>Mix 14</td>
<td>Subwoofers Grid</td>
<td>Slot 14</td>
<td>RO8 (2) Out 6</td>
<td>Crest CA6 (4) Ch. 1</td>
<td>(2) Innovox Subwoofer</td>
</tr>
<tr>
<td>Mix 15</td>
<td>Reverb</td>
<td>LS9 FX Rack 5</td>
<td>Mix 1-10</td>
<td></td>
<td>(2) Innovox Subwoofer (Permanent install, not pictured on speaker plot)</td>
</tr>
</tbody>
</table>
### APPENDIX H

#### DANTE ROUTING

<table>
<thead>
<tr>
<th>Yamaha RO8 (2) Inputs</th>
<th>LS9 Inputs</th>
<th>LS9 Outputs</th>
<th>Yamaha RO8 (Q1) Inputs</th>
<th>Yamaha RO8 (Q2) Inputs</th>
</tr>
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</tbody>
</table>

Mac Mini Outputs (QLab) | LS9 Outputs
---|---
1 2 3 4 5 6 7 8 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

Dante Routing Matrix
APPENDIX I

QLAB PROGRAMMING EXAMPLE
APPENDIX J

PRE/POST SHOW CHECKLIST

Pre-Show

<table>
<thead>
<tr>
<th>Where:</th>
<th>What:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Booth</td>
<td>Turn on sound board/rack using red-orange switch near bottom</td>
</tr>
<tr>
<td>Booth</td>
<td>Turn on sound computer. Open Dante Virtual Soundcard and press start. When the dropdown menus are greyed out and the start button says stop, open the Antigone QLab file.</td>
</tr>
<tr>
<td>Amp Room</td>
<td>Turn on the amps, using the power switch near the middle of the rack</td>
</tr>
<tr>
<td>Amp Room</td>
<td>Turn on the monitors for the dressing rooms. Flip the following switches to the <strong>down</strong> position: Concessions, Andreas Green Room, Andreas Dressing Rooms</td>
</tr>
<tr>
<td>Theatre - Mezzanine</td>
<td>Announce to the room that the monitors are on</td>
</tr>
<tr>
<td>Theatre</td>
<td>Turn on two subwoofers behind seating risers and one speaker on opposite mezzanine</td>
</tr>
<tr>
<td>Booth</td>
<td>Run cue “Test” and go down to the stage floor</td>
</tr>
<tr>
<td>Grid and Theatre floor</td>
<td>Listen to all speakers as they play. Note any that do not work.</td>
</tr>
<tr>
<td>Theatre</td>
<td>If any speaker does not work or there are any other problems, call Luke — 507-382-6651</td>
</tr>
</tbody>
</table>

Post-Show

<table>
<thead>
<tr>
<th>Where:</th>
<th>What:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amp Room</td>
<td>Turn off the amps, using the power switch near the middle of the rack</td>
</tr>
<tr>
<td>Amp Room</td>
<td>Turn off the monitors for the dressing rooms. Flip all switches back to the center position.</td>
</tr>
<tr>
<td>Theatre</td>
<td>Turn off subwoofers and mezzanine speaker.</td>
</tr>
<tr>
<td>Booth</td>
<td>Quit QLab. Click “Stop” in Dante Virtual Soundcard, then quit it and shut down the computer.</td>
</tr>
<tr>
<td>Booth</td>
<td>When the computer is COMPLETELY shut down, turn off the rack using the red-orange switch near the bottom.</td>
</tr>
<tr>
<td>Booth</td>
<td>Place the cover on top of the sound board.</td>
</tr>
</tbody>
</table>
APPENDIX K

PRODUCTION PHOTOS
APPENDIX K CONTINUED

PRODUCTION PHOTOS
WORKS CITED


