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The Transformative Art of the Recording Composer

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We must expect great innovations to transform the entire technique of the arts, thereby affecting artistic invention itself and perhaps even bringing about an amazing change in our very notion of art.

~ Paul Valéry

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Abstract

Record production is a communicative art form that enhances traditional methods of composition with innovative techniques. In his 1928 essay titled, "*The Conquest of Ubiquity,*" Paul Valéry noted the contrast between the development of art from the past through the present, emphasizing the evolving nature of art and creativity. Since the fine arts originated, advancements in technology have offered countless modes of crafting and interacting with art. For example, recording originally served the role of preserving live performance occasions but has since flourished into an artistic outlet. Currently, an affordable array of recording technology has made music production accessible to those without traditional training in composition or musicianship, sparking debates about quality. Though elements of traditional music composition are critical for creating high quality art, contemporary production tools can further extend the compositional horizon. Through detailed control of concrete sounds, producers have already discovered new sonic worlds and as a result have established fresh genres. Equipped with skills of critical listening, the recording composer can transcend physical constraints within their musical works through sound manipulation. The recording composer works behind the scenes in the studio and does not seem to fit neatly within the traditional trio of composer, performer, and listener in the music-making process; nevertheless, their influence is significant and needed in contemporary musical life. This paper, with its connected EP project, contribute to the ongoing discussion of musicologists, composers, and producers regarding how sound recording technology is a catalyst able to assist and transform the conception of art.

Introduction

In his 1928 essay, *"The Conquest of Ubiquity,"* (1928) Paul Valéry, French writer and philosopher, exposed the vivid contrast between the development of art from the past through the present, drawing attention to the evolving nature of art and creativity over time. Since the fine arts originated, advancements in technology have offered countless modes of interacting with and crafting art, affecting areas of technique, invention, and aesthetics. For example, the original purpose of music recording technology was to preserve live performance occasions. The term *recording* can be misleading, as it infers the passive act of registering data and information that has no meaningful connection to the sound it preserves; however, recording is in fact a catalyst that transcends its basic function to preserve the physical properties of sound through artistic manipulation by the recording composer.[1]

This paper asserts that record production is a communicative art form that enhances traditional methods of musical composition with innovative techniques. The following research framework details the historical impact of digital sound, the contrasts between live and recorded performances, the compositional innovations in recording, and the significance of a recorded track. Following the research framework is an overview of the compositional process involved in crafting my original EP, *Wisdom's Way*, which highlights key creative elements of record production that transform sound into communicative artistic expression. *Wisdom's Way* features five original songs composed through the complex stages of writing, arranging, recording, and mixing. Taken together, the compositional stages of pre-production, production, and post-

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1. Mark Katz, *Capturing Sound: How Technology Has Changed Music* (Berkeley, CA: University of California Press, 2010), 213.

production generate a composite digital performance of artfully crafted sound, able to express and communicate meaning.

Research Framework

The subject of recording is part of musicological discussion; however, the tendency is that recording is limited to its basic function of sound preservation. Musicological discussion should not limit recording to its function of preservation but should rather seek to answer the questions of *how* and *why* recording has influenced music.[2] Composer Simon Zagorski-Thomas inquires why those in the academic study of music have not adequately acknowledged the impact of recording on music and hesitate to incorporate important technological innovations into its method of study.[3] Musicology should be strongly interested in record production as a meaningful mode of composition that impacts more than one corner of the musical conversation. A musicology of record production cannot exist on its own, just as a separate musicology of harmony or singing would not be possible without a broader musical context;[4] thus, scholars should seek to incorporate the processes of creation and reception of record production into its current musical discussion to offer a multifaceted understanding of recording as a method of composition and musical artistry.

Historical Impact of Digital Sound

To view record production as a communicative art form, it is first important to understand its historical context. Several technological developments have directly impacted the nature of music. One major innovation was the publication of music scores, which made music portable

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2. Katz, *Capturing Sound*, 2.
3. Simon Zagorski-Thomas, *The Musicology of Record Production* (United Kingdom: Cambridge University Press, 2014), 1.
4. Ibid., 26.

and learnable by the average person and, thus, turned music into a widely accessible consumer product for the first time in history. Previously, the main way for music to produce income was through ticket sales for public performances. Following the innovation of the printed score, the next big technological development that impacted the nature of music was the development of sound recording devices—such as the phonograph, wax cylinder, disc, tape, and CD. These sound-capturing inventions had the ability to preserve the raw physical properties of sound, similar to how the printed musical score preserved musical abstractions.[5] Not only does digital sound, on discs or CDs, allow listeners to replay specific recorded performances, the digital audio file portrays visual representations of the physical properties of sound on a grid revealing amplitude, dynamics, and the frequency spectrum of audio files—similar to the function of visual cues of music notation on a printed score.[6] Just as music notation significantly shaped and paved the way for musical composition, so does the representational system of physical sound components shown in digital form—both are equally useful in preserving and crafting artistic music.

With the invention of the tape recorder in the mid-1930's, along with the presence of the phonograph and the radio, came the desire for experimentation, notably by composers John Cage and Pierre Schaeffer. Prior to the tape recorder, musical sound could only be preserved as it sounded in live performance settings; however, the possibility of manipulating sound in the recording studio opened almost limitless options for the possibility of creating new sound worlds. Schaeffer prefigured the modern music producer, as he recorded and shaped sound in the recording studio (aided by his many years of experience as a radio engineer) to create musical

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5. Zagorski-Thomas, *The Musicology of Record Production*, 5.
6. Ibid., 6.

compositions. According to author, Christoph Cox, Schaeffer brought in a ". . .new breed of musician: an amateur explorer working directly ('concretely,' as he put it) with sound material rather than going through the detours of musical notation, conductors, and performers."[7] Since sound was now taken out of its original context of performance, Schaeffer coined the term, "acousmatic listening," which refers to the act of hearing sounds taken from their original sources and visual contexts. Now sound was simply sound, and numerous interpretations of it could abound freely, depending on its affect upon a wide variety of listeners.[8]

Perhaps the most significant innovation that impacted music was the shift from recording and distributing music as a physical hardware product to a digital software file. This shift to digital sound recording technology, along with the innovations of printed music scores and recording devices, directly impacted the economics and the widespread distribution of music; however, the switch to the digital sound file truly produced a revolution for recorded music, for it opened the door for consumers to manipulate sound for themselves through the accessible features of electronic form. Examples of affordable digital recording software include programs such as Audacity and GarageBand, available to the average person. Pro Tools and Logic are higher quality examples of digital recording software for use by either the amateur or professional recording composer.

The rise of the Internet is a vital factor that has enabled the widespread and rapid accessibility of music in digital form. According to musicologist, Mark Katz, music now has ". . .unprecedented and unparalleled accessibility. . .understood in terms of speed, ease, and

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7. Christoph Cox and Daniel Warner, *Audio Culture: Readings in Modern Music*, (New York, NY: Continuum International Publishing Group, 2004), xiii.
    8. Ibid., 65.

breadth."[9] Through the speed and convenience of the Internet as a vehicle for spreading digital sound files, people have easy access to music of all kinds, and in many cases, they expect music to function as a soundtrack for daily life. Music is distributed, shared, and consumed daily all around the globe through online music stores (such as iTunes, Amazon, and Beatport), audio platforms (such as SoundCloud), and popular streaming services (such as Spotify and Pandora), as well as a host of illegal methods of hosting, streaming, and sharing music. Through universal digital data networks, these wide-ranging musical outlets are now a core part of twenty-first century pop culture's identity.[10] According to Katz, this is the age of the amateur.[11] Katz states, "Amateur music is not only alive and well, it is powerful. . . . Music belongs to everyone and should be made by everyone."[12] Because digitally recorded sound is so easily replicable and malleable,[13] even novices can create and manipulate music of their own to compose works of art.

Contrasts Between Live and Recorded Performances

The advent of recording technology released music from the time and location constraints of singular performance occasions through sound capture and manipulation. Not bound by time or location constraints, musicians on opposite sides of the globe can collaborate on a record through features of multitrack recording software and achieve artificial results through the editing and mixing process, the result of which is impossible to reproduce in a live performance setting.[14] According to Cox, "Recording began as a reproduction of the live act. Yet, today, the recorded

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9. Katz, *Capturing Sound*, 186.
10. Jens Gerrit Papenburg and Holger Schulze, *Sound as Popular Culture: A Research Companion* (Cambridge, MA: MIT Press, 2016), 6.
11. Katz, *Capturing Sound*, 216.
12. Ibid., 215.
13. Cox and Warner, *Audio Culture*, xiv.
14. Papenburg and Schulze, *Sound as Popular Culture*, 126.

event has all but displaced the live event as primary."[15] Regardless of whether the recorded event is in fact primary to the live event, both performance occasions have equal value and should be considered as two separate entities with different modes of communication and meaning. The biggest difference between live performance and the recorded performance of a track is the method of delivery and reception. For example, expressivity in a live performance is largely dependent on visual cues, given by the performer to the audience, in addition to aural cues. On a recorded track, however, the listener has no visual cues from the performer and must rely completely on auditory cues.

Another difference between live and recorded events is that there is no variety in the performances of a record. A record consists of fixed musical works, and so it must constantly live up to the expressive standard held by the visual live performances by relying purely on sonic means to convey the sense of an engaging live performance.[16] Intimacy must be created in a record by way of non-visual editing tools that shape sound in a way that replicates the live performance experience. In concept, a record may seem like a stagnant musical work without variety in its performances, and yet, what makes listeners play a record over and over? The answer to this question is that a record has separate value from live performances. In other words, a record contains its own methods of musical expression, resulting in a unique listening experience for its audience in which the music becomes normalized and familiar to the ear. Though differences exist between the live performance event and the recorded performance, each performance type can enhance the understanding and appreciation for the other.[17]

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15. Cox and Warner, *Audio Culture*, 114.
16. Albin J. Zak III, *The Poetics of Rock: Cutting Tracks, Making Records* (Berkeley, CA: University of California Press, 2001), 50.
17. Ibid., 50.

The goal of the recorded studio performance is to put together all the sounds and utterances of the track that help to define the character and identity of the record. The goal of the recording composer, since they do not have the convenience of visual cues to indicate their persona as in live performance settings, is to somehow convey their musical persona through merely sonic means. The process of creating a persona through aural means could be the result of many recording attempts that are cut, spliced, and layered together, or it could happen in one burst of spontaneity; however, the actual moment in time of performance in the studio is not the actual culmination of the process, as it is in live performances. The recording process is simply one step in the complex process of the digital audio performance. The performance that occurs in a recording studio does not have a definitive ending as a live performance does—the work is, rather, "transformed into an enduring aesthetic object."[18] Records contain complex components of basic musical elements, such as pitch and rhythm, which are heightened by the particularities of timbre, phrasing, intonation, and other features. The process of inscription can capture bits and pieces of the studio performer's passion, emotion, psyche, and life experience, which adds to the identity of a record.[19]

<div align="center">Compositional Innovations of Recording</div>

Composition and performance in the European classical tradition are largely tied to the visual object of the score, which notates the musical work. Musical notation came centuries before the invention of sound recording technologies, and its abstract symbols are meant to help capture the live sound event in time based on factors such as pitch, dynamics, and duration.[20]

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18. Zak III, *The Poetics of Rock*, 51.
19. Ibid., 51.
20. Ibid., 41.

Music scores contain abstract representations of live performance settings and, thus, are left to the interpretation of the performer. Records differ from musical scores in that they have something that scores lack—concrete material content. Albin Zak III in his book, *The Poetics of Rock*, claims that "Record making is a compositional process that produces musical works."[21] Similarly, Katz notes that through recording technology and sound manipulation, ". . .musicians have been able to transcend time, space, and human limitations, and in the process have created wholly new sounds, works, genres, and performance traditions."[22] Recording technology made possible a whole new world of compositional possibilities that were previously unheard of. The compositional focus of recording is creating textures of sound and virtual acoustic spaces through electronic means. The various knobs and controls in a recording studio have separate individual functions; however, taken together they accomplish the same purpose of manipulating raw sound for creative purposes of composition. A recording composer can bend and shape each individual sound to fit their creative vision, so that the focus is on discovering new sounds and combining them to create an overall work of musical art.[23]

Composition is a unique process in the recording studio that differs from traditional compositional methods. When composing on a score, there is usually a framework and conception of a finished piece before beginning the abstract writing process; however, in the studio there is no prerequisite of having the concept of a finished piece in mind. The beauty of studio composition is that the recording composer can enter the studio with no starting point or end goal in mind and still create an artistic work by piecing together many spontaneous ideas into a fixed recorded form. Many recording composers work in this improvisatory way when

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21. Zak III, *The Poetics of Rock*, 37.
22. Katz, *Capturing Sound*, 47.
23. Cox and Warner, *Audio Culture*, 95.

writing their musical works, which is a completely new and separate way of composing compared to the traditional methods of classical composers.[24] In the studio, the recordist becomes a painter holding in their hands the medium of sound, the potential of which is defined by their creativity.[25] Zak compares the creation of a record's sounding musical surface with the visible artistic surface of visual art. Zak uses graphic words such as "image," "canvas," "sculpture," and "color" to describe how the creation process of a musical and visual art are analogous. In the visual and musical realms of production, both deal with concrete physical materials that are layered and pieced together to create a complete visual, or sonic, picture. Record producer George Martin, stated, "I *see* music. . . . Part of my life has been painting pictures in sound."[26] Similarly, record producer Brian Eno, views the creation of a record as a performance that occurs out of real time and that can be worked on progressively, like a painting. In a 1979 talk entitled, "The Studio as Compositional Tool", Eno described in detail how studio composition was similar to painting:

> You're working directly with sound, and there's no transmission loss between you and the sound—you handle it. It puts the composer in the identical position of the painter—he's working directly with a material, working directly onto a substance, and he always retains the options to chop and change, to paint a bit out, add a piece, etc.[27]

Eno views this creation of sound art as occurring at the atomic level, using various kinds of studio processing equipment to evoke atmospheres, landscapes, and anything else within the capabilities of the imagination.[28] Thus, technology has opened the door for a new way of viewing composition, which can be likened to painting with various layers on a canvas of sound.

24. Cox and Warner, *Audio Culture*, 129.
25. Ibid., 129.
26. Zak III, *The Poetics of Rock*, 23.
27. Ibid., 67.
28. Ibid., 23.

The genre of jazz provides an important example of the compositional features of the recording process. Jazz is improvisatory in nature, focusing on the actual performance for its value. A score used for jazz is merely interpreted, completely inverting the priorities of music in the classical world.[29] Through recording, the unintended and improvised could now be preserved and fixed in the jazz repertoire, for the recording process transports sound out of the time dimension and into the space dimension.[30] What was once spontaneous could now be replayed and normalized by the listener, putting pressure on future live performances of the same song because of the standard set in the recorded version.[31] In a live performance setting of a jazz work, if a performer perfectly replicates or even comes close to playing a previously recorded improvised jazz solo, it ceases to be an improvisation. Even though the improvised solo is not notated, it becomes a fixed composition in its recorded form.[32] When recorded, jazz improvisations become fixed in time as musical works, which others may study and learn through repetition. Though jazz is spontaneous in its performance aspect, it has been preserved through the decades on records that have enabled it to influence its development over time. In the same way recording has preserved a museum of Western concert music of various performers' interpretations of musical works throughout history. Recorded performances of any genre of music serve to archive the multitude of representations of musical texts.[33] Jazz paved the way for the evolution of a new type of creative artist who uses the many resources of recording technology to their advantage to create or recreate a product of musical art. What was once impossible acoustically is now possible through the audio recording medium, in which sounds

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29. Katz, *Capturing Sound*, 88.
30. Cox and Warner, *Audio Culture*, 127.
31. Katz, *Capturing Sound*, 89.
32. Ibid., 90.
33. Zak III, *The Poetics of Rock*, 2.

are altered and combined in new ways of creative expression beyond the horizon of the acoustic performance.[34] When used as a sound shaping device, recording has the potential to transform art beyond its function to preserve sound.[35] The recordist in this case serves the role of a creative artist, including those of composer, conductor, and performer.[36]

The Meaning of a Recorded Track

Through new expressive possibilities of shaping sound, recording has changed notions of musical beauty and meaning.[37] Sound is the substance that defines the relationship between humanity and the physical world, and music now finds its place somewhere between the physical restrictions of the natural world and the endless manipulations of the technological realm. The new technology created to capture, preserve, and manipulate sound has produced a new kind of musical ontology in face of traditional methods of music making.[38] Sound in the context of popular culture and the rise of the digital age has developed into an important influence, as it has become distanced from the acoustic realities of sound, fueling culture's auditive imagination.[39] Just as music finds roots in the physical heartbeat and in the human voice of intuition, it finds equal meaning within the artifice of the "age of the machine."[40] The impact of recording is shown in the relationship between the technology and the responsive actions of its users. The convenient accessibility and ease of amateur production has shaped the way music is made and the technology through which it is made. Through the course of recording history, it is evident that technology has the power to shape the way its users approach their activities of listening to

34. Moylan, *The Art of Recording*, 35.
35. Ibid., 36.
36. Ibid., 251.
37. Katz, *Capturing Sound*, 214.
38. Zak III, *The Poetics of Rock*, 3.
39. Papenburg and Schulze, *Sound as Popular Culture*, 23.
40. Cox and Warner, *Audio Culture*, 113.

and creating music, just as the users of technology also shape how technology advances—a two-way dynamic.[41]

Recording becomes an art through the creatively sensitive application of the recording process that results in a unique artistic statement through the shaping of sound. Sound is a medium of artistic expression with the ability to communicate meaning.[42] As simple as a record's sound might seem to the ear as a finished product, it consists of a complex layering of a multitude of elements and processes, including ". . .song, arrangement, sounds, techniques of sound recording and processing, musical performances, and all the particular ephemeral nuances that attend the moment of inscription."[43] Thus, the record is a complex network of events that find unity within the finalized track and which are then able to be perceived as a unit by the listener. The human brain takes each separate element of sound hears it as "a richly textured surface".[44] Once in record form, the track's components do not exist independently—they function as one unit. For example, a record's lyrics or harmonic language could be analyzed separately, but to truly analyze the record itself as a meaningful work it must be understood as a composite entity, including all elements with which it is formed. A record is a complete experience of captured and molded sound. [45]

In general, a work of art is what it is. As a painting is viewed as all the brushstrokes and visual elements that make it what it is, so the record's identity lies in its material form of sound as its primary meaning and not the variety of subject matter that could arise from interpretation of its building blocks. All other analysis is merely interpretation of the bigger work of art in both

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41. Katz, *Capturing Sound*, 3, 220.
42. Moylan, *The Art of Recording*, 4.
43. Zak III, *The Poetics of Rock*, 43.
44. Ibid., 43.
45. Ibid., 43-44.

cases of music and visual artworks. For musicologist, Albin Zak III, "Records are both artworks and historical witnesses. In short, they are all that they appear to be."[46] Therefore, the study of record production must be approached differently than the study of classical music and analysis of scores, for the most essential and characteristic aspect of a record is its composite sound—not on what elements the records *contain* but literally on what they *are*.[47] The meaning of the record comes between the relationship and blending of the representation and the reality presented by sound alone. Recorded music leaves the listener to understand meaning through the hypothesis of what the instruments, personae, place, and time suggest through consolidated sound.[48]

EP Composition Process

There are three compositional layers to recording, which include the song, the musical arrangement, and the track. The song is the most abstract form of the work; its concept is represented by a lead sheet with indications of text, chord progressions, and form. Arrangements of the song are distinct live performances in a unique setting with specific instrumentation. The recorded track represents the finished musical work, which incorporates the layers of song and arrangement into one cohesive permanent unit of recorded sound. Both the song and the arrangement can be treated as independent representations of a work and though altered may still retain their fundamental identity, separate or extracted from the recorded version. The track, on the other hand, finds complete identity in its fixed sound qualities. Thus, with its inclusion of both aspects of the compositional process of song and arrangement, the creation of recorded tracks encompasses a wide gamut of the creative process. What was once abstract in lead sheet form, and what was once transitory in the arrangement and live performance, now becomes a

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46. Zak III, *The Poetics of Rock*, 23.
47. Ibid., 22-23.
48. Zagorski-Thomas, *The Musicology of Record Production*, 25.

concrete performance of sound.[49] The syntax and form of the song and arrangement of that song becomes a material element that sounds through speakers or headphones. The recorded track absorbs both categories of song and arrangement. The compositional aspect involved in recording a track includes all three categories of conceiving, creating, capturing, and finally shaping sound. Timbres, musical textures, specific performance moments, and the ambient space involved play a part in the overall sound and are vital aspects of the compositional process of a track. All elements of composition can only be understood by hearing the finished product of sound on the record.[50]

The following paragraphs outline each phase of the compositional process involved in creating my EP of five original songs. The meaning of the EP involves each phase of the compositional process leading up to its completion as one unit of sound: the pre-production stage, production stage, and post-production stage. The pre-production stage involves the formation of the songs in their abstract form and incorporating feedback from composition professors from Houghton College. The production stage involves the recording of rough demo ideas and the arrangement of the songs with other band members to prepare for recording final tracks using various set-up procedures and microphone techniques. The post-production phase involves the mixing of individual sound sources within each song to establish acoustical balance and final mastering to create a cohesive overall sound for the EP. Each of these phases of production involve innovative techniques of composing directly with sound to create musical art.

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49. Zak III, *The Poetics of Rock*, 24-25.
50. Ibid., 46.

Pre-Production Phase

Writing the Songs

The conception of my EP, *Wisdom's Way*, began in the Fall of 2016, in the middle of my three-year graduate program of study at Houghton College. Through this project, I sought to fuse together my experience with music industry, collaborative piano, violin, and voice. The title of the EP is *Wisdom's Way*, based on common themes that I discovered within the book of Proverbs. The first three songs incorporate lyrics that personify Wisdom as a woman calling out to mankind to follow in the path that leads to eternal life. The final two songs are a human response to Wisdom's call and a prayer to God for guidance, also based in Proverbs but personalized with human thoughts and emotions. Once I had established Scriptural lyrics as the basis of my songs and the theme from Proverbs to tie them together, I began to think about melodic and harmonic content that would fit with the flow, rhythm, and mood of the lyrics. The rhythm of the words in each line provided the framework and inspiration for the sounds I wanted to create. I used the iPhone voice memo app as a practical means of storing my melodic and harmonic compositional ideas. By the end of the summer, I had rough demos on my phone for the EP along with simple demo arrangements of piano and vocals. Writing the songs and recording basic sketches of my songs was the first step of the compositional process of my EP.

Compositional Feedback

With basic song ideas in rough demo form and lead sheets in hand, I was ready to show my song sketches to peers and professors in the Fall of 2017. I sought out feedback from two composition professors on faculty at Houghton College: professors Carrie Magin and Christopher Ashbaugh. I met separately with Magin and Ashbaugh and played my piano and vocal demos for them, which I had redone using GarageBand. They each brought a different

perspective to my songs—Magin with a focus in the classical tradition, and Ashbaugh with a focus in the pop realm, and so began the sculpting phase of my songs, from a purely compositional, abstract standpoint.

The first song, "Before the World," has a long instrumental intro that reminded Ashbaugh of a grand finale that continued gaining momentum until its finish, much like the Boléro form, where there are constants that continue to layer and grow into a grand culmination at the end; however, this was not accomplishing its purpose as an intro to the song. Magin also felt that the intro should be simplified and expanded. She enjoyed the organic growth of the song, which was characteristic in all my songs, and encouraged adding "dirt" by making small adjustments to the unique rhythms and irregularities of the songs. I purposefully wrote my songs so that they would be somewhat through-composed and not just contain repeated melodic and harmonic material. Each verse differs, though there is consistency in the main melodic and harmonic features. My goal in choosing my song forms was that the listener would be taken on a journey and experience moments of surprise, so that an established norm for the song would have a slight variation as the song progressed.

Magin felt that "Wisdom Calls Out," the second song, provided a good contrast to "Before the World," with its speech-like verses, grooving beat, and rolling feel. This was also a song that needed to be simplified for the sake of the listener's focus. Magin was taken aback by the harshness of the final line of lyrics, "All who hate me love death," but she realized that the hopeful lyrics presented by the following song helped to bring a sense that hope was yet to come despite the doom of death. She encouraged the idea of creating a song cycle through the songs on my EP to portray meaningful connection of interdependence between the songs. Ashbaugh noted the text painting I used in this song. He said I should have a goal of economy and balance and

challenged me to seek to accomplish more with less and to exploit the ideas that were good in the song—to make the interesting aspects what drive my other musical decisions. He noted that the most interesting aspect of this song was the characteristic falling plagal cadence characteristic and he suggested that I bring that out as the harmonic focus. This song was also a process of cutting out lyrics and chords. I was trying too hard to do too many things, and he emphasized that too many ideas together do not sound good. English is a hard language to set, and my use of long, complex words was hard to put together smoothly with the music. The melody I had chosen was lyrical, but the words were not and so it did not quite fit. The way that I solved this problem was to make the verse uninteresting from a melodic standpoint so that the focus would be on the words. I had to set up the chorus as a reward to the listener for listening to all the information in the verses, so I made the chorus more metrically aligned than the verses and more simplistic and catchy to help balance and offer stability to the song.

Magin thought the third song, "To Fear the Lord is Life," had a good flow and noted that the instrumental tag with spoken word at the end was a nice change to the style of the other songs. She felt that this song was an artistic piece and not just a song. She noticed a characteristic interval of a descending fifth as a characteristic element that helped to unify the song. Usually composers use the interval of a descending fourth, so it was a unique element in my song. I strove for variety in this song, so I wrote different lyrics for each chorus to show the progression of the message being communicated. Magin appreciated the variety in bridge melody that helped to break up the song and add freshness. This song begins with a soft, intimate acapella verse meant to be a lullaby, and Ashbaugh pointed out that I had used the descending minor third interval as a characteristic element, known for being used in lullabies, and I had used the motive

intuitively. Ashbaugh was drawn to the moving bass line in the choruses as one of the most interesting characteristics of the song, so he suggested bringing this aspect out throughout.

Ashbaugh thought my idea of doing *Wisdom's Way*, the fourth song, as a simple voice and piano ballad could be very effective. The framework for the song was set on paper, but the rough demo made it sound improvisatory. He encouraged me to make this song more personal and to really put my emotions into the verse. This song created variety from the others through its unique organization. It had a less defined chord motion and several non-resolutions. The changes he suggested for this song was to have strong resolutions at key places that helped to solidify the message of my lyrics and what I wanted to communicate through the flow of the song. Different types of harmonic resolutions could be treated like musical punctuation marks to help guide the listener through the message of the song. The problems I was experiencing in solidifying the structure of this song was to avoid making it too ambiguous. Ashbough challenged me by asking if the song was truly communicating what I wanted. I needed to find balance and use a critical ear with this song.

Magin felt that my fifth song, "Wait for the Lord," was the most subjective on the EP. The original rough demos that I came up with for this song were very irregular, making it hard to convey my lyrical and musical message. It felt awkward and unstable right from the start for her. I originally wrote the song this way because that is how the lyrics seemed to be most appropriately reflected through the music; however, I wanted to make sure that this song would be able to communicate to others in a more universal way instead of being such a personal expression of how I felt about the song, so I ironed out the rhythms and harmonic and melodic material.

Several themes came up in both composition professor's comments on my songs. In general, they both felt that I had too many good ideas going on at the same time, involving both my lyrics as well as my chord progressions, which was overwhelming for the listener and hard to follow. They encouraged me to cut out elements in my songs that were not necessary, to create a better focus for the listener to understand the overall meaning of each song and to better convey my artistic expression and message of the lyrics. They both encouraged taking those aspects of my compositions that I liked and that worked well and to draw those aspects out and expand on them to create a more coherent message. Magin challenged my compositional decisions and intentions by asking if I was making compositional decisions based on ease or because I really wanted to achieve those results. I had to come to terms with why I was making decisions—whether my ideas were really the best option, or if they were simply convenient. Magin told me that I needed to dig deeper for more solutions, for it was much more fulfilling to go deeper and to go against predictability to build suspense and surprises. Ashbaugh similarly encouraged that I apply a filter to my songs and to not be hesitant to say "no" to ideas that were not adding to the composition. Ashbaugh used Mozart as an example of a cookie-cutter composer and Beethoven as an organic composer who constantly was re-writing and cutting things out to chisel the sculptures of his musical works. I felt most like Beethoven in my compositional style, as I had a multitude of ideas that I was constantly having to chisel down to their essentials until I ended up with something that I felt was unified and substantial.

As far as the structure and intent of my songs, Magin mentioned that this style of pop song is an art form based on repetition and variation, so that the goal in writing and communicating a message is to first establish the musical norms for listener, enough for them to understand the main themes, so that when a change or variation occurs that is different from their expectation of

the song, the listener knows where it "should be" and is then pleasantly surprised as their expectations are diverted. This musical style is intended to communicate to non-musician listeners, made for everyday person. Ashbaugh talked a lot about the structure of my songs and whether each section of my song form was performing its function to progress the song logically and musically. Some of my pre-choruses functioned more like choruses, and some bridges could be expanded and built up more. Many of my choruses needed a more rewarding and catchy hook in the last line. This was the moment that would bring in the listener and reward them for listening.

I ended up having to go back through all my songs and mostly cut things out and figure out what I really needed. My problem was that I had too many good ideas going on at the same time to the point that my chord changes and lyrics were overwhelming when put together. Cutting things out was hard because these were my creations, and I had to be decisive and make my own decisions about what made my song its final version. This was an extremely hard process emotionally, for I had invested a lot of time and energy already into the creative process.

However hard this process was, when I finally reached the point where I knew my songs were where I wanted them to be compositionally, it was extremely rewarding. This writing and editing phase of my compositions began the process of production, for how you build and design a song directly affects how well the production of it will go. If you go into sound production of a song when it is not of good quality, it will be nearly impossible to make it sound good in the recording and mixing stages; however, if you go into production with a solid song tested for compositional quality by knowledgeable experts, then the recording and mixing phase goes much smoother, and it is possible to achieve high quality art.

Recording Rough Demos

When I had solidified my song form and chords and melodies in a basic recording set up with a USB microphone on my laptop using GarageBand and practice room pianos to the point where I was satisfied and confident with the outline of my songs from a musical standpoint, I was ready to begin recording rough demos on Pro Tools software, so that I could send solid versions of my songs to my musicians for them to learn and play along with. I chose a small band, featuring talented undergraduate students from Houghton College that were involved in music: Arthur Ward on acoustic and bass guitars and Shehan Rodrigo on drum set. I covered the piano, vocal, and violin layers. I recorded a simple combo of piano and voice for my musicians and then set up separate rehearsals with each, during which we played and recorded our parts together so that we could listen back to remember our ideas and solidify the tempos at which we would record the final tracks. I recorded my rehearsal with Shehan first in the drum room, and then I layered Arthur's guitar ideas over top of our session later. The result was very choppy and unpolished—full of mistakes, but this was a vital part of the process, for it helped us fuse the ideas and styles of three unique artists together into one unit that resulted in something much bigger than what we could have done as separate musical artists. There is beauty in collaboration, and this was one of the most rewarding parts of the compositional process—to be able to hear other musicians help bring my songs to life and contribute something fresh that I would not have thought of doing on my own.

Production Phase

Forming Arrangements

Once I had established final tempos, I created click tracks for the first three songs, and I recorded piano on a full-sized MIDI keyboard in the dead room. My drummer and guitar player

requested that I use the rhythm quantization function for the scratch MIDI keyboard part, so that each note lined up exactly with the metronome value and was pushed to the nearest subdivision of the beat.[51] To accomplish this task, I had to go back through and apply rhythmic quantization to the keyboard parts for songs one through three and then go through the MIDI notes and make sure every note was placed in the correct position, as the computer did not always line everything up correctly and would sometimes push section in the opposite direction of what I had intended. This was one of the most time-consuming parts of the process of creating my scratch tracks; however, it achieved wonderful results when it came time to record final drum, bass, and acoustic guitar tracks, for it allowed my musicians to line up as close as possible with the clean beat of the metronome.

I wanted the opening three songs to have solidity and exactness of tempo and rhythm to represent the perfect ways of Wisdom, and I contrasted the final two songs by not using a click-track to convey the frailness and imperfection of humanity. These final two songs were the most difficult to record because they would never line up perfectly or be at the tempo I had always envisioned. I also planned for these final two songs to have a simpler instrumentation from the first three songs, which had the full band playing in various portions of those tracks. My final two songs represent broken humanity seeking out Wisdom and praying for guidance to walk in the right way while confessing the tendency of all human hearts to wander from the faith and to go down paths that do not lead to life.

Use of Microphones

Recording engineers and sound producers are constantly practicing performances of their musical creations. An important part of this performance process involves choosing, placing, and

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51. Katz, *Capturing Sound*, 50.

finding balance with microphones to maximize the resulting quality of sound capture to build

layers onto the composite sound image. The techniques that engineers use are part of their

expressive language and compositional craft in order to bring together the song, arrangement,

and sound into one cohesive unit through technical skill and aesthetic expression.[52] Unlike the

traditional classical composer, whose work is focused on working with completely musical

aspects in each aspect of the compositional process, the creative process for the recordist is not

bound up in aspects of music only—it is largely dependent on the variety of its equipment, from

cords to microphones to amps. Every detail involved that impacts the overall sound is part of the

compositional process.[53]

I used two types of condenser microphones to record my final tracks. Condenser

microphones unify recorded sound, unlike dynamic mics which are mostly used for live

performances. I used the same Shure KSM32 condenser mic for recording voice, violin, and

guitar in the studio and was pleased with the clean sound capture of each unique instrument. For

piano I used my laptop, connected interface, and the Rode NT4 stereo condenser microphone

configured in X-Y stereo set-up and phase aligned to create a true stereo picture to capture the

fullest sound of the Steinway grand piano I was playing. The resulting recording captured a full

sonic picture of the stereo image of the piano, which contains the main portion of the frequency

spectrum of human hearing.

The most difficult part of recording the voice was that it is such a personal instrument and

took a lot of emotional investment to create the tracks. Especially hard was being in the studio by

myself and wondering if each take sounded good enough to keep as a final track. When I first

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52. Zak III, *The Poetics of Rock*, 17.
53. Ibid., 98.

began recording final vocal tracks, I had already had a lot of experience singing into the microphone through the preceding process of recording rough demos and scratch tracks for the aspects of production leading up to this point. Now, however, was the time I thought I needed to make perfect tracks. I found out after many, many tries that it was impossible to make a perfect vocal track. First of all, I was not using any sort of manipulative device on my voice that would adjust the pitch and auto-correct it so it sounded just right. I wanted to use the limitations of my natural, human voice, and I found out after many tries that I had to be okay with the results and incorporate my humanity within the songs. Producer Russ Titelman warns against taking the feeling out of the voice by striving for perfection. The voice sounds best when the sound is driven straight from the heart. I found this to be true working alone in the studio, sometimes to the point of exhaustion and tears. I had to forget I was recording final tracks, and I had to get into the song and remember why I wrote it and tap into my deepest feelings to best express and communicate my message. Usually the "magic" that recordists seek to capture in the studio comes at unexpected moments of release and surrender—those moments when you become part of the music and forget about perfection.

Recording Final Tracks

The possibilities of molding sound brought by technological innovations have transformed music and musical life.[54] The beautiful aspect of recording that reveals the innovative aspect of technical invention lies in its powers of accessibility and ease of use is that recording tames the qualities of physical song and makes them moldable. Moments of sound recorded in actual time are now no longer transient and fleeting but are transformed into something both concrete and flexible, as a recording stays true to its identity of sound and yet can be moved around and edited

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54. Katz, *Capturing Sound*, 54.

indefinitely.[55] The following paragraphs describe the overall resulting sound of each song through the recording and layering process.

The first song on my EP, "Before the World," was inspired by verses in Proverbs relating to Wisdom's birth before the creation of the world. Wisdom was present during God's creation of the world, and He consulted Wisdom as He set each part of the universe and the world in place and set life in motion. To understand that Wisdom existed before time began and oversaw all aspects of creation is a mystery that humans cannot fully fathom, so I attempted to capture some of the wonder of Wisdom's mystery within the beauty of creation that this song expresses. "Before the World" opens with a minute-long instrumental introduction of piano and violin that sets the sonic scene of the universe before time began. The piano ostinato and octave bass line provide a secure framework that brings balance and solidity to the intro. There are three layers of irregular melodic lines that enter in the violin, which I improvised to provide an organic, unpredictable feel. Then the voice comes in—the voice of Wisdom telling of her origin and her witness of the world's creation by God. She existed before anything else came to be, and she watched creation unfold. The meter changes throughout with feelings of two and three, sometimes separately and sometimes acting as a hemiola with contrasting rhythms layered on top of each other.

The second song, "Wisdom Calls Out," is intended to be rap-like, with words sung over a supportive, driving rhythm. It is the most up-beat song and has an energetic vibe. I wanted to convey the urgency with which Wisdom is calling out and the seriousness of the matter of life and death at hand. Wisdom offers blessing and life for those who follow her, but this song is also a warning of disaster and death to come for those who choose to ignore her call and go their own

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55. Moylan, *The Art of Recording*, 312.

way, as the very last line states forebodingly: "All who hate me love death. . . ." Though the second song ends with such a dark final line, the message does not end there. I drew out the transitions between each song by holding out an unresolved chord that finds its resolution with the start of the next song. With the construction of my songs as a cycle, I discovered a higher level of meaning for my individual songs. In this manner, the second song is meant to transition into the third song, "To Fear the Lord is Life," representing the other side of Wisdom's call and warning to man to follow in her ways. This third song offers all the hope and promises of following in Wisdom's righteous path. It is the most nurturing song of the first set of three, from the perspective of Wisdom. It opens with a soft acapella first verse, meant to sound like an intimate lullaby of a mother singing softly to the infant that she cradles in her arms. She sings words of life and hope with a conviction that builds through gradual increase of speed and dynamics throughout the song until the climax at the end the bridge until the drop off into the final chorus. The final spoken line in the tag is completely contrasted to the ending of the second song, which ended in the consequences of death. This final line states: "There is *surely* a future hope for him. A hope that will not be cut off."

The final chord, which is not a true resolution of the third song, finds its resolution with the start of the fourth song, "Wisdom's Way." This is the theme song of the EP, as it contains the title of the EP and the heart of the overall message. The song is in the form of a confessional prayer with simple instrumentation, with piano recorded on a Steinway grand piano in the Recital Hall of the Center for Fine Arts at Houghton College and vocals recorded in the studio. I wanted a simpler feel for this song, to focus the listener on the lyrics and emotion of the singer as the most important aspects for communication of the message. I went for a real sound, as if it was, in fact, a live performance on the Recital Hall stage. I wanted to connect this song to

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humanity and to put it within a sound world that best represented reality, to convey aspects of traditional methods of performance. This song does have final resolution because I intended it to sound like the end of the set. I debated whether I should include the final song, "Wait for the Lord," because I felt that it might sound like too similar to the style of the fourth song that came before, as it uses similar instrumentation with grand piano and voice; however, I made it sound different by adding vocal harmony layers and panned echoes, as well as bringing back the violin trio from the first song. The violin parts do not enter until the bridge and then build into the ending. My hope in creating this effect was to complete the idea of a full circle from the first song and to bring back some of those compositional ideas through use of similar instruments, but this time from the lyrical perspective of humanity instead of Wisdom.

Improvisation in Recording

A recording consists of both a performance and a fixed musical work, which were once separate categories. A spontaneous improvisation can be recorded in the studio and then transformed into a composition through repetition. These recorded compositions, originally improvisatory in nature, become fixed into musical works that can be, according to Katz, ". . .analyzed, historicized, canonized, politicized, and problematized,"[56] just like the rest of music that uses written scores. Many recordists prefer song ideas to be planned before beginning recording work in the studio, so that the work flow is more efficient and focused; however, other recordists are open to inspiration in the studio and find beauty and energy from being spontaneous and from allowing the recording process to have a part in shaping the songs. Even if songs are completely planned or notated before entering the studio, the recording process allows a song to unfold organically, always open to new ideas that emerge as tracks are layered. In

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56. Katz, *Capturing Sound*, 54.

Zak's words, "The songs' ultimate form should be allowed to emerge over the course of the record-making process as the song absorbs the influences of the process itself."[57] The fact that a song does not have to be conceptually finished in the mind of the recording composer until the final mix is completed creates a fluid working environment in which to record and produce records, inviting moments of improvisatory inspiration.[58]

Improvisation for its own sake, without limitations and necessary patterns, is the truest sort of music and makes a song feel important, inviting the listener in. It is as if an improvised song were pieced together in midair and carries all the excitement of defying the rules of gravity for that instance. Improvisation is about being completely immersed within a moment and making the most of it, whether there is much music to offer or little. The identity of a musician comes to the forefront when they improvise, for they are composing what is innate to them musically on the spot. They must draw on the emotion of the heart and be guided by their intuitive mind alone. From the basic vantage point of the listener, improvisatory music is a human extension, just like talking and walking, but this type of extension is only heard and understood aurally. An improvisation will not provide an autobiography of a person, but it offers a sort of transparent window into the performer's imagination.[59] I came into the studio to record with a basic plan I had rehearsed. I knew the moods I wanted to communicate throughout the form of each song, but I was mostly going for feel, and I was extremely open to what might happen in the moment that might be different from what I had originally anticipated. I embraced these deviations from the plan, both in my own playing and during the time spent with my band members. There were

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57. Zak III, *The Poetics of Rock*, 28.
58. Ibid., 29.
59. Ben Ratliff. *Every Song Ever: Twenty Ways to Listen in an Age of Musical Plenty* (New York: Farrar, Straus and Giroux, 2016), 149-150.

certain musical ideas I was set on and requested from my musicians to keep consistent as we recorded, but I mostly set them loose to be inspired and to improvise their way through my songs.

Each time I recorded piano for a song, it was slightly different, and I ended up taking bits and pieces of the elements that worked well. Most of the time, I wanted an organic feel, so I would play through and record a particular track for the entire song to make it sound more real, resembling a live performance. In recording voice, my songs morphed the more I sang them. I experimented a lot on the spot with different ornamentations, use of vibrato, and general singing style and would listen back later to hear which track resonated most with me. I found that when I put myself completely in the moment as I recorded, I sang the most like the sound of my end goal. After I finished recording final tracks for my band members, my last recording goal was to add violin layers. I have three layers of improvised violin tracks on the first and final songs. I did several takes of each until I found three that fit well together contrapuntally. My goal in recording violin tracks was to imitate the sound of a string trio, so I have one track in the low register, one in the middle register, and one in the high register. Recording violin tracks was probably the most exhilarating part of the recording process, as I was placing my unique stamp of innate improvisation on my songs and leaving a print of my identity within my songs.

Post-Production phase

Once all the recorded tracks are finalized and arranged and layered, to create the layout of the song, it is time for the mixing process, which creates relationships between each sound source to the other and forms the overall texture that defines a song. Each sound source is placed in a specific location on the stereo sound stage, through panning, to achieve balance in the mix. Each source is given a unique quality of sound through signal processing plug-ins, which alter frequency and amplitude, through EQ and compression, and add timbre and environmental

characteristics, through effects such as reverb and delay.[60] When a multitrack tape mix is bounced down into a fixed audio format, that mixdown is considered the "live performance," in real-time, of the recordist's composition, for it involves both the preparation and rehearsal of how each part sounds in the mix.[61]

Mixing Process

Carlton Campbell and James Bowman were the two music industry professors from Houghton College who provided guidance on the process of studio composition and performance of the mixdowns for my EP. Producer Campbell encourages his students to be involved in all facets of creative control whenever possible, which is exactly how I went about creating my EP. I had direct experience in the process of writing, composing, arranging, recording, mixing, and mastering my songs. The opportunity to play a part in these roles was very strenuous and emotionally and physically exhausting, and yet it was also extremely rewarding to know that I could do these things, even as a beginner in the field. I took a couple of mixing courses that Campbell and Bowman taught and learned a lot about how to approach mixing as an art form. For Campbell, mixing is based completely on personal preference. He emphasizes in his teaching that there is no right or wrong way to mix, for it is a creative and artistic process based on individual expression. To know what sounds good to an artist or listener is individualized and depends on the context. The biggest crippler to mixing, according to Campbell, is self-doubt. The only way to gain success in mixing is through a trial and error process. Though there are a lot of numbers involved in the professional level of mixing, even at that standard mixing is not a science, and there is no prescribed right and wrong formula for creating sonic artworks. The

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60. Moylan, *The Art of Recording*, 227.
61. Ibid., 299.

question that should be asked, instead, is "why" decisions are made. If there is a good answer to the "why," then a mixing decision will make sense and should help the producer achieve their end sound goal. Though there are no specific rules to mixing, there are certain guidelines. For example, musical genres dictate how to approach mixing based on what other people have done before, but there can still be freedom of expression and choices within a genre.

Balancing the Stereo Sound Stage

The stereo field acts like a sonic canvas with a physical and expressive depth onto which individual sound sources may be painted.[62] To find a point or area for each sound source to occupy on the stereo canvas is often a difficult balance to achieve, for each sound source must have independence in the mix while also contributing to the whole sound. To find this balance, one of Campbell's techniques for mixing is to work in mono, which mashes sound together through a one-channel source. By mixing in mono, the recording composer can hear how things sit naturally, as everything is crunched into one-dimensional space. If any frequencies clash in the mix, they will mask each other in mono format, revealing that more balancing work must be done. When the mix reaches the point where everything sounds good in mono, there is a guarantee that the mix will sound larger than life in stereo format, with all of its spatial positioning and hierarchies.

Specific sources that Campbell always recommends panning dead center are the lead vocal or instrument, the kick and snare drum, and the bass guitar. These are the main melodic and rhythmic elements that help to frame the mix of a song, and so panning them to the middle creates an anchor that holds the rest of the song together and prioritizes the main sound sources in the mix. What helped me envision the stereo field and how to pan was to imagine being a

62. Katz, *Capturing Sound*, 50.

conductor in an orchestra. I panned my violin layers as if I was working with violin, viola, and cello in the orchestra with my vocal at the center. I panned the stereo piano tracks for my first three songs at 60 on each side, so that everything else in the mix would sit on top of it, for the piano covers most the human hearing frequency spectrum. I panned the piano tracks for my final two songs to 100 on either side, to create a full stereo piano sound, since these tracks only involved piano, voice, and violin.

Signal Processing and Effects

Gain-staging is one of the most important practices to keep in mind when mixing a song. Gain-staging involves consistently checking that the input and outputs levels of a sound source match, to avoid loudness and to hear the differences being applied through plug-ins and effects processing, which might otherwise be inaccurately assessed. Loudness to the human ear is equated with being better than something that is softer; however, making something louder is not always the best solution. The process of gain-staging creates head room in a mix that enhances the overall mix and leaves room for the shaping of sound without necessarily becoming overly loud.

Equalizing plug-ins are usually applied first on a track and help to chisel and enhance the sound frequency spectrum of the instruments and vocals. Equalizing helps with the masking of two or more sound sources in the mix that diminish the overall sound quality. Through the chiseling of sound frequencies between the sources, room is created in the mix for each one to live and breathe on its own and to be clearly distinguished.[63] Compression comes next in the mixing process and works to tame and polish sound sources after any necessary equalizing has been done. Effects plug-ins include reverb and delay, which are used to create spatial

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63. Moylan, *The Art of Recording*, 32-33.

environments through illusions of distance in space. Manipulating echo through the partnership of reverb and delay provides the mix engineer a palette of timbre, texture, rhythmic, and atmospheric relationship possibilities within a song.[64]

Music in live performance settings exists in time and is philosophically understood by that definition; however, a record exists in its representation of physical space and the spatial proximity to sound sources, such as the ear or the microphone. Many mixing decisions are based on establishing these relationships of physical space through manipulation of sound qualities through signal processing and effects plug-ins.[65] There are many approaches to shaping sound sources. Some mix engineers prefer to recreate life-like sound environments, in which relationships between sources sound physically natural to the ear. Other mix engineers purposefully seek to distort physical realities of sound to create new sound worlds with realistically impossible environmental cues.[66]

The overall sound of the bounced files of the tracks contains the meaning of the overall performance. I went for a natural sound in manipulating the overall sound for my five EP tracks. My goal was to create five songs that were contained in slightly different environments. "Before the World" is meant to sound wide and open, as if it were heard from the perspective of God creating the expanse of the universe. I used reverb to create a sense of distance and expansion. "Wisdom Calls Out" is meant to be contained in a smaller room, in which the voice bounces off the walls with slapback delay, to create a concentrated spatial environment that places the focus on the intensity of the lyrics. I created an artificial electric guitar solo by using a MIDI keyboard with a virtual instrument plug-in. I then manipulated the sound possibilities by bending the

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64. Zak III, *The Poetics of Rock*, 70.
65. Ratliff, *Every Song Ever*, 102.
66. Moylan, *The Art of Recording*, 253.

pitches and adding distortion and reverb, to make it sound as if the guitar is out in the distance. "To Fear the Lord is Life" is starts as an intimate lullaby and slowly grows into a big climax section. In this song, I kept the opening vocal dry so that it would seem close to the listener's ear, as if they were being rocked to sleep like a small child in Wisdom's arms. The transition into the main section of the song builds and has more resonance and lushness with a combo of reverb and delay working together. "Wisdom's Way" is simple, with only voice and piano, and balanced so that it sounds as if it were a live performance on a stage. I manipulated the piano through plug-ins that enhanced the overall sound, since it was the only instrument playing, and balanced it to a level that would best complement the voice. Finally, "Wait for the Lord" has a simple acoustic sound with its opening of voice and piano, much like the previous song; however, the string trio from the first song comes back during the bridge and builds into the closing section, adding harmonic lushness and expressivity of line. By bringing back the string trio that was only used in the first song, the listener is reminded of where this journey started and how they have changed through the experience of listening to this EP. Thus, the overall sound of the track communicates and expresses what I, the recording composer, intended. Of course, the listener can interpret the songs in their own fashion based on their experience and context; however, the recorded sounds are fixed in time and have a definitive quality of artistic expression. Tone is a carrier of human emotion,[67] and the recording composer is able to shape physical sound in order to create communicative art.

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67. Ratliff, *Every Song Ever*, 49-50.

Conclusion

In conclusion, art is a continually evolving form that is highly impacted through the changes of technological innovation. From the first publications of sheet music to the digital audio file, technological innovations have shaped music's function in the world. The components of traditional music composition are valuable for the creation of high quality art, but current tools for recording and production can further extend the compositional horizon. The recording composer works behind the scenes in the studio and does not seem to fit neatly within the traditional trio of composer, performer, and listener in the music-making process; nevertheless, their influence is significant and needed in contemporary musical life.[68] The recording composer can transcend physical constraints within their musical works through sound manipulation and a critical ear. Through detailed control of concrete sounds and immediate playback, producers have already discovered new sonic worlds and, as a result, have established fresh musical genres. This paper and connected EP project have shown how record production is a communicative art form that enhances traditional methods of music composition with innovative techniques and seek to contribute to the ongoing discussion of musicologists, composers, and producers to reveal how recording technology is a catalyst able to transform art.

As an emerging recording composer, I have only a small amount of experience with using and understanding the technology of record production; however, I was able to express meaningful art through each phase of the compositional process of creating the final tracks of my EP. Each stage of the compositional process was new to me—writing the songs, recording rough demos, forming arrangements with my band members, recording final tracks, and finally mixing—and each part of the process was its own challenge and its own victory. I sought for

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68. Katz, *Capturing Sound*, 47.

perfection and was not able to reach my standard; however, through this creative process I discovered that in the end perfection is not necessarily the best goal in creating a work of musical art. The composite sound of the record must produce an overall effect that contains the human condition of emotive and beautiful imperfection. According to musician, Jeffrey Rodgers, "The greatest songwriters are actually the ones who *never* arrive at that mythical place of artistic satisfaction. No matter where they are or what they achieve, they always have their eyes on the horizon…. So think of yourself as engaged in a process rather than creating a series of final products."[69] The compositional stages of the recording composer are complex subjects, and each unique stage of the recording process is a brushstroke on the sonic canvas.

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69. Rodgers, *The Complete Singer-Songwriter*, 8.

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