Contritum Machina: A Composition for Wind Ensemble

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Contritum Machina: A Composition for Wind Ensemble

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ABSTRACT

Contritum Machina is a composition written for a wind ensemble instrumentation. It is comprised of two parts, each created through a different compositional process. Part 1 was originally composed as a piano score that was later orchestrated for wind ensemble. Part 2 lacked such an outline and was simultaneously composed and orchestrated.

This document will explore each compositional process and compare the two in terms of their significance in developing the final score, and in terms of their impact on my growth as a composer. It is organized chronologically by part. Within the discussion of each part is a chronological organization by section in which the development and overall significance of each given section is explained in terms of its relationship with the composition as a whole. My overall goal in writing this thesis is for it to serve as a work that defines my overall growth as a composer and musician after completing a Master’s program in Music Composition at the University of Tennessee School of Music.
TABLE OF CONTENTS

1. Chapter I: Introduction .................................................................1
4. Chapter IV: Conclusion.................................................................33

References......................................................................................36
Appendix.........................................................................................38
Vita..............................................................................................93
LIST OF FIGURES

Figure 2.1 Piano Score - The Introduction of the Ostinato and Motif 1 .......................................................5
Figure 2.2 Wind Ensemble Score - Superimposition of Motif 1 and Motif 2 .........................................................6
Figure 2.3 Wind Ensemble Score - Section A: Ending Phrase ..............................................................................7
Figure 2.4 Piano Score – Section B ....................................................................................................................8
Figure 2.5 Wind Ensemble Score – Section B ....................................................................................................9
Figure 2.6 Wind Ensemble Score - Section C Woodwind Accompaniment ..........................................................11
Figure 2.7 Wind Ensemble Score – Section C: Introduction of Motif 5 .................................................................12
Figure 2.8 Wind Ensemble Score – Superimposition of Motifs 1 and 2 with Tom-Tom Accompaniment ..........14
Figure 2.9 Wind Ensemble Score – Extension of Motif 4 ..................................................................................14
Figure 2.10 Wind Ensemble Score – Ostinati of Section E ...............................................................................15
Figure 3.1 Piano Reduction: Part Two Melodic Pattern ..................................................................................19
Figure 3.2 Wind Ensemble Score – Section G: Initial 13-Beat Phrase .................................................................22
Figure 3.3 Piano Reduction - Section H Melody ................................................................................................23
Figure 3.4 Section I: Part Two Melodic Pattern Countered by Staccato Melody ...............................................25
Figure 3.5 Rite of Spring - "Ritual of Abduction": Ending Phrase ....................................................................26
Figure 3.6 Wind Ensemble Score – Section J Tritones: Augmented 4th - m. 174, Diminished 5th - m. 17 ........27
Figure 3.7 Piano Reduction - Division of the Part Two Melodic Pattern ..........................................................28
Figure 3.8 Wind Ensemble Score – Section K: Climactic Phrase .................................................................29
Figure 3.9 Wind Ensemble Score – Section K: Ending Cadence .................................................................30
Chapter I: Introduction

*Contritum Machina* is a Latin phrase translating to “Broken Machine.” Such a title certainly reflects my background in medieval history. Latin dominates the surviving accounts forming modern historians’ understanding of the Middle Ages. History was one of my two majors as an undergraduate. In combination with this second major and the subject of my graduate studies and thesis, music composition, the historical reference of my thesis title symbolizes the synthesis of my university studies thus far in my life.

The primary theme of this thesis is not only a culmination of my compositional knowledge and personal growth academically, but also professional development. As an aspiring band composer, the performance of my composition, *Congaree Drifter*, by the Charlotte Country Day School Concert Band set the foundation for my pursuit of a master’s degree in music composition. After completing my studies at the University of Tennessee, I plan to compose more works to be performed by middle and high school bands. Therefore, it took little deliberation on my part in deciding to write for a wind ensemble.

Given such plans, it was vital for me to explore multiple strategies and approaches in composing for large groups such as concert bands or wind ensembles. I first began composing what would eventually become *Contritum Machina* in the form of a piano score with the plan to orchestrate it into wind ensemble instrumentation. However, when I completed this process, the resulting score lacked closure and demanded more material. In response to the lack of a satisfying ending, I began simultaneously composing and orchestrating additional material directly into the wind ensemble score without the use of a piano score outline. This additional material became the second half of the completed work, which I refer to as Part 2 in this document.

The organization of the final score reflects this difference in compositional processes. The musical material of Part 1 is the result of my completing a piano score outline, and then orchestrating it into a wind ensemble instrumentation. Part 2 of the score is the result of my taking a more intuitive
approach by simultaneously composing and orchestrating directly into the score where Part 1 ended, without an outline to follow. The two parts contrast one another in terms of tempo, rhythm, harmony, timbre and thematic material. These differences between Part 1 and Part 2 were the inspiration of the title and shape the story that the music tells.

The inspiration behind the title *Contritum Machina* was derived from the machine-like quality of Part 1, in which a rhythmic ostinato is continuously heard throughout. The persistence of this ostinato is a defining feature of Part 1. As consistent action allows machines to serve a greater purpose (clocks tell time, engine pistons propel vehicular motion), the unceasing ostinato provides a foundational structure for the development of Part 1 and its five key motifs. In the latter half of Part 1, these five motifs replace the ostinato as the primary focus of the music. This represents the deterioration of the machine, represented by the ostinato.

Part 2 begins when the deterioration reaches a breaking point. The contrasts in rhythm, tempo, harmony, timbre, and melody during this section are significant. These differences from Part 1 represent a “melt-down” of the machine. By the end of Part 2, the machine is completely broken.
Chapter II:  
The Compositional Process of 
Part 1 of *Contritum Machina*

While initially composing *Contritum Machina*, I considered every decision in terms of three pre-existing goals. These goals were 1.) To establish an ostinato that persists for the duration of the piece 2.) To introduce several motifs over the ostinato 3.) To combine and rearrange these motifs such that the piece gradually builds from a single ostinato line into a climactic ending section.

Band composer John Mackey described compositional methodology similar to my formulaic generation of Part 1. In an interview, Mackey states that he “figures out what the structure will be before writing the piece.”¹ He makes the comparison to the process of an architect in which the form of the musical composition relates to the basic purpose and resulting shape of a building. He describes the notes of a score as the furniture in the building, which is added once the basic structure is completed. Mackey stresses that he does not write a single note until the shape of the piece is determined. While I composed notes in the piano outline before fully conceptualizing a detailed structure regarding Part 1, I did not write a single note in the wind ensemble score until I completed the outline. John Mackey did not go into details about the specific nature of his outlines, but there are certainly similarities between his compositional approach, and that in which I employed when writing Part 1.

I consistently kept my three compositional goals in mind while composing a piano score outline with the intent of orchestrating it into a wind ensemble instrumentation. Once the orchestration was complete, I realized that the integrity of the three goals had not been adequately maintained and translated from the piano outline, and that the piece did not have a suitable climactic ending. In Chapter II, I will focus on the transformation of the material from the outline to the wind ensemble score, and discuss the compositional changes I made, after orchestration, in order to maintain the role of each section in

fulfilling my 3 goals. The chapter is divided into six sections corresponding to the six sections of Part 1 of *Contritum Machina*. These sections are labelled A, B, C, D, E and F and correspond to the rehearsal letters in the score. I will discuss each section in terms of how its musical material satisfied my three goals and I will shed light on how the orchestration process revealed a need for more material (Part 2) to complete the work.

**Section A**

Since my first goal was to establish and perpetuate an ostinato for the duration of the piece, I immediately began *Contritum Machina* with an unaccompanied vibraphone line repeating the two-beat ostinato pattern (see Figure 2.1, note that all figures in this document appear as part of a C score). My choice to orchestrate the piano line into a single vibraphone line stems from the mallet instrument's metallic and mechanical timbre. The persistent repetition of the ostinato, the consistent tempo, and the timbre of the vibraphone symbolize the inner workings of a machine in Part 1.

I accompanied the ostinato with a six-beat tail in the piano score (see Figure 2.1 - m. 5-6), in which the rhythm and contour of the ostinato pattern are filled in, becoming consecutive sixteenth notes rising to an 8th note peak. The cycle between the ostinato and the tail forms the primary building block of Part 1, which is constructed by combinations of the ostinato and its tail. As the musical material of the ostinato tail is developed later in the score and acts as a motif, I will refer to the tail from this point as Motif 1.

My effort in creating music representative of a machine is also reflected in the harmony of the ostinato. While maintaining a clear tonal center at c'', the ostinato leaps to g'', followed by a d'' and f'' in succession. This harmonic motion roughly resembles a repetitive cycle between a C major chord and a D minor chord. However, such motion is not functional in a standard harmonic progression. This is significant because such a static harmony symbolizes the repetitive motion of a mechanical device.
Upon orchestrating the piano outline, I reviewed Section A and realized the potential of utilizing the new timbral colors of the wind ensemble score in order to better fulfill the first goal of establishing an ostinato that persists throughout the piece. I realized that, by adding additional material from the winds and brass, the ostinato would persist more effectively with the listener experiencing a greater timbral and thematic variety. I wanted to balance the listener’s experience on a fine line between persistence and the tedium of repetition. Therefore, I composed Motif 2 (m. 21 - played by bass clarinet and marimba – bass clef) in Section A (see Figure 2.2) as a means to introduce the winds and brass earlier in the piece in order to maintain the attention of the listener.

For the first two cycles of the ostinato and Motif 1, I allowed the material to persist with light percussion accompaniment. However, on the third cycle, I superimposed Motif 2 over Motif 1 (m.21 – played by flute, marimba – treble clef, and vibraphone) in order to contrast the sparse ostinato (m. 17-20) with a dense, polyphonic response (m. 21-22 - see Figure 2.2). Such a busy response allowed the ostinato to persist more effectively by distracting the listener with new material. The layering of Motif 1 and Motif 2 inspired me to extend what was initially a six-beat tail into a densely textured phrase to end the section (see figure 2.3).
Figure 2.2 Wind Ensemble Score: The Superimposition of Motif 1 and Motif 2
Figure 2.3 Wind Ensemble Score: Section A Ending Phrase
Section B

In Section B, I satisfy the conditions of the first and second goal. As the first goal demanded the persistence of the ostinato, I continued the two-beat pattern on the vibraphone for the duration of the section. The second goal was the establishment of various motifs over the ostinato. Therefore, I introduced Motifs 3 and 4 over the vibraphone line.

Following the orchestration process, Section B required far less additional composition than did Section A once it was orchestrated. Section A required additional composition to the point of my creating a new motif in order maintain attention from the listener and allow the ostinato to persist while generating interest. On the contrary, when I orchestrated Section B into a wind ensemble score, the section maintained its role in regard to the first and second goal. A comparison of Section B from the piano score version versus the wind ensemble version clearly demonstrates a similarity in which the ostinato persists and Motif 3 (m. 25 – bass clef of piano score; m. 40-42 – bass clarinet in wind ensemble score) and Motif 4 (m. 26 - bass clef of piano score; m. 43 – tenor saxophone and horn in wind ensemble score) are clearly established (see Figures 2.3 and 2.4).

![Figure 2.4 Piano Score – Section B](image)
Figure 2.5 Wind Ensemble Score – Section B
Motif 3 represents the deterioration of the machine due to its legato quality which contrasts the ostinato. While the ostinato establishes a mechanical rhythm consisting of eighth and sixteenth-note motion, Motif 3 breaks such a mold. The lyrical motif contains several sustained pitches forming long and sweeping melodies throughout the variations and elaborations of Motif 3 during Section B. Motifs 1, 2, and 4 are more mechanical, do not contain such lengthy note values, and are not used to create lyrical lines. Thus Motif 3 may be seen as the motif most representative of the corruption of the established machine. Motif 3, in Section B, foreshadows the ultimate destruction of the machine as the lyrical melodies constructed by the motif dominate the foreground of Section F, in which the machine malfunctions beyond the point of no return and transitions into Part 2.

**Section C**

Following the lyrical melodies contrasting the ostinato in Section B, I reestablished the mechanical pattern in Section C with the flute, oboe, and marimba in accordance with the first goal of perpetuating the ostinato throughout the score. I intended for the octave doubling between the marimba and the wind instruments to firmly project the line, making it the primary focus of the music. The rapid accompanying figures played by the clarinet, tenor saxophone, baritone saxophone and bassoon provide a fresh musical context allowing the ostinato to persist while maintaining interest of the listener (see Figure 2.6).

Section C also satisfies my second goal, to introduce motifs over the ostinato, by introducing Motif 5. The bass clarinet, bassoon, baritone horn, trombone and tuba, in octave and unison, project the new motif over the busy activity consisting of the ostinato and the woodwind accompaniment (see Figure 2.7). Though Motif 5 contains a similar lyrical quality to Motif 3 and is certainly representative of the deterioration of the ostinato machine, it does not reappear as the focus of Section F. Motif 5 is therefore not considered a foreshadowing motif in the same manner as Motif 3.

This is not to say, however, that Section C does not foreshadow later material. The woodwind accompaniment is similar to the main motif of Part 2 in terms of rhythm and contour. These continual
rapid lines that form Part 2 signify the machine going haywire. While the machine has not broken down by Section C, it is certainly in worse shape than it was in Section A. The rapid woodwind accompaniment foreshadows Part 2 and symbolizes the increasing decay of the machine in Section C.

Figure 2.6 Wind Ensemble Score – Section C Woodwind Accompaniment
Figure 2.7 Wind Ensemble Score – Section C: Introduction of Motif 5
Section D

I began to address the third goal in Section D: to combine and rearrange the five motifs such that the piece gradually builds from a single ostinato line into a climactic ending section. This was a departure from the role of Sections A, B, and C, which was to operate in accordance with my first two compositional goals: To establish an ostinato that persists for the duration of the piece and to introduce several motifs over the ostinato. While the busy woodwind accompaniment and powerful brass melodies of Section C signify a gradual build from Sections A and B, the section only introduces new material and does rearrange pre-existing motifs. Section D marks the first section that I began developing existing material by recontextualizing the five motifs.

Recall that, in Section A, I superimposed Motifs 1 and 2. I do the same in Section D. This time, I used the combination of Motifs 1 and 2 to build the excitement of the music by introducing the tom-toms as rhythmic accompaniment (see Figure 2.8). This timbral and textural addition to the earlier motivic combination helps Section D satisfy my third goal of reusing old motifs in a manner that builds towards a climactic ending section.

The reuse of Motif 3 also builds tension and excitement in Section D as it is played by the horn, trombone, and trumpet. This motif was originally played by the mellow bass clarinet in Section B. The use of brass instruments for Motif 3 in Section D increases the excitement of the section. Similarly, Motif 4 is also played by louder brass instruments in Section D instead of saxophones in Section B. This motif is also extended into a two-measure phrase to end Section D (See Figure 2.9). Prior to Section D, Motif 4 only sounded for durations of one to three beats. This new context of the motif contributes to the gradual buildup of the piece.

By Section D, the malfunction of the ostinato machine is significant. While the ostinato persists throughout the section, there are no measures in which it acts as the only musical activity. All five of the motifs, which represent the machine’s deterioration, are recycled in a busy Section D, in which the prominence of the ostinato is far removed from that of Sections A, B, and C. As the tension of the music increases, the function of the machine deteriorates.
Figure 2.8 Wind Ensemble Score – Superimposition of Motifs 1 and 2 with Tom-Tom Accompaniment

Figure 2.9 – Wind Ensemble Score – Extension of Motif 4
Section E

I continued the decline of the ostinato into Section E. The dense musical activity from Section D is maintained during Section E while the ostinato is broken into pieces. Although the marimba ostinato maintains its steady rhythm, there is significant change in register between select notes so that the contour of the ostinato becomes extremely disjunct (see Figure 2.10). Thus, I perpetuated the ostinato in accordance with the first goal, while I pushed the machine closer to its destruction.

Figure 2.10 Wind Ensemble Score – Ostinati of Section E
Section E is the only section in Part 1 that did not appear as an independent section in the piano score. Section E was originally a two-measure lull at the end of Section D designed to let the music breathe before it took the next step into the climactic Section F. Following the orchestration process, in which I changed Section D into a palette motivic development, the transition into Section F sounded forced. This transition demanded more material before reaching Section F.

The two-measure lull at the end of Section D was therefore expanded into Section E. The increased activity of Section D left no room for a lull before Section F. In addition to transforming the ostinato into a disjunct figure to begin Section E, I also superimposed Motif 2 (played by the trombone) as its own ostinato to accompany the ostinato machine (see Figure 2.10). The addition of Motif 2 worked as a fresh ostinato figure that further deteriorated the function of the machine. While there are several new melodies exclusive only to Section E, I further developed Motif 3 using small snippets to foreshadow Section F, in which the motif takes center-stage. The last measure of Section E is a four-beat variation of Motif 3, composed only of sixteenth notes, that successfully leads into Section F.

Section F

Early in my process of creating a piano score, I composed the material of Section F to be the climactic ending section described in my third goal. This section marks the first time in the entire piece that the ostinato entirely disappears. The absence of the ostinato signifies the point of no return regarding the deterioration of the machine. Motifs 2, 3, and 4 are at their strongest, in terms of intensity, while lacking the accompaniment of the ostinato machine. The story of an established machine gradually malfunctioning, was supposed to end at Section F.

However, my expectation to complete the piece at the end of the section fell short once I finished orchestrating the piano score into the wind ensemble score. Much of my reasoning for this was intuitive. The piece simply felt incomplete once Section F ended.

I waited until I completed the compositional changes to Sections A-E, described earlier in this chapter, before deciding how to address the unsatisfying ending of Section F. I realized that there was no
quick fix. I could not simply sustain the final harmony into an ending cadence. There was no way around it: the music demanded more material.

At this point, I completed my first two goals of establishing an ostinato and introducing motifs. I only partially satisfied the third goal by recycling the motifs. The climax was not complete. My instincts would not allow the piece to end at Section F. Upon this realization, I turned to my musical intuitions. With significant professional experience as a guitarist in improvisation-based bands, I decided to use the skills I learned from such context in order to generate a suitable ending for the piece. Chapter 3 will discuss my significant departure from the compositional approach of Part 1 as I created Part 2 of \textit{Contritum Machina}.

\section*{Summary of Part 1}

According to Pulitzer-prize winning composer Roger Reynolds, “At the most elevated level (of a musical work)... there is form; at the most basic, material; and mediating in the middle there is method, the means by which the composer transforms the small into the large…”\footnote{Roger Reynolds, \textit{Form and Method: Composing Music: The Rothschild Essays} (New York: Rutledge, 2002), 5.} Chapter II of my thesis document addresses the middle level, method, of Part 1 of \textit{Contritum Machina}. My method of composing with an outline, dictated by three compositional goals, served as the progenitor for the form and material of the finalized wind ensemble score. The macro and micro elements of my piece stemmed from this “middle level.”

Once I established the ostinato machine in accordance with the first goal, the introduction and development of five motifs towards an ending climax defined the story of the machine’s malfunction. Therefore, the key to understanding Part 1 is through the context of a motivic analysis in which motifs contrast an ostinato and represent the deterioration of a machine. Chapter II is certainly a motivic analysis as it involves “first, identifying the melodic motifs within a work, second, describing how the motifs are varied or developed throughout the work, and finally, determining the function of motivic development.
within the structure of the work as a whole.” The chronological motivic analysis of Sections A-F in Part 1, in the context of three overarching compositional goals, maximizes the explanation of the story told by the motifs.

The material of Part 1 satisfies the first two goals I established in the outline at the beginning of my compositional process. I established an ostinato that served as a framework, and I wrote and developed a set of motifs that built towards a climax. I owe much to the completion of this process to my academic studies. My knowledge gained from music school allowed me to tell a focused story through motivic development. I composed a piano outline dictated by compositional goals, and successfully transformed it into a wind ensemble score. However, upon reviewing my work, I realized that my third goal was not achieved. My musical instincts developed through years as a professional guitarist performing improvisational music led me to the conclusion that I needed a more fitting ending to the work.

I began composing Part 2 with the hope of achieving the third goal that was left wanting at the end of part one: to build to a suitable climactic ending. I simultaneously composed and orchestrated Part 2 using my intuition to push the tension of the music towards a greater climax and more satisfying ending. It was at this point that Contritum Machina began to symbolize a culmination of my skills and musical influence from both academic and professional settings. Chapter III of my thesis document will detail this shift in compositional methodology.

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Chapter III:
The Compositional Process of Part 2 of Contritum Machina

Part 2 focuses solely on my third compositional goal: the buildup to a suitable climactic ending. Aside from this demand to elevate the energy and intensity from Section F, the compositional process of Part 2 was open-ended. The lack of a piano outline and goals regarding motivic development gave me room to draw upon my instincts as an improver. In a 1980 interview in London, film composer John Williams denied the use of any predetermined formula in his work.\(^4\) Over thirty years later, during a 2014 interview in Los Angeles, Williams described the compositional process for his film scores as “intuitive” and akin to sculpting in which the final product “reveals itself.”\(^5\) In this interview Williams clearly states that he does not know how his compositions will unfold until he makes discoveries after sustained exploration. Such a process is certainly descriptive of my approach in composing Part 2 of Contritum Machina. The first result of this new freedom was my creation of a short melodic pattern (see Figure 3.1). As I developed this pattern into the sections of what I now call Part 2, I noticed functional similarities with the ostinato of Part 1.

\[\text{Piano} \quad \begin{array}{c}
\begin{array}{cccc}
\text{d} & \text{f} & \text{a} & \text{d} \\
\text{c} & \text{e} & \text{b} & \text{d} \\
\text{f} & \text{#b} & \text{#b} & \text{d} \\
\text{f} & \text{#b} & \text{b} & \text{d} \\
\end{array}
\end{array} \]

\(\text{Figure 3.1 Piano Reduction: Part Two Melodic Pattern}\)


While the two parts of *Contritum Machina* employ different compositional techniques, both were expanded into their current form through the repetition of basic melodic figures. In Part 1, a single ostinato served as the backdrop for motivic development. Part 2 is also built around what may be considered an ostinato.\(^6\) However, the difference between the two building blocks for Part 1 and Part 2 is that the ostinato of the first part is constantly repeated with little to no rhythmic, melodic, or timbral variation. The “ostinato” in Part 2 sees consistent changes in timbre, rhythm and melody. The figure is also significantly developed in Sections H and K while the Part 1 ostinato remains almost identical throughout the first part. Therefore, I shall refer to the building block of the second part as the Part 2 “melodic pattern.”

The rapid motion of the melodic pattern, in conjunction with the increased tempo of Part 2, represents the meltdown of the ostinato machine. Such intensity contrasts the controlled motivic development in Part 1 that symbolizes a *gradual* decay of the machine. By Part 2, the slow deterioration of the machine has reached a breaking point. This section represents a broken machine and leads me to imagine a smoking, sputtering device with pieces of the machine becoming projectiles around the general vicinity.

The absence of gradual motivic development in Part 2, in comparison to Part 1, is reflected by the stark sectional changes as the second part follows a small rondo form (A, B, A1, C, A2 corresponding to Sections G, H, I, J, and K). While the persistent Part 1 ostinato functioned as a smooth, overlapping connection between the sections of the first part, the contrasting sections of Part 2 are clearly divided. Sections H and J break from the Part 2 melodic pattern dominating Sections G, I, and K. The result of this form is that Part 2 fulfills my third goal by building in tiers (three rising tiers corresponding to Sections G, I, and K) to a climactic ending. Chapter III is a chronological discussion of its five sections in the context of satisfying my third and final goal by reaching a conclusive musical peak using a tier-based buildup.

Section G

Section G is the first tier of the buildup in Part 2 and establishes the melodic pattern of the second part while perpetuating the intensity of Section F at the end of Part 1. I organized the pattern into two 13-beat phrases to begin the section (see Figure 3.2). These phrases (m. 103-110) and their closely related variations are repeated many times throughout Part 2 and provide significant rhythmic and harmonic contrasts to Part 1. Such contrasts symbolize the change from a functioning machine at the beginning of the piece to its broken state in Part 2.

In addition to being played at a much faster tempo than any material from Part 1, these 13-beat phrases are asymmetrical while Part 1 was almost entirely in the symmetrical time signature of 4/4. Another aspect of Section G that provides even further rhythmic contrast to Part 1 is the variations of the beat-count in the successive repetitions following the initial 13-beat phrases. The third repetition, for example, is 15 beats in length (m. 111-115). The fourth repetition of the phrase (m. 116-121) is 17 beats in length. After the fifth repetition (m. 122-125) returns to its original 13-beat length, the sixth repetition (m. 125-132) is extended to 19 beats. The seventh and final repetition of the phrase (m. 133-136) is 15 beats.

The differences in harmony between Part 1 and Part 2, established in Section G, are another representation of the machine’s destruction. The chordal jabs (best described as pitch clusters rather than functioning chords) of Section G, which provide a counter musical line to the melodic pattern phrases, and are much more dissonant than the material of Part 1: After the musical lines of Section F conclude on the downbeat of measure 103 with a tone cluster, another cluster occurs on beat two of measure 104, followed by another cluster in measure 106. The second two clusters are subsets of the first cluster; the second chord is missing the D and the third omits a G. These dissonant harmonies do not go away in Part 2; their prevalence, in fact, increases in successive tiers, making Part 2 more dissonant by the end of the piece.
Figure 3.2 Wind Ensemble Score – Section G: Initial 13-Beat Phrase
Section H

Rather than continuing the tension of the previous section, I composed Section H (corresponding to the B section of small rondo form) as a contrast to the material in Section G before continuing to the second tier (Section I) of the buildup in Part 2. This contrasting section is only eight measures in length and is a variation of the melodic pattern established in Section G. While the pitches of the pattern are altered, the contour remains similar and the note values are doubled. Section H is monophonic, with the entire wind and brass choirs playing the single melody in unison (see Figure 3.3). Such significant differences in Section H allows the rapid and dense music of Section G to breathe before similar material returns in Section I.

![Figure 3.3 Piano Reduction: Section H Melody](image)

Section I

In addressing the third compositional goal of *Contritum Machina*, Section I is the second out of three tiers forming the buildup, in Part 2, towards an ending climax. This section corresponds to the A1 section of small rondo form and is therefore a return to the material established Section G. While the primary melodic pattern of Part 2 is reasserted in Section I, the elevation in tension from the first to second tier of the buildup is reflected in this section by the development of the chordal jabs from Section G.

While such tutti strikes exist as sparse accompaniment in Section G, I organized them, in Section I, into a consistent pattern countering the main melodic pattern (see Figure 3.4). My idea of countering a
rapid, legato line with a staccato line is similar to various sections in Igor Stravinsky’s *Rite of Spring*. Although this legendary composition contains many more sections than *Contritum Machina*, and reaches several climaxes, its influence on my work is undeniable. There are four climaxes in particular in which rapid motion is countered by a series of dissonant staccato chords in a manner that propels the momentum of the music. The difference between such employment of contrasting musical lines between my work and *The Rite of Spring* lies in the phrasing and organization of the chordal jabs. I organized these tutti chords in Sections I and K into a repetitive rhythmic pattern with little variation. Stravinsky used these chords in a less predictable manner with the likely intent of surprising the audience each time there is a tutti strike. The main result of such a difference in phrasing is that most areas in *Rite of Spring* that see a legato line countered by a staccato line are short-lived (see Figure 3.5). These moments cap off several minutes of prior development in Stravinsky’s work while they act as the development in *Contritum Machina*. Such development elevates the intensity of the music towards a suitable climactic ending in fulfillment of my third and final compositional goal.

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7 Igor Stravinsky, *Rite of Spring*, (New York: Dover, 1989), 29-31, 42-44, 74-79, 84-85. All four of these sections end at a musical peak and involve rapid, continuous motion countered by dense, staccato harmonies.

8 Kim Jeongyeon, “The Rite of Spring (With Piano 4 Hands Score),” August 2019, YouTube video, accessed May 8, 2020, https://www.youtube.com/watch?v=7_u2MtwEaRU. This frame appears in the video between 7 minutes and 40 seconds, and 7 minute and 50 seconds.
Figure 3.4 Wind Ensemble Score - Section I: Part Two Melodic Pattern Countered by Staccato Melody
Figure 3.5 Section I: Part Two Melodic Pattern Countered by Staccato Melody
**Section J**

Before I reached the concluding third tier of the buildup in Part 2, I added another section of contrasting material. Corresponding to the C section of the small rondo form, Section J is the second section of Part 2 serving to contrast Sections G, I, and K (acting as the A sections of the small rondo form). The difference between Section J and Section H (the contrasting B and C sections of the small rondo form) is that Section J retains the motion established in the prior section while Section H drops all the rapid motion and serves as a slower, monophonic interlude.

While I used a variation of the Part 2 melodic pattern in Section H to contrast the A and A1 sections of the small rondo form (Sections G and I), my intuitions led me compose entirely new material for Section J. In addition to acting as a bridge that perpetuates the motion of Section I into Section K, the harmony of Section J sustains the dissonance of the second tier and continues it into the third tier of the Part 2 climactic buildup. I accomplished this by focusing using tritone harmonies in the driving woodwind lines of the section (see Figure 3.6). It was my intention to create one final break from the Part

![Figure 3.6 Wind Ensemble Score – Section J Tritones: Augmented 4th - m. 174, Diminished 5th - m. 17](image-url)
2 melodic pattern by continuing the motion and dissonance of the preceding material into the finale of the piece. Section J serves as an effective platform for Section K, the climactic section of *Contritum Machina*.

**Section K**

In composing Section K as the third and ultimate tier of the Part 2 buildup, I successfully fulfilled my final compositional goal and ended *Contritum Machina* at a concluding musical peak. Section K is similar to Section I because the tutti staccato line returns to contrast rapid musical lines in near-identical fashion. This was my intention regarding the beginning measures of the section. In reestablishing familiar material, I created room to use the audience expectations as a foundation for altering the ending phrases of such material, and thereby reaching the climax of *Contritum Machina*.

I developed the phrases to end Section K dividing the Part 2 melodic pattern into two segments (see Figure 3.7). I then superimposed these two segments and created a dense, driving texture reinforced by bass drum and crash cymbal accompaniment (see Figure 3.8). The harmony of this ending phrase progresses through several dissonant, non-functional pitch clusters until reaching the climax. In the short aftermath, I used variations of the Part 2 melodic pattern to reach an ending cadence (see Figure 3.9).

![Figure 3.7 Piano Reduction: Division of the Part Two Melodic Pattern](image-url)
Figure 3.8 Wind Ensemble Score – Section K: Climactic Phrase
Summary of Part Two

I composed Part 2 of *Contritum Machina* with the sole focus of completing my third compositional goal: to create a musical buildup to an ending climax. This was not my original plan when I composed the piano outline. Section F was designated to be the concluding musical peak of my work. By the time I orchestrated the outline into the wind ensemble score, I certainly satisfied my first two goals: establish an ostinato and establish several motifs over the ostinato. However, when reviewing my work, I could not ignore the lack of closure at the end of Section F. Therefore, I began writing Part 2 with the intent to remedy this deficiency.

I employed a different compositional process when creating Part 2. There was no outline, and my only established boundary was the necessity to reach an ending in accordance with my third goal. During the creation of the second part, I relied on intuition in order to generate new material. As a result, Part 2 reflected music I played and composed as a guitarist for improvisation-based “jam bands.” The music I created in such a setting forms the bulk of my experience as a professional musician prior to pursuing music at an academic level. The resulting form of Part 2 contains obvious similarities to such music.

I only realized after the fact that the structure of Part 2 may be defined as a small rondo form (A, B, A1, C, A2). The idea of establishing an anchoring musical idea interspersed with contrasting sections is not uncommon among improvisation-based music. Contrasting sections are often utilized as platforms for improvised solos among band members before a return to familiar material. An example of a song structured in such a format is “The Emperor’s Cyclical Disco” by Tree No Leaves. The bass guitar player of the band confirmed that the song, among many others written by the band, is “fully orchestrated, save for the sections where they purposely create space for improvisation.” Obviously, all sections of *Contritum Machina* are fully composed. However, there is no denying that my intuition, largely developed by playing music containing improvisational sections, led me to structure Part 2 in a similar

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fashion. Despite my composition existing as a score without the demands for improvised sections, I establish the melodic pattern in Part 2 as a dominating theme, and then counter the theme with sections of entirely new material. I did not plan to structure the music in such a way. The process was almost entirely organic.
Chapter IV: Conclusion

Contritum Machina tells the story of a malfunctioning machine. The two parts of the composition represent the stages of this decline. Part 1 introduces a well-functioning mechanism before expressing the gradual deterioration of the device into a state of disrepair. The transition into Part 2 marks this point of no return as the machine continues to suffer irreversible damage and eventually ceases to function.

The ostinato established at the beginning of the piece symbolizes the machine. Its initial prevalence over the accompanying material reflects the functioning state of the machine. The motivic development over the ostinato is representative of the mechanical decay. This process is gradual because the motifs are initially introduced in sparse intervals. Over time, the motifs are developed and reintroduced into combinations forming dense textures. Eventually the ostinato is smothered by the motifs. The breaking point in the machine’s functionality takes place in Section F, where the ostinato ceases entirely, and the motifs are at their most prominent.

My construction of this musical story began when I composed a piano outline dictated by three compositional goals: 1.) To establish an ostinato that persists throughout the piece 2.) To introduce several motifs over the ostinato 3.) To develop the motifs so that the music gradually builds to an ending climax. Part 1 of the wind ensemble score was created when I orchestrated the piano outline while attempting to maintain the integrity of these three goals. I succeeded in completing the first two. Upon reviewing the orchestrated score, however, I was unable to ignore the unsatisfying ending to my piece.

I responded by employing a different compositional method in the creation of Part 2. I used no outline, and my only parameter was to complete the ending on the terms of the third goal. The result of such freedom was that I relied on my basic instincts. I created the Part 2 melodic pattern with no idea how the rest of the second part would unfold. It was only after I completed the piece that I was made aware of Part 2 adhering to small rondo form in which the three A sections acted as rising tiers to a concluding
musical peak. The final result of *Contritum Machina* was a two-part composition in which I used a different process to complete each part.

It is difficult for me to determine which compositional approach is superior. Both are valid ways of composing a piece. It seems the use of either method can be beneficial depending on the practical purpose of the score. My examples of John Mackey and John Williams earlier in this document show that both methodologies may be quite effective.

When comparing the approaches of Williams and Mackey, it is worth considering the purpose of their scores. Williams composes film scores and cites the emotional response of the audience as his primary concern.\(^\text{11}\) Mackey is a concert composer and discusses his creative technique in the context of the demands accompanying his commissions. One purpose in creating preliminary structures is to satisfy predetermined durations of his compositions.\(^\text{12}\) He also describes stylistic requests such as ballads, dances, or symphonies as another reason to fully outline his works before writing notes. Williams’ comparison to a sculptor slowly discovering his final product through small changes is a complete reversal of Mackey’s allusion to an architect who completely conceptualizes a structure before adding the fine details at the end of the process. Therefore, in assessing the use of the two compositional processes employed in *Contritum Machina* for future works, I must consider the practical application of my scores.

I composed *Contritum Machina* in order to satisfy the requirements of my thesis project. In essence, it is a theoretical work as I did not write the score with a specific group in mind, such as the UT Wind Ensemble. The outcome of this piece is a synthesis of my compositional knowledge upon completion of a master’s degree. However, the reason I chose a wind ensemble instrumentation for my thesis project is due to my aspiration of composing for school bands upon the completion of my studies.

My path towards becoming a professional band composer began in 2017 when I was commissioned to write a short work for the Charlotte Country Day School Concert Band. The resulting product was a three-and-a-half-minute piece titled *Congaree Drifter*. The creative boundaries of this

\(^{11}\) Oscars, “John Williams on the Power of Film Music.”

composition amounted to the request for a short duration, and consideration of the technical limitations of performers in a high school concert band performing a Grade-3 band composition. Given such parameters, I composed intuitively and did not use an outline. I focused on creating catchy and memorable melodies that were playable for high school students.

In contrast, I composed Contritum Machina while imagining a top-level college wind ensemble performing an eight-minute work. I chose to write a piano outline with three specific goals in order to guarantee that my thesis composition was longer and more substantial than Congaree Drifter. The necessity for a larger and more complex work led to my use of a predetermined structure. This was my first time composing a piece of music with such an extensive outline.

In the future, I am likely to rely primarily on my intuition to compose band pieces. Stylistically, I enjoy writing compositions rooted in popular music rather than art music. Such a preference definitely stems from my time as a guitarist in a jam band writing music tailored for simpler tastes than that of art music audiences. This does not mean I am opposed to composing contemporary classical music or using pre-determined forms. My time in music school has cultivated my taste in art music and I feel a unique sense of satisfaction when creating music with the goal of pushing stylistic boundaries. However, it is my desire to focus on composing band music for middle and high school bands.

Contritum Machina is a synthesis of my professional and academic experiences. While I plan to develop a career composing accessible band music following my instincts developed as a live guitarist, I will also draw upon my experience as a composition student writing art music. Contritum Machina certainly classifies as art music by telling a story through motivic development within a rigorous pre-determined structure in Part 1. However, it also contains a substantial element of popular music reflected in the looser, intuitive-driven structure of Part 2. As I pursue a career rooted in popular music, the skills and knowledge I gained as a graduate student will certainly continue to influence my music for the rest of my life. The experience of composing Contritum Machina showed me the value of drawing from multiple sources to achieve my compositional goals.


https://www.youtube.com/watch?v=DMTj0_5UOYs.


https://www.youtube.com/watch?v=wErVYVkiGw.


https://www.youtube.com/watch?v=_heFn4nmScI&t=187s.


Contritum Machina
for Wind Ensemble

J. Adam Whitlark

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2020
INSTRUMENTATION

Piccolo
Flute
Oboe
Clarinet I in Bb
Clarinet II in Bb
Bass Clarinet in Bb
Bassoon
Alto Saxophone in Eb
Tenor Saxophone in Bb
Baritone Saxophone in Eb

Trumpet in Bb
Horn in F
Baritone Horn
Trombone
Tuba

Cymbals
Triangle
Claves
Marimba
Vibraphone
Tom-Toms
Bass Drum
## Contritum Machina

**Transposed Score**

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\[ j = 72 \]

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J. Adam Whitlark
VITA

Adam Whitlark is currently a graduate student pursuing his Master's of Music in Composition and certificate in Music Theory Pedagogy at the University of Tennessee, Knoxville. Adam completed his Bachelor's of Music Composition and Bachelor's of History at College of Charleston in 2016. Born in Columbia, SC in 1993, he grew up playing the electric guitar. Prior to his graduate studies, Adam was a guitar instructor and performer in Charleston and Columbia. Since formally studying composition, he has written works for The University of South Carolina Graduate String Quartet, Atlantic Music Festival Orchestra, Charlotte Country Day School Concert Band, University of Tennessee Vocal Studio and Charleston Contemporary Ensemble, among other groups.