Composition Summary

A Document

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

Master of Music in Music Technology

Composition Track

By

Rebecca F. Rhodes

Valley Forge Christian College

Phoenixville, Pennsylvania

[May 2013]

Composition Summary

A document submitted to the graduate school

in partial-fulfillment of the requirements

for the degree

Masters of Music in Music Technology

by

Rebecca F. Rhodes

APPROVED BY SUPERVISING COMMITTEE:

_____	_____
Supervisor: [Name typed under line] [omitting Ph.D. or Dr.]	Date
_____	_____
Committee Member: [Name]	Date
_____	_____
Committee Member: [Name]	Date
_____	_____
Committee Member: [Name]	Date

Valley Forge Christian College

Phoenixville, Pennsylvania

[May 2013]

Copyright

by

Rebecca F. Rhodes

2013

Table of Contents

Table of Contents

Chapter 1 – Introduction

What are the secrets to attracting an audience to one's original music? Can an effective work be written solely from luck and inspiration, or are there rules to follow?

Throughout history, artists and musicians have analyzed the works of the masters to fathom how to reach a wide audience and make them want to come back for more. This was also my goal as I embarked on a year of studying music composition. The purpose was to become a more effective composer in my own right, and also to become a better teacher of composition for my high school students.

We have heard the statement attributed to Thomas Edison that "Genius is one percent inspiration and ninety-nine percent perspiration." Whether or not this actually came from Edison, the concept can be applied to music composition. Some think that composing music is a matter of chance or inspiration – something that just comes to you and somehow transforms into a full-length work. That may happen sometimes, but I have learned that most of the time, composing is more than simply producing a great idea. It may start with that, but you have to listen to music, study the works of the masters, and learn the craft of composition to be able to take that first idea and create something cohesive and exciting.

I had the opportunity to explore music composition through the master's program at Valley Forge Christian College and studied with Dr. Scott Watson, a respected composer and teacher in the Parkland School District. Dr. Watson shared time-tested strategies for composing in any genre while, focusing on concepts that one can use to create effective and adventurous music. He challenges his students to stretch their imagination, moving past traditional harmonies, forms, and tonalities into areas that may be a bit less comfortable and more daunting - to have a bite of twentieth century flavor. From his guidance, I have learned how to transform a small musical idea into a full-length, work

that is exciting and cohesive. I have stretched my borders from comfortable, traditional harmony, tonality, and form to using the ideas of the masters of the late Romantic and 20th centuries. I have learned that once you learn the rules for composition, they can be broken, as long as it is still intuitive to the listener.

The intent of this study is to explore the craft of composing with a focus on historical origins, works of the masters from each historical era, and techniques for transforming past strategies into my own works.

Chapter 2 - Review of Related Literature

I entered this master's program with a strong background in music theory, years of experience in directing both instrumental and vocal ensembles of all sizes, and extensive knowledge of works by the masters of vocal and instrumental music. In studying composition with Dr. Watson, we stretched use of the musical elements, with a focus on melody, form, tonality, and harmony. There was one guiding question throughout the process: How to take the traditional, comfortable elements of pre-20th century music and transform them into a more adventurous compositional style? To answer this question, it was necessary to understand the music of the master composers of the past and today - Aaron Copland, Maurice Ravel, Percy Grainger, Gustav Holst, Igor Stravinsky, Eric Whitacre, to name just a few, and to determine how to use their musical ideas as inspiration for original compositions. This study of related literature focuses on three concepts explored during this year of composition: Methods of 'borrowing' from the masters, the development of musical form, including how

composers were able to create something great out of just one small idea, and the development and transformation of harmony and tonality from traditional to something more adventurous.

As a starting point to the compositional process, it was necessary to analyze the works of the master composers and even to borrow ideas. Interestingly, there is a history of borrowing existing ideas as a basis for new works, not only in music, but in literature, architecture, and the visual arts. Many composers based new works on ideas that were not their own. It is a sign of a composer's creativity – the ability to visualize the potential of a musical idea and to adapt it for different uses. In fact, all music is based on something that happened earlier, whether it is a small figuration or chord progression, or a genre, style, or aspect of harmony. I found myself doing what seems to be commonly done - analyzing the works of the respected composers, and transforming their ideas in ways that become my own. It could be taking motives or fragments of melody or rhythms and reworking them in a new context, thus changing the effect, or borrowing harmonic ideas and themes and transforming them into something fresh and new. The description of my original works will include a discussion of how I used the works of other composers as a catalyst for my own compositions.

At the heart of any composition is an organizing element. All of the elements in a piece of music need to be organized in a manner that is coherent to the listener. Musical form provides the structure and design of a composition. If a composer wants to take a musical idea and convert it into something new and cohesive, it is necessary to have an understanding of musical form. It was the first discussion that occurred at the beginning

of the study of composition with Dr. Watson. We discussed the importance of formal structure, and how one kernel of an idea can be transformed into something great using repetition and variation. In addition, Dr. Watson's constant mantra was to expand past the comfort zone, transforming traditional forms into something adventurous, but also made sense.

One statement that cannot be refuted is that form provides clarity and unity to music. Music is an art that takes place in time. In live performances, the listener cannot go back and re-listen to a detail, as can be done in painting or literature, where you can study details for any length of time. So, in music, the substitute for this characteristic is repetition – a pattern of sounds which is repeated. Repetition is the backbone of any great piece of music, but if used alone, it become tedious to the listener. Just as repetition is necessary, musical form also needs variety, and combinations of repetition and variation create different kinds of forms. In studying the works of the masters, I took a close look at their methods for taking a small idea – a motive - and turning it into something great.

The definition of musical form has been the subject of debate for centuries, because, although there are models for different forms, the art of composition is so flexible that, with each new historical era, it has been necessary to expand and build upon previous forms. In fact, form has been defined as referring not only to organization, but also in a biological sense. For example, Schoenberg, in his *Fundamentals of Musical Composition* says that "form means that a piece is organized: i.e. that it consists of elements functioning like those of a living organism…The chief requirements for the

creation of a comprehensible form are *logic* and *coherence*. The presentation, development, and interconnection of ideas must be based on relationship".

Through the centuries there has been enormous growth in the understanding of the principles of form, harmony and tonality, and in the mastery of applying those principles. I was told once that a conductor must have an encyclopedia of gestures. I believe it is the same with composing. You must build up an encyclopedia of ideas that work – a 'bag of tricks.' To become a composer of worthwhile music, you must have an understanding of the history and development of form, harmony, and tonality, for two reasons: first, to have new ideas to put into your bag of tricks, and second, to study how composers took the traditional concepts and turned them into something personal. So the study of the history and development of form, harmony, and tonality, and how composers used these items in their music is necessary, since we are a composite of everything that happened before us.

The sacred music of the medieval era was Gregorian chant, a single-line melody, monophonic in texture, and lacking harmony and counterpoint. The simple chant, with its free form and irregular phrase structure, served as the foundation from which sprung immeasurable advancements in melody, rhythm, harmony, and tonality.

Polyphony, which began to emerge at the end of the Romanesque era (850-1150), was the first step in new developments in rhythm, notation, and the beginnings of harmony. As soon as composers began to write for more than one voice, regular meters were necessary to keep the voices together, and a more exact notation system was needed to indicate precise rhythms and pitches. Organum, the earliest

polyphonic music, developed when a second voice was added above or below the original Gregorian melody at the interval of a fourth or fifth. Soon the individual voices began to move with greater independence in parallel and contrary motion. Leonin the 12th century composer and the first of which polyphonic music whose music is known to us, wrote the *Great Book of Organum (Magnus liber organi*), music for the entire church year. His successor, Perotin, in the early 13th century, expanded organum by increasing the number of voices parts to three and four. As polyphony developed, from Gregorian chant through the Renaissance, composers used modes, which served as the tonal basis of composition for a thousand years.

The next development occurred at the end of the thirteenth century when musicians began to write new texts for the upper voices of organum. This became the Medieval Motet, the most important form of early polyphonic music, and an example of how Medieval composers did what we still do today – based works on what was done in the past. A fragment of Gregorian chant was used, transforming the rhythm while keeping pitches intact. This served as the skeleton of the piece, to which they added newly composed countermelodies. Composers still do this today, taking folk melodies or hymns and transforming them into something new. In my woodwind quintet, "The Whistling Bishop," I borrowed one of my great-grandfather's favorite civil war songs, "Wake Nicodemus," and transformed it into something new. Australian-born composer Percy Grainger did this all the time, taking folk songs and turning them into works that mirror his own distinctive personality. An exceptional example is his reworking of English folk melodies in his six-movement *Lincolnshire Posy*.

At the beginning of the 14th century the Art Nova (new art) displaced the Ars antiqua (old art), as new developments in rhythm, meter, harmony, counterpoint emerged. As Renaissance tastes replaced the Medieval, some things stayed the same, such as the use of modes and the need for repetition and variation, while other transformations occurred. Repetition and unity is part of our human nature, and composers in each era had different methods for achieving this. Renaissance musicians used imitation, exchanging motives among vocal lines so the same musical idea is heard, in turn, in different voices. Imitation is an effective compositional device used by composers throughout history. Examples… I used imitation in theme B of my "Brass Quintet No. 1", developing it into something that mirrored my own compositional personality.

Even with the rise of Renaissance polyphony, composers of sacred music still based their music on Gregorian chant. The early polyphonic settings of the Mass were based on a piece of chant that became the cantus firmus, or the "fixed melody," and the foundation of the entire work. This provided a fixed element (repetition) that could be embellished (variation) with all the resources of creativity. The use of the cantus firmus in every movement helped to unify the mass even more. Guillaume Du Fay (1397 – 1474) was one of the earliest composers to use this style of writing, yet also hinted at developments that were to come. His music was more accessible, and his melodies and rhythms being well-defined and clear-cut, compared to the complexity of the 14th century. His harmony was simpler and more consonant, and foreshadowed the language based on triads and a sense of key that was to come. His *L'homme arme Mass* uses a popular secular tune as the cantus firmus for each section of the Mass, and features the

octaves and fifths of medieval music, but also thirds and sixths that were becoming popular.

The secular vocal music of the Renaissance featured a union of poetry and music which led to the chanson and the madrigal. By the early 16th century, poetic structures were freer, without set repetition patterns. Preeminent composers were Johannes Ockeghem, Guillaume Du Fay, Josquin des Prez. Instrumental dance music was often created from the madrigals and chansons, and featured types such as the pavane, saltarello, galliard, allemande, ronde, and the allemande, a German dance that retained its popularity through the time of Bach and was adapted into the Baroque dance suite.

Tielman Susato (1515-1571) published one of the most popular dance collections. The form was in three sections, AA BB CC, one of the most common forms still used today.

As musical tastes changed during the move to the Baroque era, (1600 – 1750), a new style, monody, arose, featuring solo song with instrumental accompaniment. There was a shift of interest from a texture of several independent parts (polyphonic) to one in which a single melody stood out over a foundation of simple chords (homophonic). This new music freed composers from the complexities of counterpoint. The style could be applied to short text, like a poem, and also to an entire drama – thus the birth of opera.

In Baroque harmony, chords were notated using figured bass, shorthand that allowed the performer to create the chords through improvisation, similar to jazz improvisation today . This system was known as basso continuo. Two instruments played

the accompaniment; one played the bass line on cello or bassoon, another filled in the harmonies on an instrument that could play chords, generally harpsichord or organ.

As interest shifted from counterpoint to a simpler style based on a single-line melody, the harmonic system grew simpler too, leading to one of the most significant changes in all music history – the establishment of major-minor tonality. The drive to the home pitch, the tonic, became the most powerful force in music; each chord could assume its function in relation to the key center. Composers of the Baroque learned to exploit the opposition between the chord of rest, the tonic, and the active chord, the dominant. This led to the movement – modulation – from home key to contrasting key and back, an important element in shaping musical structure, which, in turn, led to new forms for instrumental music that were larger than ever before.

The transition to major-minor tonality also led to *equal temperament.* In keyboard instruments - The scientific law of acoustics – first discovered by the ancient Greek philosopher Pythagoras – gave a pure sound in some keys but out of tune intervals in other keys. As instrumental music rose in prominence, it was more important to be able to play in any key. Experiments with tuning systems in attempts to achieve this goal led to a discovery – by slightly adjusting – tempering – the mathematically "pure" intervals within the octave to equalize the distance between adjacent tones, it became possible to play in every major and minor key without experiencing the out of tune sounds. This tuning adjustment is known as equal temperament and greatly increased the harmonic possibilities available to the composer. Johann Sebastian Bach demonstrated that he could write in every one of the twelve major and twelve minor keys – the result was *The*

Well-Tempered Clavier – a two-volume collection – each containing twenty-four preludes and fugues, one in every possible key. Equal temperament eventually transformed the major-minor system, making it a completely flexible medium of expression.

Later in the Baroque era, the rhythmic freedom of the monadic style gave way to vigorous, relentless, yet controlled beat -a prime trait of many late Baroque compositions. This provided freedom to focus on continuous expansion of melody, to start with a musical idea, and then spin out with wide leaps and use of chromatic tones that created highly expressive melodies. Baroque composers used dissonant chords more freely for emotional intensity and color. Subtle dynamic changes became apparent, although not purposely inserted in the music yet, but created by varied imitative voices and terraced dynamics in keyboard instruments. As musical instruments developed technically, there was a rise in the level of virtuosity, resulting in freedom for the composer to be more creative, resulting in the need for more advanced playing techniques.

One formal convention that developed in early opera is the da capo aria in ternary form (ABA), which brings back the first section with embellishments improvised by the soloist. Claudio Monteverdi, in his opera *The Coronation of Poppea*, uses a pattern of ABBA that foreshadows the da capo (ABA) aria which later dominated opera. He also injected into his operas an emotional intensity that was fresh to music, creating new effects such as string tremolo and pizzicato, dissonance, and instrumental color, changes of key and rhythm to portray passion and dramatic expression.

As tastes changed again during the shift from the Baroque to the Classical era (1725-1775), new ideas arose, and the old ideas faded away. Among the new trends was a desire arose to systematize all knowledge. Jean-Phillipe Rameau (1683-1764), the foremost French composer of the era, tried to establish a rational foundation for the harmonic practice of his time. His *Treatise on Harmony* (1722) set forth concepts that served as a basis for modern music theory. Composers in the Classical era explored fully the possibilities offered by the major-minor system and developed a new idea of beauty in music, a single melody line with simple chordal accompaniment – homophonic texture. As history tends to repeat itself, this development is similar to the contrapuntal complexities of the late Renaissance that gave way to early Baroque ideal of monody.

Classical music is based on simplicity. It is easy to sing with regular rhythms and meters. Melodies are simple, moving stepwise or by narrow leaps within a narrow range with symmetrical four-bar phrases marked off by clear cadences. Clarity is further enhanced using repetition and sequence, with the overall result being a balanced structure that is readily accessible to the listener. Classical harmony features largely diatonic chords firmly rooted in the key and based on the seven pitches of the major or minor scale. Changes are not confusing, following the balanced symmetry of phrases and cadence. The texture is generally homophonic, featuring a melody with accompanying harmony. The form is based on symmetrical phrases and clearly shaped sections marked by cadences that establish the home key, move to contrasting but closely-related key, and return to home key.

In the 16th and 17th centuries, instrumental compositions were usually short in length, such as a movement of a keyboard suite by Byrd or Purcell. By the 19th century forms such as the sonata and concerto were expanded and symphonic styles emerged that were developed using elements drawn from opera. From these advances was born the Classical multimovement cycle comprised of three or four movements. From around the 1750s through the Romantic era, many of the great masterworks of instrumental music such as the symphony, sonata, chamber music, and the concerto, were based on the multimovement cycle. The masters of the Classical musical style (Handel, Mozart, Beethoven, and Schubert) composed using these large-scale musical forms.

Each movement of the multimovement cycle is characterized by form and tempo. The first movement is usually in sonata-allegro form with three main sections, the exposition, development, recapitulation. During the exposition, the home key is established, modulates to another key, and then returns to the home key, providing for tension and release. Each key area is associated with a theme which can be developed. During the development, the themes are transformed, and then restated in the recapitulation. The second movement of the cycle is usually slow, using various forms including theme and variations or ternary. The third movement is a triple-meter dance – either a minuet and trio or a scherzo and trio. The fourth movement is fast and lively – often rondo or a return to sonata-allegro form.

In general structure, chamber music follows the four-movement scheme of the standard multimovement cycle. The composer adjusts the material to the particular combination of instruments, but underlying structure is mostly the same. The symphony

was one of the principal instrumental forms of the Classical era, and is generally set in the standard four-movement structure.

Within the multimovement structure, the characteristics of repetition and variation, harmony, tonality, and texture depended on the composer, who often borrowed from the works of others. Haydn's concise, angular themes and use of dense texture were good for motivic development. His String Quartet, Op. 76, No. 2 composed in 1797, owes a lot to the style of Mozart; Mozart and Haydn continually learned from each other. It is known as the *Quinten*, referring to interval of a fifth, because the opening theme features a repeated motive marked by a descending fifth. Mozart's melodies tended to be more lyrical and melodic, while Beethoven is also known for his use of motivic development. His techniques are an inspiration for my own music, as I focused on making the most of one or two small ideas.

Eighteenth-century composers considered the movements of the cycle as self-contained entities connected by key. The first, third, and fourth movements were in the home key, while the second movement was a contrasting key, but Nineteenth century composers wanted a more obvious connection between movements, a thematic link. This need was met by cyclical structure, in which a theme from an earlier movement reappears in later ones as a unifying thread, thus creating unity. Beethoven's *Fifth Symphony* displays elements of cyclical structure, each movement making reference to his famous opening idea. Mozart uses this structure in the four movements of his *Eine kleine Nachtmusick*. Cyclical structure satisfied the composer's need to create an extended instrumental while providing room for unity and variety.

Ludwig Van Beethoven had one foot in the Classical and the other in the Romantic Era. His compositional activity fell into three periods, which reflects the transition from Classical to Romantic. His first period replicated Classical elements inherited from Haydn and Mozart. His middle period displays characteristics more closely associated with 19th century including strong dynamic contrasts and longer movements. His third period features more chromatic harmonies, as he developed a language in which all nonessentials were rigidly pared away. In his *Fifth Symphony*, one rhythmic idea, "three shorts and a long," dominates the entire symphony. The theme is exploited with all manner of variation – changes in melodic outline, harmony, rhythm, tempo, dynamics, register, key, mode, timbre.

Franz Schubert (1797 – 1828) is another composer whose life coincided with the first upsurge of Romanticism. His *Trout* Piano Quintet in A major, based on an earlier lied called *The Trout* , displays balanced, regular phrases in a 5-movement cycle, with the same simple theme passed from one instrument to the next. But his music also displays inventive variation of the Romantic era with changes of mood, contrasting dynamics, tempo, range, rhythmic treatment, and use of major and minor modes.

As tastes changed again, and Classical moved into the Romantic era, the Industrial revolution led to technical advances and more affordable instruments. The orchestra grew in size as new and improved instruments were introduced, producing a demand for new levels of expression, extreme high and low ranges and expanded range of dynamics in the orchestra. Harmonies were rich, highly emotional, and expressive.

Richard Wagner displayed various combinations of pitches that were more chromatic and dissonant than those of his predecessors.

Every musical work has a certain form – simple or complex. Sometimes form is dictated by considerations outside music, such as text or a program. Other times, there is no prescribed story or text to hold the music together. This is absolute music. In absolute music, the form in itself is the most important organizing element, and the story is the music itself. Romantic composers often preferred their music to have a story. My own music tends to lean towards the absolute, but Dr. Watson encouraged me, at times, to come up with a story in some of my compositions.

Romantic- era composers gradually expanded the instrumental forms they had inherited from 18th century to give their ideas more time to play out. The Lied, for solo voice and piano, became a favorite genre of Romantic era. The typical structure of the Lied was either strophic, modified strophic, or through-composed. Modified strophic form repeats the melody for two or three stanzas, and then introduces new material when poem requires it. In through-composed form, the music follows a story line and changes according to text. The result is from beginning to end there are no repetitions of whole sections. But even as music became more complex and traditional trends were stretched, composers were able to create ways to provide for repetition and unity.

Take Franz Schubert. He wrote his *Erlking* when he was only 18 years old. It was a through-composed Lied that followed the text of a German legend. Four different characters are depicted and differentiated through changes in harmony, rhythm,

accompaniment; feelings such as terror indicated by dissonance, high and low register. Unity is created using one motive, a figuration in the piano that pervades the song.

The use of repetition can be the basis of connecting large-scale forms. In cyclic form, movements in the symphonies or sonatas are linked by common themes. Take the *Symphonie Fantastique*, by Hector Berlioz. He connects the movements using a single theme – an "idee fixe" – that represents the composer's beloved in various circumstances. The work makes sense when the audience knows the program – the story – and understands the role of the idee fixe.

Frederic Chopin (1810-1849) is said to have originated modern piano style, and is known as one of the most original artists of the 19th century. His style was so entirely his own that there is no mistaking it for any other. His music features ornaments – trills, grace notes, and runs to prolong single tones. He uses various key centers, rubato, and chromaticism for emotional intensity. His Prelude in E minor – one of a set of 24 prelude was inspired by Bach's Well-Tempered Clavier, and displays a variety of form and texture; arranged to be played in a cycle, providing contrast, tension, and release.

By the end of the 19th century the Romantic impulse had run its course and composers were bridging the gap between a dying Romanticism and new ideas of the twentieth century. Some composers continued on traditional path; others struck out in new directions; others tried to steer a middle course between old and new. All were influenced by Wagner's chromatic language.

Composers of the early twentieth century were beginning to feel that the possibilities of the major/minor system were being exhausted. Their works do not use the final cadence of dominant to tonic of the classical and romantic era. In fact, they began to use tone combinations and harmonic relationships that formerly had been prohibited. Classical harmony regarded dissonance as a temporary emotional disturbance that resolved to consonance. Now composers began to use dissonance as a value in itself, freeing it from the need to resolve. They made use of the entire spectrum of pitches in the chromatic scale and explored the whole tone scale. They began to emphasize the primary intervals – 4ths, 5ths, and octaves, and parallel movements of chords, similar to medieval organum. They used parallel chords in which on one tone is duplicated immediately on a higher or lower tone, and daring new tone combinations such as ninth chords. Debussy and other composers were attracted to other scales – church modes of middle ages and others. His opera *Pelleas and Melisande* displays use of the whole tone scale. In addition, ninth chords are found so often that the work came to be known as "the land of ninths." His *Sunken Cathedral* features parallel movement of chords (fifths and octaves), which I used in my second choral work in the piano part. Composers were also focusing on small forms, and turning away from the large forms such as symphonies and concertos. Instead, they preferred short, lyric forms such as preludes and nocturnes.

Impressionism, used by Debussy and Ravel, was a French movement developed by painters to capture 'impressions." In music, impressionism featured exotic scales (chromatic, whole tone), unresolved dissonances, parallel chords, rich orchestral color, and free rhythm. I analyzed the music of both Debussy and Ravel as inspiration for my

later works, and experimented with non-traditional scales, parallel chords, and dissonances.

In the early Twentieth century, just before the outbreak of World War I, diverse artistic trends were occurring as a reaction against Romanticism. Expressionism was the German response to French impressionism . Composers including Schoenberg and Webern explored new harmonic systems, wide leaps in melody, and extreme registers of instruments. Harmonic language came into being that pushed beyond the traditional major and minor system.

The Neoclassical movement sought to revive balance and objectivity by returning to the formal structures of the past. In the 1920s, "Back to Bach" was the standard, a revival of certain principles that appeared to have been best understood in Bach's time. Composers began to emulate the great musicians of the early 18th century – Bach, Handel, Vivaldi, Pergolesi, and the detached, objective style often associated with their music. They tried to rid music of the story/picture meanings of the Romantic era, turning away from the symphonic poem and preferring absolute to program music. Their focus was on craftsmanship and balance, which I also leaned towards in my compositions.

New elements of musical style arose in rhythm, melody and tonality. Rhythmic complexity abounded with the used of polyrhythm (use of several different rhythmic patterns at once), polymeter, changing meters, and irregular meter based on odd numbers. There were no more neatly balanced phrase repetitions of earlier music.

But no single factor distinguished early-twentieth century music from that of the past more definitively than the new conception of harmony. The traditional triads, 7^{th} chords, and 9^{th} chords of Debussy were altered; composers added more "stories," forming highly dissonant polychords of six and seven notes, polyharmony (two or more streams of harmony against each other), and atonality, all which brought increased tension to music. From the development of polyharmony came polytonality, two simultaneous keys. I did this in my last woodwind piece, just for a short while, during the development section. Stravinsky's *The Rite of Spring* features a dissonant harmonic palette of polytonality, along with polyrhythm, changing meter, shifting accents, and short melodic motives exchanged among instruments.

Arnold Schoenberg devised an important and influential compositional technique, the Twelve-tone method, that abandoned tonality altogether. He did away with the tonic by giving the twelve tones of the chromatic scale, in no set order, equal importance, thus creating atonal music. His song cycle *Pierrot lunaire* featured this concept. Extreme dissonance became part of the normal sound palette.

Alban Berg (1885 – 1935), a student of Schoenberg, often used the twelve-tone system, but in a more moderate way. His harmonic language is rooted in both tonality and more modern idioms. His most famous work, the opera *Wozzeck*, is harmonically atonal, although Berg writes a number of passages in major and minor keys and uses leitmotifs in the manner of Wagner.

Anton Webern (1883-1945) another student of Schoenberg, was more radical than Berg, cutting himself off completely from the tonal past as he extended the twelve-tone

technique not just to pitches, but to rhythms, timbres, dynamics – complete control of all elements – *total serialism* is what it's called. His Symphony, Opus 21 demonstrates this completely original style using the twelve-tone system with pointillistic texture – each instrument given just one or two notes.

Not all Twentieth century composers were as radical as Schoenberg and his students. Bela Bartok (1881-1945) used traditional songs of his native Hungary, plus the main currents of European music, resulting in dissonant harmony and polytonality; but he never wholly abandoned the principle of key and was more traditional in his choice of form. His model was the Beethoven sonata in la more tightly structured manner. Bartok's music encompasses the diverse trends of his time: polytonality and atonality, expressionism, neoclassicism, folk dance, and abstract music. His *Concerto for Orchestra* features pentatonic tonality, shifting meters, irregular rhythms, polytonal and atonal harmonies.

Aaron Copland (1900-1990) is one of America's greatest contemporary composers who mirrored the dominant trends of his time. His *Piano Concerto* consists of jazz elements. He experimented with abstract in his *Piano Variations, Short Symphony,* and *Statements for Orchestra*. After the 1930s he began to attempt to simplify his music so it would reach a large public. This move established his popularity, as he came out with *El* salon Mexico*, Billy the Kid*, *Rodeo*, and *Appalachian Spring.* Works like *Billy the Kid* are a mix of traditional and new, featuring shifting meter, dissonance, polytonal harmony, and polyrhythms in a way that intrigue the listener. I listened to and analyzed

many of Copland's works, including Billy the Kid and Appalachian Spring as a springboard for my own works, especially the A theme of my *Woodwind Quintet*.

How a composition comes into being, from conception to completion, depends on what works for each individual composer and need. Brahms described his compositional process as an initial, unbidden inspiration. This is followed by the hard work of actual composition, which might not begin for a long time after the initial inspiration in order to give it time to mature and germinate. On the other hand, Schoenberg and Hindemith claimed to have had no real separation between the initial idea and the working out process.

Except for the more experimental modern composers, the compositional processes associated with the elements and repetition and contrast, have consistently concerned composers of all periods and in all forms. There is no single formula guaranteed to produce a great composer or good composition, and there is no single way in which music must be heard in order to communicate with the listener. What is necessary, though, is knowledge of the history, the music of the masters, and the craft.

My own first composition was written in September and October, 2012. Since this was the first work in our study together, Dr. Watson and I needed to gauge my compositional capabilities. Prior to beginning the piece, we discussed the importance of form and repetition, and how a great piece of music can be created using just a couple small musical ideas. We also explored the uses and effects of pedal point. This was my first ever attempt at composing a full-length work for large instrumental ensemble, so I kept it simple and straightforward, focusing on methods of repetition and variation of the

key ideas of the piece while writing within the capabilities of middle school instrumentalists that was moderate in difficulty. Dr. Watson recommended using ABA form, one that he makes use of successfully. By the end of the process, we were able to explore useful compositional tools: methods for repetition and variation, pedal point, writing for percussion, and musical grammar - proper notation in terms of stems, ties, slurs, and other phrase markings.

The first composition is based on an idea and is entitled “Drinking the Wind,”, a reference to running horses. The slow introduction features an oboe solo, theme 1 presented by clarinets, then repeated in full ensemble with a countermelody high woodwinds; theme 2 introduced by alto saxophones, then repeated in full ensemble with another countermelody with sax and horn; transition featuring percussion with detached motives in winds; return to final theme that combines A and B.

The second composition, written in November and December, 2012, is the *Quintet No. 1* for Brass, written for 2 trumpets, French horn, trombone, and tuba. This work is in ABA form, and begins in six-eight meter. The melody of the A theme is in F dorian and centers around a dotted eighth-sixteenth motive. The bridge into the B theme introduces a one-measure sixteenth note figuration that appears throughout the rest of the piece. The fugue-like B theme is in G minor and moves from the dotted eighth-sixteenth idea to simple duple meter featuring decisive eighth and sixteenth- note patterns. As the theme develops, both the melody and a pedal point are traded among all voices, as key changes and phrase extensions maintain the forward motion and tension. The bridge to the A theme continues the figurations from the B theme along with pedal point in the tuba part,

as the rhythmic motion slows to a fermata. The A theme returns in quick six-eight meter, back to F dorian, but the melody is presented using different rhythmic patterns than the beginning, and features the tuba. Immediately after the presentation of the theme, development takes place with syncopation, key changes, sixteen note runs, and changes in texture with imitation, pedal point, to create a build-up of tension, followed by release with descending chords and hemiola. The horn and then the low brass bring back the B theme, surrounded by figurations in the trumpets. This leads to continuous development using hemiola, chromatic ascending and descending, pedal point, figurations, and a thinning and thickening of texture, which leads to a final, unison presentation of the first motive to end the piece.

This piece was a challenge. As a trumpet player and member of a brass quintet, the choices regarding instrumentation, range, and other characteristics of each instrument were not a problem, so we were able to focus on other issues. Dr. Watson challenged me to break away from the traditional harmonies and phrase structure of which I was comfortable and stretch my imagination with dissonance, use of figurations and pedal point, and phrase extensions. It was difficult at first to come up with new ideas, but once they started coming, it was like a door had opened to a whole new room of ideas. As I look back, I can understand Dr. Watson's goal for this piece. I was forced to stretch the imagination, and now I have a whole new set of compositional ideas for my bag of tricks!

As we progressed to the next work, Dr. Watson encouraged us to consider techniques used by the masters of the 19th and 20th century composers and how they stretched tonality and exploited uses of repetition and variety. Prior to the project, we

explored non-traditional scales and modes. I was familiar with the modes and the whole tone and pentatonic scales, but some of the others were new and exciting such as the octatonic, augmented, overtone, double harmonic, and Hungarian major. Dr. Watson challenged us to experiment with new scales in our next composition, which opened up a whole new set of challenges and opportunities for experimentation.

I chose to write the next piece as a miniature for piano that would last only a few minutes and express a single emotion, similar to the character pieces created by composers of the Romantic era such as Schumann and Mendellsohn. An overriding goal was to stretch the form to be more spontaneous with less clear cadences and to experiment even more with dissonance and chromaticism. At the same time, I wanted to tell a story, like the Romantic–era composers often did, while giving the listener a way to follow the thematic material.

For inspiration, I spent a lot of time listening to and analyzing Schumann's *Carnaval*, Mendelssohn's *Song Without Words*, Chopin's mazurkas and nocturnes, among others. I also studied the impressionist music of Ravel and Debussy, focusing on his *Violes* and the *Sunken Cathedral.* I came up with a figuration with which to base the composition after listening to Ravel's Jeux d'eau. I was intrigued with how he took one simple motive and transformed it, and I used this piece as a constant reminder of how to stretch the imagination.

I tend to compose in an absolute manner, based on no outside story or text, but, since this piece focused on tendencies of Romantic-era composers of piano miniatures, which usually were based on some kind of story or emotion, I needed to do the same. My

composition centers around the events in an elementary school playground during recess, specifically, a ride from my own experience – a yellow, rectangular piece of metal attached to a vertical post that swung swiftly around. I called it *Miniature #1 (That Spinning Ride*.)

The piece is written in simple quadruple meter at a pretty fast tempo. I wanted to create a quirky quality of elementary-aged children playing on a playground, and intended to use the Octatonic(diminished) scale in D, but it quickly morphed into D lydian, featuring lots of F# and G#. In any case, the A theme is introduced with a delicate, flowing sixteenth-note motive in the right hand accompanied by a steady eighth note pattern in the left hand. This idea is expanded a bit, with the motive moving to the left hand with pedal point in the lowest voice. The B theme quickly appears with a contrasting staccato motive in a pattern of eighth and sixteenth notes, moving in the opposite direction of the first idea. The idea is expanded as the motive is traded between hands, along with changes in register, octave displacement, unpredictable rhythmic patterns, hiccups, and pauses, and sudden changes in dynamics. The theme seems to wind down to short motives with pauses in between, like musical hiccups, but it suddenly returns in full force, with sforzando accents, and unexpected leaps, until the theme is raucously hopping along full force, evoking the sense of children, not always playing nice on the playground. The B theme finally winds down, literally, with a descending chromatic movement and gradually slowing tempo. Dr. Watson reminded me, at this point, of the rule of repetition – "do not repeat the same idea more than three times." I had been descending chromatically using the same pattern, which needed to be changed up. This was an important reminder of the necessity of variation within a repeating idea.

A very slow and plodding C theme occurs next, featuring grace notes and disjunct melodic motion, this time in duple compound meter. The idea was to represent the spinning ride as a child got on and gradually went faster and faster. The music immediately begins to pick up speed, and as the new motive is presented in different keys and registers, the music gets faster and faster as it whirls with chromaticism and trills, reaching a thick harmonic climax to represent the child falling off the ride with a booming, dissonant chord. The ending is a return to the A theme in slow, wistful quadruple meter with the simple melody accompanied by delicate trills to represent the children returning to their classes at the end of recess. It ends with one final reminder of the first motive, using a bit of an unexpected harmonic twist, and then a pianissimo long D major chord.

Every composition provides new challenges and more stretching of the imagination – more ideas for the compositional "bag of tricks." In this project, I came up with new ways to recycle seminal ideas using pedal point, ostinato, repetition, octave displacement, change of register, phrase extension, harmonic sequence, and chromaticism. I was also reminded to think about the proportions – the length of piece vs. the length of various sections in order to maintain interest and satisfaction for the listener. In addition, this was great practice in learning more about notation for piano and writing in an intuitive manner.

The initial idea had been two create a set of three Miniatures for Piano, in the style of the Character Pieces of the Romantic composers, but writer's block interfered during the writing of the second piano piece, and things slowed down. The movement is

entitled “At Night,” and evokes what I remember from my own childhood about going to bed, saying my prayers, and then being afraid of the dark. I wanted to experiment with a unusual scale, and chose the augmented, for its dreamy quality. The augmented scale is created by alternating half steps and whole steps, and I discovered that any augmented scale has a companion set of pitches which are comprised of the notes that haven’t been used yet. So I chose to use the A augmented scale along with the companion scale built on B.

This movement contrasted in tempo, meter, and character with the previous one. The meter is triple with an andante marking. The A theme is introduced using a slow, steady, repeating motive in the left hand, similar to *Satie’s Gymnopedie, No. 1*. The melody makes a simple appearance in the right hand, and after a quick repetition of the motive, moves into the companion scale. It was intriguing and satisfying to find that this actually works and sounds good! The entire idea is repeated and developed using thicker chords and increasing chromaticism. This time when the companion scale returns, a new melody is added, borrowed from nineteenth century compser Engelbert Humperkinck’s “Evening Prayer.” An increasingly thicker and more chromatic bridge appears next, followed by another treatment of the A theme, with even more development, using octaves, thick chords, vertical glissandos, accents, hemiola, and, at the climax, a return of the “Evening Prayer” theme, overall evoking an increasing sense of fright and dread. After the climax, I wanted to create a sense of release after the tension and fright, like a child gradually going to sleep. To achieve this, I gradually thinned out the chords, removing pitches until the harmony was down to two pitches in the melody. The initial,

simple theme returns in a way similar to the beginning, and the piece ends on a quiet, long chord.

The difficulty about this piece was that it featured the same plodding, tedious bass line throughout, and I couldn't figure out a way to break out of it without completely changing the character of the piece and making it too long. I experimented, threw ideas out, tried new ones, and eventually put it away. I returned to the piece a couple months later, and the fresh new look provided some new ideas, which I incorporated. It's better, but still not satisfactory, but I know that is part of the travails of every composer.

The next composition was a choral work that I had intended to write for my own choir, but it quickly developed into something that was too large and serious for a high school group. I wanted to do a piece for a December concert – something related to Christmas, but not overtly so. Dr. Watson and I discussed several approaches we agreed that it would be prudent to find a public domain text from which to build the piece. I found a work by the Scottish poet George MacDonald called "The Year of the Trouble in Lancashire." The text was a bit depressing, but the idea was to begin with the MacDonald text and then move into the hopeful Medieval Carol, "Personent Hodie."

I had not written in a minor key yet, so the piece is written in G minor. The mysterious introduction is achieved with a cappella choir gradually entering on long tones, from the bass voice up through the soprano, all singing the words "Populus", meaning "people." On top of this texture, two soloist introduce fragments of two melodies – part of the A theme, and "Personent Hodie." The choir presents increasingly dissonant long tones, which leads to the A theme in triple meter at a moderate tempo,

with flowing piano accompaniment. The men introduce the diatonic melody in unison with text from Macdonald's poem, answered by unison women. Two verses are presented, followed by a bridge similar to the introduction that results in a long dissonant chord. Through this dissonance, the choir, in layers, begins to sing a hopeful text. The tension builds layer upon layer, which leads to a statement by full choir, "We who walk in darkness have seen a great light!" This is followed by the first phrase of "Personent Hodie," the choir singing in intervals of a sixth, with light, syncopated piano accompaniment, followed by the second phrase, "Ideo Gloria," developed through mostly rhythmic means, with a final, fortissimo, full choir "Deo" ending the piece.

The piece was finished, but neither Dr. Watson nor I were especially excited about it. It seemed much too heavy for a high school piece, and still needed to be cleaned up. Dr. Watson recommended that I put it to the side and revisit it in the future.

As the final semester approached, there was time for two more compositions. By this time, I have a lot of new ideas in my bag of tricks, and I'm trying to exploit them as much as possible in a way that makes sense. Since I wasn't satisfied with the previous choir work, I decided to embark on another December piece for my high school choir. My goal was a lighter theme and shorter length. Dr. Watson wanted to see total exploitation harmonic and chromatic devices. It was a success!

This text came from a public domain poem "Mortals Awake, With Angels Join," written in 1782 by the English poet Samuel Medley. The piece is in strophic form, and starts with an introduction borrowed from my previous choral work, with dissonant long tones in the choir and two soloists. Following the introduction, a strong unison statement

introducing one of the themes is presented, and then the main theme in six-eight meter, E dorian, moving at a very quick pace. The verse-chorus is presented and developed three times, maintaining the almost frantic pace, before stopping to bring back the introduction and soloists and give the listener a chance to rest. But the release doesn't last long. The chorus returns one more time, back to the fast tempo, this time in E major, which completely changes the character of the ending.

The piano is what makes the piece truly colorful, and is where all of harmonic devices are used to push to the edges of tonality. From the opening idea, the piano pushes the boundaries of traditional harmony using clusters of chords, dissonances of a second, changes in register, and hemiola. It's good to be a pianist because it was necessary during the compositional process to make sure the piano part was playable. I focused on creating patterns of chromaticism, so it would be more intuitive for the pianist. The overall result is an exciting song that is not too long, is accessible for a middle-level choir, yet pulsates with frantic movement and color. I hope the students like it.

The final composition was for woodwind quintet, and is based on a previous idea that just didn't work. I wanted to write a piece in honor of my great-grandfather, John E. Kauffman, a Bishop in the Mennonite Church. He was an interesting and sometimes quirky man, known as being compassionate, visionary, and progressive. His responsibilities stretched not only over churches in his own Mifflin County, in Central Pennsylvania, but also as far away as Baltimore, Maryland and Warwick County, Virginia. I relate to John E. Kauffman, because we share the same interests in rocks, Indian artifacts, the civil war, and music, his presence often being revealed by his singing

and whistling. He seemed to have a particular interest in Civil War songs, and is remembered for his rendition of "Wake Nicodemus." John was afflicted with tuberculosis, and in order to fight the disease, he would spend much time working rigorously in the mountains. It is also said that he consumed quantities of pine pitch, although I'm not sure why. He possessed great strength, and it is said that in old age he could still life and carry rocks that younger men could not move, and occasionally he would demonstrate his great strength by grabbing a horse by the collar and jumping on it.

This work for woodwind quintet is entitled "The Whistling Bishop," in honor of John E. Kauffman. It features one of his favorite civil war songs, "Wake Nicodemus." In the piece, I endeavor to portray the characteristics of his personality that I admire, making the most of everything I learned this year about repetition and variety and stretching harmonic and tonal options. In preparation, I listened to and analyzed the works of Aaron Copland and Percy Grainger. I focused on Copland's *Billy the Kid* and *Appalachian Spring*, and Grainger's *Children's March* and *Molly On the Shore*. I was working out how each of these men would take a simple musical idea and develop it to it's full potential.

The woodwind quintet opens with a slow pastoral introduction in C major, triple meter, evoking early morning and birds singing. Pieces of "Wake Nicodemus" are passed around among each instrument. A short transition leads to the A theme, the first phrase of the civil war song, in the clarinet, accompanied by a walking line in the bassoon that establishes the quirky mooed and the flute, horn, and oboe jump in and out with grace notes and short chromatic interjections. The same melody is then repeated and traded

among each instrument, while other continue with chromatic utterances. The B theme with a change to G major, enters with a focus on an even more pecular dotted-eighth sixteenth feel produced by the horn and bassoon, along with sixteenth notes utterances and sforzando hits by the other voices. The B theme is repeated, but this time legato and in imitation, with one voice overlapping with the next. Now that the A and B themes have been established, the real fun begins in the development. I envision this part as portraying John's progressiveness and sometimes peculiar nature. The music moves into a brisk quadruple meter with short pieces of the A theme thrown around among the voices in sequence, inversion, and different keys. There is a quick modulation to A flat minor, and then C flat major, and then the key signature changes to one sharp; but fragments of the A theme are thrown around in the whole tone scale, but this does not last long either. The B theme appears in a conversation among the bassoon, clarinet, and oboe, featuring two different keys – G major and C major! At the climax of the development, there are three things happening. The flute, oboe, and clarinet are presenting a rhythmically challenging version of the A theme in mostly staccato sixteenth notes in the keys of G and C major. The bassoon is bringing back a version of the original A theme accompaniment, and the horn is bombastically singing the B theme in quarter notes. This continues as the key changes, motives are traded around, and chromaticism reigns until the full ensemble comes to a frantic long tone on an unstable chord, which leads to an abrupt change in mood and key. The music moves back to the original key of C major, and the pastoral image reappears to the end of the piece.

The goal of this piece was to use every trick in the book to develop the two themes while creating a fresh, new version of the civil war song "Wake Nicodemus". At

the same time, there needed to be just enough of a balance between repetition and variety to keep the listener on their toes and wondering what will come next. I hope it was achieved.

Chapter 3 – Design

A requirement of the master's degree with a focus on composition is to create at least two works per semester, so by the end of the program there is a library of compositions of various instrumentation and genres. The final product will take place during the final semester of the Master's program - a recital of the music composed over the course of study. This involves several factors, in addition to the composition aspect. Performers need to be procured to play the music. Rehearsal and performance dates need to be scheduled. Hard copies of the music need to be prepared. Program notes need to be written, along with written study of the entire process.

All of the pieces are written. What comes next is planning and presenting the product to see if what is in my head will really work. The final product of the composition-track student is a recital of the works written during their study. My pieces will be performed at a recital in December by ensembles comprised of Valley Forge Christian College students, and possibly others, including me. There are a number of things that need to be done to prepare for the recital. First, my advisor, Dr. Richmond, and I will schedule a date for the recital. We are tentatively looking at a Tuesday evening in December, 2013 at 5:00 p.m. After the recital date is established, three or four rehearsal dates will need to be scheduled with the ensembles in order to prepare the

music. I would like to have five or six of the most successful pieces presented at the recital. This will include “Drinking the Wind,” “Quintet No. 1” for brass, “The Whistling Bishop,” for woodwind quintet, and the second choral piece. I would also love to hear “Miniature #1 for Piano,” if an accomplished pianist would be available.

It is necessary to be flexible in terms of instrumentation. I am grateful that Valley Forge Christian College will provide the performers from the “Music Education Ensemble,” since I live a good ninety minutes away from the college, and it would be difficult to find persons willing to make the trip for each rehearsal and the recital. The instrumentation might not be perfect and substitutions may need to be made for quintets and the concert band piece. There are twenty to thirty people available to sing the choral work, and the performance of the piano miniature depends on if an accomplished pianist is available and has the time to learn the piece.

After the personnel has been obtained and the recital date has been established it will be necessary to schedule at least three rehearsals, one in mid-September, one in mid-October, and one in mid-November. Prior to the first rehearsal, it is my responsibility to prepare the scores and the parts. I need to go through the full score of each composition in detail to make sure all notation, expressive markings, measure numbers, and other details are perfect. Separate parts need to be made for the instrumental compositions, all with proper notation, markings, and measure numbers, and I need to make duplicates of all parts.

I am planning to attend at least one of the rehearsals, so it is necessary to prepare background notes for each composition and what my expectations are for each piece in terms of expression and characteristics.