Ruminations + Reverberations: Music of Literature

An Honors Thesis (MUSTH 495)

by

Nathan Daywalt

Thesis Advisor

Dr. Jody Nagel

Ball State University

Muncie, IN

April 2012

Expected Date of Graduation

May 2012
Abstract

In the modern world of academia, many scholars succumb to the temptation of overspecializing on particular topics within their particular fields. Too often, this pursuit of specialized knowledge often comes at the expense of experience in nonrelated disciplines. Although my primary focus is music composition, I have maintained a strong interest in the humanities over the course of my undergraduate career. In particular, I am fascinated by the literature of Existentialism. Unfortunately, many young scholars today are unfamiliar with the perspective and philosophical insight offered by literature that has survived much of the 20th century. In an attempt to help this intellectual movement maintain relevance in the 21st century, I have composed music derived from the texts of Nietzsche, C.G. Jung, Albert Camus, and other notable thinkers. Other compositions were inspired by scientific and technological concepts. These works were performed at a composition recital on April 22, 2012.

Acknowledgements

My recital would not have been possible without the instruction, patience, and mentorship of my professors.

I would like to thank Dr. Michael Pounds for his assistance with technical affairs at my recital. His experience with computer programming and synthesis was integral to the development of the electronic pieces on the recital, and he also assisted in recording the piano for Cirrus.

Dr. Eleanor Trawick provided excellent notational advice. She oversaw the development and final revisions of many of the pieces presented on the program.

Dr. Jody Nagel's encouragement and aesthetic discussions were indispensable in the conceptualization of my pieces. His input was integral to the organization of the recital, and also served as my thesis advisor.

Lastly, I would like to thank the performers whose time and practice made the performance possible. Dr. Amelia Kaplan, Bahara Annaduriyeva, Nikolay Verevkin, Elysia Amtzen, Dorene Chen, Erika Williams, and Brendan Bassett deserve significant appreciation for their hard work and friendship during a busy time in the academic year.
Author's Statement

Philosophers have long debated a tired reciprocal adage: does art imitate life, or does life imitate art? Not without mischievous intent, I have attempted to bypass this clichéd dualism with a less-controvertible contrivance: art imitating art. Music inspired by literature is hardly a novel conception, though perhaps I approach the task with a different purpose in mind. Modern academia is concerned with the current generation of young scholars and its aversion to reading. As a rebellion to this trend, I have attempted to revitalize and propagate literature that is too often left to drown in the waters of negligence. By composing music that is accessible and pleasant to most listeners, while propagating the messages and aesthetics contained in literature I find meaningful, I hope to inspire audiences to research great writers and works that might otherwise fade into obscurity.

“Ruminations + Reverberations” describes my ongoing struggle to transform literature and abstract concepts into acoustic phenomena. The following works were performed at my composition recital on April 22, 2012, and are included on the accompanying CD.

1. *Coalescence* – A work for five marimbas, glockenspiel, celesta, vibraphone, and piano. It was inspired by Friedrich Nietzsche’s essay “On the Flies in the Marketplace” from *Thus Spoke Zarathustra*, as well as C.G. Jung’s response to this passage.
2. *LCD* – An interactive electronic composition inspired by the technology of the same name. Three randomly chosen audience members “performed” the piece by interacting with the computer.
4. *Cirrus Duplicatus* – The final piece in the *Cirrus* collection. It features 15 minimalist gestures used to create an immersive surround-sound experience.
5. *Ruminations No. 2* – A virtuosic piece for solo piano. It is inspired by Albert Camus’s *The Myth of Sisyphus*.
6. *Ruminations No. 4* – Another piece in the same collection, it is inspired by a message contained in contemporary Randall Munroe’s online webcomic XKCD.
7. *Ruminations No. 7* – The final piece in the *Ruminations* collection, owing homage to Friedrich Nietzsche’s “The Night Song” from *Thus Spoke Zarathustra*. 
**Coalescence (2010 – 2012)**

*Coalescence* was conceived in Fall 2010 as a musical exploration of identity, independence, and collaboration in a group collective. In *Thus Spoke Zarathustra*, Friedrich Nietzsche postulates that true dignity and peace can be found only in the solace of solitude. Carl Gustav Jung dismisses such radical individuation, as much of one's personal growth relies on one's peers as much as one's own will. These literary excerpts are reproduced at the beginning of the score (*Figure 4*). The primary compositional gimmick utilized in *Coalescence* is a technique I have pretentiously christened *gestalt dissemination*. Merriam Webster defines *gestalt* as "a structure, configuration, or pattern of physical, biological, or psychological phenomena so integrated as to constitute a functional unit with properties not derivable by summation of its parts." In the beginning of the piece, each of the five marimbas possesses its own melodic material. As the piece progresses, this individualism gives way to motivic coalescence. As *gestalt dissemination* is employed, the individual melodic lines are distributed evenly throughout the marimba "gamelan." Instead of five units acting as one (5 x 1), a single gestalt produces five indistinguishable musical lines (1 x 5). This process is demonstrated in *Figures 1 and 2*.

When each instance of this process of individuation/deindividuation occurs, the marimbas employ a series of ascending modal scales of various lengths. This technique produces asynchronous phase relationships that create an undulating, dynamic texture with curious harmonic and rhythmic implications. This process can be seen in *Figure 3*.

During the improvised jazz piano solo from mm. 193—224, each of the five marimbas regains its independence and once again possesses unique musical content. Each marimba has a four-measure "solo" during this section. During the climax at m. 237, these five motives are employed simultaneously. Each marimba maintains its individuality, but the resulting culmination of sonorities and saturating sonic deluge possess a brilliance surpassing each individual component. This is a quaint metaphor for an ideal instance of human interaction in society: a conglomerate of unique individuals that, when placed in conjunction with one another, create a fascinating gestalt that is derived from the complex, independent characters that create it during the process of social coalescence.
Figure 1. *Coalescence*, mm. 83—91. Marimba 1 is red, Marimba 2 is orange, Marimba 3 is green, etc. This passage employs extensive polyrhythm. Marimba 1 features a repeated 4/4 pattern, which creates interesting phase relationships with Marimbas 2 and 4, both containing 2-bar phrases in 6/8. Marimba 3 repeats an endless 5/8 pattern, and Marimba 5 alternates between 6/8 and 3/4 every measure.
Figure 2. Coalescence, mm. 83–91, post-gestalt dissemination, as demonstrated in mm. 185–193. This excerpt contains the exact same music as the previous example, though it has been distributed using gestalt dissemination, a type of extreme hocketing or Klangfarbenmelodie. Each marimba "rotates" through all five parts in a cyclical pattern: 1-3-5-2-4 (skipping every other integer in a base-5 system). The resulting cycle of material distribution produces an augmented cycle: 1-4-2-5-3 (skipping every two integers in a base-5 system). In a live performance, this basic mathematical model of content distribution should create an interesting visual/stereoscopic experience for the audience. (In theory. You tell me.)
Figure 3. Coalescence, mm91-98. Marimbas 1-4 employ repeated ascending modal scales of various lengths. Marimba 1 has a 6-note ascending Bb Ionian scale; Marimba 2 has a 4-note ascending D Phrygian Scale; Marimba 3 has a 5-note G Aeolian Scale, and Marimba 4 has a 7-note Eb Lydian scale. Measures 95-98 also serve as an example of Klangfarbenmelodie: a single descending melodic line is traded amongst the marimbas.

The first page of the Coalescence score features passages by Friedrich Nietzsche and C.G. Jung:
12. On the Flies in the Marketplace

Flee, my friend, into your solitude! I see you deafened by the noise of great men and stung all over by the barbs of small ones.

Forest and rock know how to keep with you a dignified silence. Be again like the tree that you love, broad-branched: quietly listening it leans out over the sea.

Where solitude ceases, there begins the marketplace; and where the market-place begins, there also begins the noise of the great play-actors and the buzzing of poisonous flies.

In this world even the finest things amount to nothing without someone to make a show of them: great men the people call these showmen. Little do the people comprehend what is great, which is: the creative. But they do have a sense for all showmen and play-actors of great matters.

Around inventors of new values the world revolves -- invisibly it revolves. Yet around play-actors the people and fame revolve: that is: 'the way of the world'.

Spirit the play-actor has, yet little conscience of the spirit. He always believes in what whereby he most strongly makes others believe -- makes believe in himself!

Tomorrow he has a new belief and the day after tomorrow a newer one. Quick sense he has, like the people call these showmen. Innumerable are these petty and wretched creatures; and for the collapse of many a proud structure raindrops and weeds have been sufficient.

You are no stone, but you have already become hollow from many drops. You will yet break and burst apart from many drops. You are no stone, but you have already become hollow from many drops. You will yet break and burst apart from many drops.

I see you wearied by poisonous flies; I see you bloodily scratched in a hundred places: and your pride does not even want to be wrathful. Blood they would like from you in all innocence, blood is what their bloodless souls desire -- and therefore they sting in all innocence.

But, you who are deep, you suffer too deeply even from small wounds; and before you could even heal yourself, the same poison-worm was crawling over your hand.

Too proud are you to kill these sweet-toothed creatures. But beware lest it become your undoing to bear all their poisonous injustice!

They buzz around you with their praising too: importunity is their praising. They want the nearness of your skin and your blood.

They flatter you as they would a God or Devil; they whimper before you as before a God or Devil. What of it! Flatterers are they and whimperers, and nothing more.

They often present themselves as charming too. But that has always been the cleverness of cowards. Yes, cowards are clever!

They think of you much with their narrow souls -- suspicious are you always for them! All that is thought of much becomes suspicious.

They punish you for all your virtues. They forgive you from the ground up only -- for your mistakes.

Because you are gentle and of righteous disposition, you say: 'Innocent are they in their petty existence.' But their narrow souls think: 'Blameworthy is all great existence.'

Even when you are gentle toward them, they still feel despised by you; and they repay your beneficence with concealed maleficience.

Your wordless pride always goes against their taste; they rejoice if for once you are modest enough to be vain.

That which we recognize in someone else, we also inflame in that person. So beware of the petty! Before you they feel petty, and their baseness glows and smoulders against you in invisible revenge.

Have you not noticed how often they became mute when you approached them, and how their strength went from them like smoke from a dying fire? Yes, my friend, you are the bad conscience for your neighbours: for they are unworthy of you. Thus they hate you now and would dearly like to suck your blood.

Your neighbours will always be poisonous flies; that which is great in you -- that itself must make them more poisonous and ever more fly-like.

Flee, my friend, into your solitude and to where raw and bracing air blows. Innumerable are they, and it is not your lot to be a swatter of flies.

"Thus spoke Zarathustra."

Figure 4a. Friedrich Nietzsche, *Thus Spoke Zarathustra*. First Part, Chapter 12: *On the Flies in the Marketplace*. In this passage, Nietzsche denounces the vicissitudes of cavorting with bitter, shallow, and petty individuals. Although a “going-under” is an integral component in one’s journey in becoming the Übermensch, Nietzsche pontificates upon the torturous and wearisome endeavor of engaging with people who do nothing but betray, hurt, and stab you in the back. He claims that a man of integrity spares his colleagues the ardor of retaliating against their maliciousness; instead, he possesses the self-discipline, strength, and tenacity to endure the tortures of society. However, one cannot remain utterly impervious: feeling and understanding these “blows” requires significant compassion and understanding for his assailants; one must feel pain in order to be complete. This is tiresome, even for the most compassionate and dynamic person, and the resulting fatigue makes solitude a desirous reverie.

C.G. Jung’s response to Nietzsche’s *On the Flies in the Marketplace*:

"There is something positive in this advice; there he would have a chance to realize that he is not the greatness. But he would never be able to realize that he is like the ordinary people and he should realize that too. For instance, if he were really a sage, he would say to himself, 'Go out into the street, go to the little people, be one of them and see how you like it, how much you enjoy being such a small thing. That is yourself.' And so he would learn that he was not his own greatness. Or he might say, 'Go away from the little people and disappear into your mountain vastnesses; try to identify with that greatness, and you will see that you cannot identify with it, and so you will learn that you are not that greatness.' You see, there are two ways of realizing it. But to disappear into solitude in order to be desirous, to be longing for friends and recognition, effect, and so on, does not pay. The one never realizes that one is not one's own greatness."

Figure 4b. C.G. Jung, *Jung’s Seminar on Nietzsche’s Zarathustra*. Famed psychologist C.G. Jung taught a five-year seminar on *Thus Spoke Zarathustra*, and complete transcriptions exist today. While discussing Nietzsche’s passage *On the Flies in the Marketplace*, Jung touches upon Nietzsche’s conception of the Übermensch, a self-actualized idealization of a person that achieves his or her own full potential as an individual. He realizes that Nietzsche’s ideas are not necessarily “healthy” or “practical” in modern society, but concludes that wisdom can be gained from the teachings nonetheless. Ultimately, engaging and embracing others is an unavoidable step on the path to self-actualization and living life to the fullest.
**LCD** (2009)

Liquid Crystal Display (LCD) is a familiar technology used in projectors, monitors, and televisions. The technology involves matrices of layers of electrodes and filters that act as shutters. By modifying parameters and opening and closing “shutters,” a myriad of colors can be produced.

**LCD** is an early attempt at creating an interactive composition using the MaxMSP programming environment. It consists of multiple 4-bar MIDI loops on a variety of instruments and synths. These instruments can be turned on or off in a wide variety of combinations, producing different musical timbres, textures, rhythms, and harmonies. Because the harmonic content is predetermined, it is difficult to produce a mix that sounds “bad.” Interactivity is enhanced by allowing performers control over basic mixing parameters, such as panning, gain, and EQ.

![LCD's graphical user-interface](image)

**Figure 5.** LCD’s graphical user-interface. During the performance on April 22, 2012, three audience members “performed” the piece.
Cirrus (2011-2012)

*Cirrus* is an unfinished set of pieces for piano and interactive electronic accompaniment. Each piece is interactive to a different degree; *Cirrus Fibratus* uses fixed electronic accompaniment, while *Cirrus Duplicatus* can be performed with no prerecorded material. Each piece in the set has a structure or form inspired by its namesake cloud.

Cirrus fibratus clouds are known for their long, fibrous appearance. Often known as “mare’s tails,” they consist of fine, wispy tendrils (see Figure 6). In the composition, I likened the meteorological phenomenon to a spectrogram analysis of an audio stream. Using a Fast-Fourier Transform (FFT), it is possible to generate graphs that illustrate the presence of each individual frequency (often 20-20,000 Hz) over time. While composing, I sought to make the entire movement’s spectrogram vaguely resemble a cirrus fibratus cloud. The electronic accompaniment for the first ninety seconds of the piece is a gradual shift from low-frequency content (rumbling, wind, etc.) to high frequency content (chimes, bells). Many sounds were created using recordings of wind (both gentle and gale-force), airplane landings, and the ocean. Using extensive convolution, granular techniques, and filtering, these sounds were merged with conventional string instruments, synths, piano, and even choral excerpts from Francis Poulenc’s *Mass in G* (1937).

Figure 6. Cirrus fibratus clouds, known for their long, fibrous appearance.
Cirrus duplicatus clouds exist in interwoven layers. These layers can overlap, or possibly even merge (Figure 7). Independent components that might or might not converge with one another is a common facet of minimalist music. Cirrus duplicatus utilizes this metaphor to create a complex tapestry that is derived from only fifteen unique musical gestures. Each gesture is recorded live, then looped a fixed number of times, and is played through each speaker in a 5.1 configuration in a specific order. Each gesture has a unique length; G2 is 7 eighth-notes long, while G4 is 7.5 eighth-notes long (Figure 8). As a result, there are many overlapping rhythmic phase relationships; every iteration of each gesture produces a new vertical sonority and rhythmic accent patterns. Sometimes, these gestures align, either rhythmically, harmonically, or simply being played from the same speaker. However, it is their continuously varying oppositional/complementary relationships that makes this sonic lattice so mesmerizing.

This piece has existed in a variety of forms; it was initially composed in stereo. Eventually, it was rewritten for 5.1 surround sound. It can be performed using pre-recorded piano samples to complement the live pianist. There is also a fully interactive version that features no pre-recorded audio; all content is recorded and looped in real-time.

Figure 7. Cirrus duplicatus clouds, which exist in several overlapping layers that occasionally overlap or merge.
<table>
<thead>
<tr>
<th>Gesture</th>
<th>Starts / Stops</th>
<th>Length (8th notes)</th>
<th>Diffusion Pattern (5.1 Surround Sound)</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1</td>
<td>1 / 12</td>
<td>6</td>
<td>L, Ls, Rs, R, C (counterclockwise)</td>
<td><img src="image1" alt="G1" /></td>
</tr>
<tr>
<td>G2</td>
<td>7 / 37</td>
<td>7</td>
<td>R, Rs, Ls, L, C (clockwise)</td>
<td><img src="image2" alt="G2" /></td>
</tr>
<tr>
<td>G3</td>
<td>12/34</td>
<td>12</td>
<td>L, Ls, Rs, R, C (counterclockwise)</td>
<td><img src="image3" alt="G3" /></td>
</tr>
<tr>
<td>G4</td>
<td>16/44</td>
<td>7.5</td>
<td>C, Rs, L, R, Ls (starshape)</td>
<td><img src="image4" alt="G4" /></td>
</tr>
<tr>
<td>G6</td>
<td>34/45</td>
<td>12</td>
<td>L, Ls, Rs, R, C (counterclockwise)</td>
<td><img src="image5" alt="G6" /></td>
</tr>
<tr>
<td>G7</td>
<td>38/78</td>
<td>5</td>
<td>R, Rs, Ls, L, C (clockwise)</td>
<td><img src="image6" alt="G7" /></td>
</tr>
<tr>
<td>G8</td>
<td>40/78</td>
<td>7.5</td>
<td>C, Rs, L, R, Ls (starshape)</td>
<td><img src="image7" alt="G8" /></td>
</tr>
</tbody>
</table>

**Figure 8.** Seven of the fifteen gestures used in *Cirrus Duplicatus.*
Ruminations (2011-2012)

Ruminations is a work-in-progress for piano and narration. It is comprised of a set of short (but substantial) pieces, which are inspired by and modeled after philosophical texts by lonely authors throughout history. The text primarily comes from famous existential authors, such as Friedrich Nietzsche, Søren Kierkegaard, Jean Paul Sartre, Arthur Schopenhauer, Alfred Camus, and C.G. Jung. However, the set does feature text from more recent sources, such as the eponymous character’s morose monologues from the television show Dexter, as well as the popular webcomic xkcd.

No. 2, The Myth of Sisyphus, is inspired by French author Albert Camus’s essay of the same name. Sisyphus is a character from Greek mythology. After tricking the gods and escaping death so that he could embrace life, he was punished for all eternity with a task of insurmountable futility. Sisyphus was forced to push a boulder up a hill; as he neared the summit, the rock would invariably roll all the way down back to the bottom of the hill, where Sisyphus would begin to push it up the hill once more. This arduous mundanity is a horrible task to endure for eternity, though Camus argues Sisyphus deserves some applaud. Camus discusses Sisyphus’s existential struggle and search for meaning in his utterly meaningless existence. Ultimately, Sisyphus triumphs over the gods once more: he creates his own purpose and meaning; he finds joy in pushing the rock because it is his rock.

The composition depicts Sisyphus’s struggle to push the rock up the hill. Sisyphus begins his journey at the bottom of the hill; the piano reflects this by occupying the lowest register of the instrument. As Sisyphus climbs, so does the piano score, traversing up the keyboard as Sisyphus does his mountain. However, as he nears the top, the rock tumbles downward, and he must begin again. This oscillation of high-to-low perpetually permeates the entire movement. At first, the accompaniment is harsh and atonal, indicative of Sisyphus’s frustration and anguish. However, with each oscillation, the piece becomes progressively tonal and sonorous, a metaphor for Sisyphus’s developing realization of meaning and purpose. As the piece progresses, a leitmotif (Figure 9) becomes increasingly prominent. It is subjected to numerous mutations, augmentations, transpositions, and alterations.

Figure 9 Sisyphus’s pentatonic leitmotif.
Ruminations No. 2 also includes many musical references to other famous piano works. These include Gyorgy Ligeti's *Piano Etude No. 13: L'escalier du diable* ("The Devil's Staircase"), Frederic Rzewski's *Winnsboro Cottonmill Blues*, Samuel Barber's *Piano Sonata*, and Maurice Ravel's *Toccata* from *Le Tombeau do Couperin*.

*Ruminations No. 4* takes its text from *xkcd* #137: *Dreams* (Figure 10)

No. 4 started as a mathematical experiment (which I regard as a failure). It is my first attempt at attempting serialism, a compositional technique where the composition is guided by a predetermined set of rules and restrictions. The piece is built upon an asymmetrical ostinato (Figure 11) that repeats itself dogmatically through the entire movement. This quarter-quarter-dotted quarter–dotted quarter–quarter pattern, which
reduced to eighth note ticks (2 + 2 + 3 + 3 + 2) could be perceived as a single syncopated in 6/4 time. Due to the placement of accents, it confuses and obfuscates the listener's perception of the downbeat. The primary developmental technique involves an additive mathematical process super-imposed over a divisional relationship with this ostinato. At measure 21, the right hand begins to play consecutive notes of the A minor scale, ascending one note on each pulse of the ostinato. For each of these notes, another oscillating process occurs: for every note in the left hand, there are three in the right hand, then four for each in the left hand, then five, then four, and three again. This four-part cycle creates interesting phase relationships with the ostinato, which is a five-unit pattern (Figure 12). Although the piece sounds repetitive, the relational rhythmic pattern between the ostinato and the right hand is different for every iteration (Figure 13).

Figure 11. The ostinato pattern that serves as a fundamental building block of Ruminations No. 4. It can be notated in either 2/4 + 8/8 (awkward but precise) or 6/4 (ambiguous and difficult to count).

Figure 12. Relationship between right hand and left hand at measure 21. Each thick black bar represents an iteration of the ostinato. Each gradient/white space represents
the constant eighth note pulse; the lower half represents the eighth-note groupings of
the ostinato, and the top half represents the divisional relationship with the beat beneath
it.

Figure 13. Ruminations No. 4, mm. 21—28. Realization of the additive/divisional
system.

As the text becomes increasingly impassioned, the piece strays further from its
original confinement in A minor. When it modulates to C minor (representative of the
second stanza of text), an additional layer of activity is added on top of the previous
system (Figure 14). With three varying rhythmic phases, and two melodic lines, the
piece becomes remarkably complex, demanding much of the pianist. Eventually, the
piece becomes less adherent to the strict rules and regulations of this serial system,
symbolic of the speaker’s severance of his societal shackles. The piece ends on three
punctuative chords, which are emphatically employed to mirror the last three words of
the comic.
Ruminations No. 7: The Night Song is intended to be the last piece in the set. The text comes from Nietzsche’s Thus Spoke Zarathustra. Nietzsche was particularly proud of The Night Song, calling it “the most Dionysian dithyramb ever written.” In the text, the speaker, Zarathustra expresses his weariness of being a creative individual; a “star in the darkness of night.” He muses that sometimes, he simply wants to coast on the doings of others; to receive instead of constantly giving. Being a creator and a person of integrity is extremely tiresome for a compassionate individual. Instead, he wishes that “[he] were night,” able to soak up the light given off by others.

Most of the other pieces in the Ruminations set feature elaborate architecture and cerebral developmental techniques. No. 7 is indulgent and self-affirming; its compositional aesthetic is whimsical and Chopinesque. The score is marked “With resigned melancholy”, though it is briefly engulfed in Dionysian passion and lamentable exuberance. It isn’t meant to be particularly sophisticated or architecturally complex as its sibling pieces; it is intended to be enjoyable, introspective, and deeply personal.

Figure 14. A diagram of the phase relationships upon the modulation to C minor.
Music inspired by literature is hardly novel. Compositions employing cryptology and numerology have been around for quite some time. In this post-Modern age, there is a special kind of futility for artists of all types: is it the artist's duty to revolutionize, to push art where it has never gone before, even if it proves unpopular? Or is it "smart" to try and please wider audiences by utilizing trusted conventions? It is a thin line to tread: creating art that is fresh and engaging that fails to alienate the audience. My intentions were to create a musical language of depth and meaning; a tapestry of intricacies that bridges previously unconnected nodes of the humanities, while making music listenable by casual listeners. By doing so, I hope to create music that revitalizes literature that has faded into antiquity, reapplying and expressing non-musical content through the art of composition.
DO NOT MAKE CD CONTENT AVAILABLE ONLINE

POSSIBLE COPYRIGHT RESTRICTIONS ON MUSIC