Show Design and Wind Arranging for Marching Ensembles

Thesis

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By

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Abstract

The purpose this study is to illustrate current trends in show design and wind arranging within the marching band and drum corps activity. Through a comprehensive review of literature a need for further study on this subject was discovered. Specifically, texts from the 1950s, 60s, and 70s focused primarily on marching band arranging practices with minimal influence of show design. Since the 1980s, several documents have been written that discuss show design with some degree of detail, but have neglected to thoroughly address changes in marching band arranging. It is the aim of this thesis to discuss current trends and techniques in marching band wind arranging, and the higher level of detail placed into show conceptualization used by drum corps, competitive, and show band.
Dedication

To Rachael, the most patient, loving, and caring wife a husband could ever ask for.
To my daughter Ellie Ann, who I cannot wait to meet in the coming weeks.
Acknowledgements

First and foremost, my family has helped me immensely both in my personal and professional life. It is without their support, witty commentary (especially from my brother’s), and encouragement that I have been able to work in a field I am passionate about. My wife Rachael has been the rock of our home over the last two years throughout my master’s studies. Our two dogs, Buckey and Urban, have provided countless moments of laughter during stressful times, for which I am very grateful.

I have been given numerous opportunities to write music for The Ohio State University Marching & Athletic Bands since the midst of my undergraduate studies. Jon Waters, Director of The Ohio State University Marching Band, and director emeritus Dr. Jon R. Woods put faith and support into me while I was a young writer. Your desire to give me opportunities has allowed my writing to mature over the last eight years.

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influenced my philosophy regarding education and approach to composition. Your help, assistance, and support as my advisor throughout my thesis work has been steadfast: for that, I am ever grateful.

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Chapter 1

Introduction

An important staple of “Americana” is the marching band. Because of its highly visible nature, the marching band has become a staple of school music programs, further enhancing community spirit and contributing to part of the pageantry of high school and college football games. Likewise, drum corps has established a significant niche in American culture, in part, due to its roots from various groups and clubs, such as Boy Scouts of America and the American Legion. Given the artistry and precision that is now required of these groups, advocates for marching bands espouse the benefits of participation. As with most advocacy efforts in music education, rationales for participation in marching band fall into both aesthetic and utilitarian areas. For example, it is often argued that students involved in marching activities benefit greatly from the experience because it can foster respect, discipline, leadership, and an attention to detail. Additionally, participation in marching band will enhance musicianship and create a heightened appreciation for musical and visual arts.

It is clear that marching bands are very important to our society and seem to be permeating cultural awareness more prevalently. Perhaps because marching bands at the collegiate level are competing with growing trends similar to the professional sports atmosphere with the use of “canned” music over the P.A. system at football games,
many of these collegiate bands have begun to produce shows with greater production value in an effort to maintain audience interest. For instance, as part of this fight for relevance, The Ohio State University Marching Band has fostered a forward thinking philosophy of show design for their halftime performances. Shows at The Ohio State University have been specifically designed to engage the school community at football games by employing more sophisticated music and drill design. This has led to the OSU Marching Band garnering international attention from a worldwide audience viewing its halftime shows on YouTube. Such efforts seem to have captured the imagination of the American public, and have allowed the band to become more culturally relevant.

Also achieving cultural significance, other marching activities, such as drum corps, have increased the refinement of field shows. These drum corps dedicate an entire competitive season to one program, allowing increased focus and emphasis on heightened difficulty and sophistication of show design. This approach has had a marked impact on the way the marching band is perceived simply because the music and visual clarity achieved by the top ensembles in drum corps is of outstanding quality. Top collegiate marching band programs, combined with drum corps popularity and relevance in our society, have affected public expectations and conceptions concerning school marching band programs. Consequently, many school marching band programs aspire to attain a similar level of refinement in their shows. Directors of these programs, however, may not have had the background or experience to understand the complexities associated with such an approach. Providing a reference for combining visual and musical arts in order to achieve a musically and visually coherent marching band show would be a welcome resource for those approaching this endeavor.
Marching band design characteristics and the expectations of the judging community and audiences have evolved over the last 20 years. For competitive marching bands and drum corps, the activity has evolved to the point that shows have many layers of depth to their design. Story telling or designing a program around a phrase or single word are both common foundations now for show designs in these competitive groups. As a recent example, in 2011 Carolina Crown Drum and Bugle Corps developed a show entitled, *Rach Star*, featuring the music of Rachmaninov and various rock and roll selections. Such a play on words in the title is now common practice among show designers seeking a unified (and clever) theme for a show. Similarly, “show bands,” are now finding themselves moving away from the “cookie cutter” structure of announcement and song, toward shows that employ animated drill and musical design elements found in drum corps.

**Need**

In order to maintain and further the relevance of the marching arts, it is important to examine and share information regarding the creative and structural elements of unified/coherent show design. Although there has been a significant amount of writing on the subject of wind arranging and show design for marching band, respectively, a need for more current scholarship on this topic exists. Specifically, a gap from the mid 1980s to the early 2000s in the literature for marching band is apparent. Since the 1980s the depth and sophistication of design in field shows for the marching band has increased dramatically; however, since then, only a select few texts can be found in the literature (e.g., Bailey & Canvea, 2003; Colwell & Hewitt, 2011; Markworth, 2008; Ryder, 2005;
Spencer-Pierce, 2008). The present undertaking will fill this gap by providing a detailed analysis of arranging practices found currently in the profession, along with focusing on how these arranging practices can be combined and unified with the elements of show design – something few, if any, texts have explained.

It is imperative to the marching arts, an educational activity for our students, that show design and arranging is approached with a scholarly attitude. There is an abundance of impeccably designed halftime shows; however, there is an equal amount of substandard products that negatively impact the education of students. In order for our students to be able to continue to grow as musicians, we need to improve the abilities of teachers and designers to provide first-rate, educationally sound shows.

A comprehensive examination of modern marching band arranging and show design is needed, partially, due to the lack of specific academic course offerings that thoroughly discuss marching band arranging and show design for undergraduate and graduate level students. Years of study and practice are required, much like time spent practicing a musical instrument, in order to have the skills to produce a refined marching band arrangement. Moreover, many band directors throughout their career will likely compose several arrangements for the marching band idiom. Perhaps due to the lack of recent information and instruction on how to write a marching band arrangement, very few educators ever take on the task of developing an arrangement on their own.

**Purpose**

The purpose of this paper is to illustrate current trends in program design and wind arranging for marching ensembles. Over the last several decades marching band
shows have evolved from block military drill design, which depended primarily on
direction of travel moves, to more intricate drill maneuvers, which include greater
emphasis on instrument direction and staging. Shows are much more theatrical for
today’s marching ensembles. Because of this theatrical approach, designers view the
football field as a stage.

Fueling this change, the growing prominence of competitive marching bands in
both professional and school music programs has demanded great strides in the musical
and visual aspects of show design in order to produce shows with heightened
sophistication and aesthetics. In order to better understand how to achieve the heightened
level of musical and visual sophistication, this document will elucidate specific structural
and detailed elements within field shows. The different design characteristics can
determine specific musical elements of the arrangements. In order to best meet those
demands, the present undertaking will provide a study of wind arranging as it relates to
the modern marching activity.

Definition of Terms

The following terms have been operationally defined:

Battery: The battery is the marching portion of the percussion section. The
instruments included in the battery are snare drums, tenor drums, and bass drums.
Sometimes depending on the group crash cymbals are also included.

Book: A book refers to the music written for a specific section (e.g., horn-book,
battery-book).
Caption: One of three main sections of a marching ensemble; brass, percussion, or color guard. Used most frequently when referring to the caption head position, or adjudication.

Color Guard: The auxiliary units on the marching field that twirl flags, sabers, and rifles are called the guard, which is short for color guard. Frequently, the color guard is referred to just as “guard.”

Drum Corps: Drum and bugle corps are 150 member ensembles who perform in DCI’s annual summer competitions. Corps are made up of four main sections; hornline, battery, front ensemble, and color guard.

Drum Corps International (DCI): The organization that governs rules and adjudicates competitions of competing drum and bugle corps is Drum Corps International. Both world and open class groupings are adjudicated by DCI.

Front Ensemble (pit): The stationary portion of the percussion section is called the front ensemble or pit. Instrumentation for the pit consists of vibraphones, xylophones, marimbas, concert bass drums, tam tams, a variety of cymbals, other auxiliary instruments, and synthesizers.

Hornline: The hornline is the wind section of a marching ensemble. It is most commonly used when talking about the brass section of a drum corps, but it has been used in the high school settings where both woodwinds and brass are used.

Line: Line simply refers to a sub-section of the hornline, battery, or guard (e.g., mellophone line, saber line, snare line).

Open class: Open class is the lower performance division within DCI’s structure. Corps within the open class typically do not have maximum membership numbers, lack a
certain level of financial stability, and membership is predominantly composed of high school students (DCI, 2013).

Program: The term program can be used in two contexts. 1) Program can be used to refer to the field or halftime show. 2) Program can also be used to refer to the philosophy, instructional plan, warm-up, and book of a particular caption.

World-class: World-class is the top performance division within DCI’s structure. Corps within in the world-class must fit certain criteria such as membership numbers, high level of performance achieved by having advanced high school and collegiate musicians, and financial stability (DCI, 2013).

A Note on Musical Examples Presented in the Text

Copyright law prevented using songs out of the public domain as music examples. Additionally, copyright law played a limiting factor in my ability to cite drum corps music scores as references. Access to drum corps scores was not possible when studying performances by any corps mentioned in this thesis. The direct citation of music by any referenced drum corps was not considered due to copyright law and the protective nature within the drum corps activity. Drum corps do not release or sell their music scores because the function of the ensemble is competitive in nature.

In order to preserve the intellectual property of drum corps and their arrangers, I have not duplicated or manipulated any music that I have studied. The music examples provided in this document are of songs in the public domain and consist with my own original work. Any form of duplication or “borrowing” from drum corps or their arrangers would be unethical. I would expect the same courtesy regarding my own music
from fellow amateur and professional arrangers. As a fan of DCI and the performing corps, I respect the professionals within the activity who contribute to the evolution of music education and the marching arts.

**Chapter Organization**

The chapters following this introduction have been organized as:

Chapter 2: Review of Literature

Chapter 2 provides a comprehensive review of literature for both show design and arranging. Sources on show design and arranging provide a historical foundation for marching band, and demonstrate a chronological progression to current trends within the activity. Music arranging, due to its limited modern writing, provides both a historical perspective and supplementary sources that relate to the topic. The intention of this chapter is to illustrate relevant sources in today’s field, provide a historical understanding of marching band arranging and show design, and note valuable resources available to the profession.

Chapter 3: Show Design

Chapter 3 presents detailed design characteristics presently seen in typical marching band and drum corps shows. Stemming from these design characteristics, the chapter includes discussion of the following: music selection, general effect, the “50 Second Rule,” impact points, competitive and non-competitive bands, stock and custom arrangements, original music, formal sections of a program, staff, timeline of events, design meeting, storyboard, and design considerations.
Chapter 4: Arranging for Winds

Chapter 4 provides an overview of information regarding wind arranging for contemporary show design. Detailed information is presented that discusses roles of the wind arranger, equipment, notation, notation software, marching band specific instruments, instrument ranges for outdoor performance, instrumentation, key selection, orchestration, power chords, form and emotional contour, part writing, compositional devices, special effects, and percussion considerations.

Chapter 5: Conclusion and Final Recommendations for Arrangers

Chapter 5 provides suggestions for creating an arrangement from the point of the show conception to the final arrangement being solidified. The process is broken down into three Phases. Working examples are provided for each Phase from my working process when writing the music program for the *Tribute to Classic Video Games* show I arranged for The Ohio State University Marching Band.
Chapter 2

Review of Literature

An exhaustive search of literature pertaining to program design and arranging rendered a relative paucity of extant information, although several scholarly texts were found in combination with other sources (e.g., articles in *The Instrumentalist*, theses, etc.). There was a disparity between modern and older resources regarding show design and arranging. Modern texts predominantly focused on show design with minimal information about arranging practices and techniques. The modern texts were also predominantly geared towards visual designers or educators, and, therefore, did present information on the characteristic of quality marching band arrangements. Older texts that date from 1950 to 1985 tended to focus more on arranging than show design. Several dissertations and theses appeared when searching for sources on the topic of arranging.

Sources for this review of literature were categorized by several factors: the amount of relevant information relating to the topic of show design or marching band arranging, relevance to the modern era, and historical importance to the marching activity. Because these works focused specifically on the topic at hand, they were defined as primary sources and are grouped together below for clarity.

Other, more ancillary, sources that centered on various topics surrounding marching band arranging and/or program design were found. The information found in
these sources proved to be very valuable to this study, as well. Unfortunately, though, only limited information was attained because of the nature of these sources (e.g., articles, podcasts, DVDs, and blogs). Books by Grove, and Sussman and Abene did, in fact, discuss arranging practices, but not specifically for marching ensembles. For clarity, these are defined as secondary sources in the review below.

### Primary Sources

The most recent and comprehensive works for marching band arranging and show design are by Markworth (2008) and Ryder (2005). Markworth’s text focuses on pedagogical and logistical issues in addition to elements of show design in the modern marching band activity. Markworth discusses, in detail, characteristics of show design, and provides a recommended timeline of events during the planning, writing, and teaching phases within a marching season. Ryder’s text focuses predominantly on visual design elements, with a chapter dedicated to show design and music selection. Due to the importance of music selection and characteristics highlighted regarding quality marching band arranging, the chapter on show design and music selection by Ryder is very relevant to this document. Both texts were very congruent and lend insight to current trends in the marching band and the drum corps activity.

Spencer-Pierce (2008) wrote the only recent book available that is dedicated solely to marching band arranging. The text provides basic information on concepts for the beginning marching band arranger. Core concepts such as instrumentation, ranges of instruments, harmonic rhythm, melody, part writing, small and large band considerations, process of creating a new arrangement, and emotional contour were included in the text,
in addition to several music examples and scores. The book serves to provide a
foundation on arranging for the novice arranger.

Importantly, Spencer-Pierce (2008) provides information about arranging for
small bands. The doublings presented for high brass and high woodwinds are very typical
and practical for a small marching band: “Lead – trumpet 1, clarinet 1, flute 8va, Part 2 –
trumpet 2, clarinet 2, Part 3 – Alto Sax, Horn” (p. 18). While the recommendations for
high winds do work, the woodwind doublings are typical and generic for a marching
band. These recommendations are a great starting point for a beginning arranger;
however, they should be expanded upon once the arranger becomes more comfortable in
arranging techniques.

For small bands, Spencer-Pierce recommends three parts within the low brass
family; “Part 1 – Trombone, Part 2 – Tenor Sax, Part 3 – Baritone” (p. 21). The medium
size band recommendations by Spencer-Pierce are, “Part 1 – Trombone 1, Part 2 –
Trombone 2, Tenor Sax, and Part 3 – Baritone” (p. 21). Small and medium size
ensembles can support only one or two low brass parts. Although, Spencer-Pierce’s
arranging recommendations for small bands are relatively sound, I would argue that
placing the tenor sax on its own individual part will not work, especially in an outdoor
environment. The sound of the tenor saxophone will support any low brass instrument it
doubles; however, the mechanics and acoustics of the instrument make it unable to
function independently and balance the rest of the tenor voice of the ensemble.

Spencer-Pierce (2008) provides several music examples, both in text and at the
end of the book. With the previous critiques in mind, the examples do provide a good
starting point for a beginning arranger to study. There is always benefit for a beginning
arranger to see the visual organization of the different music components (e.g., melody, accompaniment, bass line, counter melody) in a score and how they are written for the various instruments.

Three arrangements were found in the appendix of Spencer-Pierce’s (2008) book. Information regarding the three arrangements was provided at the beginning of the appendix. The three arrangements were of classical works and folk songs. Each arrangement was designed specifically for small band with average players.

Some issues of consistency were found between the information presented regarding large and small bands and the music examples. For instance, *Songs of the South* and *The Planets* both require three clarinets, three trumpets, and two trombone parts, which is in contrast to Spencer-Pierce’s instrumentation recommendation for a small marching band. Moreover, the length of the arrangement of *Songs of the South* was too long for any segment of a field show exceeding the maximum time of two minutes and thirty seconds typically placed on contemporary performance.

Spencer-Pierce’s text could have been greatly enhanced if show design was presented in combination with wind arranging. Show design, especially for competitive ensembles, can dictate the direction of the music. At no point does Spencer-Pierce discuss characteristics (visually or musically) of an opener, closer, production number, percussion feature, or ballad. Some supplemental texts were provided at the conclusion of the book; however, very few referred the reader to other marching band specific documents.

Recommended at the end of Spencer-Pierce’s book was another text regarding marching band instruction and show design: *The Complete Marching Band Resource*
Manual, Techniques for Teaching, Drill Design, and Music Arranging by Bailey and Caneva (2003). This work provides predominantly sound information regarding arranging and show design. Bailey and Caneva (2003) briefly discuss music selection, show format, and music analysis. Additional information regarding drill design and charting is provided in the same chapter; however, this information is not relevant in the scope of the present document due to the specific skills and study required for drill design. Recommendations for show concept and theme by Bailey and Caneva work predominantly well with marching bands. Bailey and Caneva (2003) recommend planning the emotional high and low points of a show graphically. While this type approach to show design offers some merit, graphically planning a show can be a difficult and arbitrary task during the initial planning stages. It is recommended that the use of the graph be another method of assessment once drafts of all the arrangements have been created.

Some limiting factors presented by Bailey and Caneva (2003) in show design consisted of musical form. It was stated by Bailey and Caneva that “The music that is best suited for a marching band show is in ABA or AB form” (p. 56). ABA and AB forms do work well for marching bands, but an arranger should not be limited to just those structures. Sometimes an arranger is asked to use two or more songs in a single movement, not as medley, but to communicate a storyline. It is the task of the arranger at that point to act as both a composer and an arranger. Any number of musical forms could work for this scenario.

The arranging chapter provided by Bailey and Caneva (2003) informs the reader on how to plan, sketch, double woodwinds, create counter lines, compose introductions
and endings, and write the score. Information is included that gives appropriate recommendations for key selection, melody placement and length of the arrangement, among other arranging considerations. Although Bailey and Caneva provide commendable advice for arrangers, some concerns arose during the discussion of woodwind doublings and orchestration. Some examples provided by Bailey and Caneva (2003) place the wind instruments in ranges that do not allow them to project their sound on the field. The advice provided by Bailey and Caneva (2003) regarding orchestration and woodwind doublings is appropriate in concept; however, other music scores should be sought for further study.

Several texts written from the 1950s to the 1980s discuss arranging for marching band. Documents as early as 1950 by Henie illustrate the genesis of the marching activity in its current form. In order to gain a clear understanding of current trends in show design and wind arranging for marching band it is imperative to gain a historical perspective.

Heine (1950) presents a thesis at a time of infancy in scholarly work that addresses marching band arranging. As Heine, himself, states, “Simplified scoring for the marching band is a relatively new technique, and, up to the time of writing of this thesis, there has been no text published on this specific subject” (p. v). Heine’s text is the foundation for several subsequent documents. Discussed in detail in his text are musical decisions to be made while keeping in mind the physical demands of the musicians. Several principles are as applicable today as they were in 1950. These principles are very important elements for the beginning arranger to adhere to: arranging so the melody is easily heard, melodic writing of harmony and accompaniment parts, and guidelines for creating a countermelody.
Other information presented by Heine illustrates the infancy of the marching band activity. For example, Heine’s thesis was written before tenor drums became a part of the battery. “The rhythm section of the marching band consists only of side (field) drums, bass drums and cymbals. Rhythmic impact is their only addition to the music” (p. 4). Modern snares now typically sit in front of the musician held up by a piece of equipment referred to as a carrier. Bass drums in most drum lines now carry multiple pitches, and have complex runs that require the entire bass drum line to be in sync with one another for the music to have clarity.

Percussion writing for marching band has evolved into its own art form. Wind arrangers, especially in competitive circles, oftentimes do not have the performance or writing knowledge to adequately compose for the percussion section. While one purpose of the battery section is to maintain pulse, the writing has matured to be more melodic so that it adds a level of texture and depth to the music. This is not a critique of Henie, perse, but illustrates how marching bands have evolved since his thesis.

Thirteen years after Henie’s thesis, Smith’s (1963) *Arranging for the Modern Marching Band* was published. In this work, Smith discusses common arranging practices in addition to philosophical concerns for the marching band in the early 1960s:

While the marching band has steadily gained in importance, the quantity and quality of music suitable for the outdoor performance has not increased proportionately. The peculiar acoustical demands of the open air, especially concerning the relative weakness of the high woodwind instruments and the difficulties of playing while marching, are only two of the problems, which must be taken into account when selecting music for the marching band. Published music has not solved these problems effectively, and indeed neither publishers nor arrangers have been concerned with the musical excellence of band arrangements for outdoor use. (p. 3-4)
Since 1963, the marching band world has seen a considerable increase in the musical quality of marching band arrangements. There has also been an increase in the number of publishing companies. Companies, such as Arrangers Publishing Company, have since helped produce quality stock arrangements for high school and collegiate marching bands to perform. Obviously, not all publishing companies today are producing music of high quality. Arrangers who seek to study other arrangements or directors who are programming music must screen stock arrangements. Smith’s work provides a philosophical point of view that is very important and still relevant today.

Most of the other information presented by Smith was not found to be applicable to the modern marching activity. Similar elements such as instrumentation, range of instruments, and principles presented by Heine were found. Both Heine and Smith provide information specifically regarding instrumentation and instrument ranges that outline a good foundation for today’s arrangers with the exception of the alto voice. A more modern chart regarding instrument ranges and instrumentation is presented in Chapter 4 of this document.

Prenshaw (1970), following Heine and Smith, wrote *Current Practices in Arranging for the Marching Band*. “Chapter VI – Adding Interest to the Arrangement” begins to illustrate how arrangers were beginning to think of the marching band show as a production. “Interest may be added within the arrangements as an integral musical device or it may lie outside of the basic arrangement, as in the case of introductions and elaborated endings” (p. 100). Prenshaw goes on to explain that the introduction should set up the mood of the following number. Specific theoretical information, such as a clear harmonic direction of the introduction pushing to tonic illustrates consistency with
compositional craftsmanship. Introductions that were written in the 1970s might not work for current competitive bands; however, the mechanical elements of the music still remain true.

Prenshaw (1970), after discussing the introduction to a field show, goes on to discuss endings of a show: “Very often a slowing down is desired at the ending. A true ritardando is difficult to perform on the field because of the players difficulty in watching the conductor (if there is a conductor)” (p. 102). Shows in the modern drum corps activity frequently have a fast ending. This is due to the visual and musical demands of needing fast evolving drill combined with exciting music. While fast endings are not a requirement, it is important for the show designers and arrangers to create an ending that is musically and visually appropriate.

Special effects are design elements that create a “wow factor” for the audience. Special effects can challenge the performers musicianship and technical skill, allowing the ensemble to showcase its virtuosity and cohesiveness. While not a special effect by todays standards, Prenshaw states, “Varying the type of rhythm within a piece of music is one means of achieving interest. A popular tune, for example, may change from the basic rhythmic patterns which are considered normal to a Latin American rhythm” (p. 107-108). When a rhythmic pattern is changed, in essence, the arranger has changed the style of the song. Style changes can be very effective, but Prenshaw fails to discuss the appropriateness of changing a song’s style.

Prenshaw presents the “Simplicity System I” that enables the beginning arranger to rapidly score for marching band. The approach suggested by Prenshaw “is only
recommended when time imposes extreme restrictions” (p. 110). The framework presented by Prenshaw, although possible, could result in a very unimaginative product.

Prenshaw explains, “The first step in making the simplicity arrangement is to write the melody of the desired piece of music as conceived for unison trumpets on the treble staff of a two-line grand staff” (p. 111). The melody and bass line are oftentimes the first two items sketched into any arrangement. Melody also must be featured in every section of the ensemble during the course of a show. Prenshaw wrote the document in a time where melody was most frequently placed in the trumpet section, and counter melody was placed in the trombone and baritone sections. Problems arise for the modern arranger when applying the methodology of his “Simplicity System I” to today’s style of writing. When in the initial phase of drafting and sketching an arrangement, melody should be placed with desired instrument family either in a reduced score or the working score in any computer notation program.

Prenshaw goes on to discuss the placement of countermelody as the next step in the “Simplified System I.” “After writing the melody for unison trumpets, the alphabetical chord symbols should be placed above the staff and a countermelody written for trombones and baritones on the lower staff” (p. 112). Countermelodies are not appropriate for all sections, or sometimes any section of a song. Adding a countermelody with the low brass is a technique that was common back in the 1950s and 1960s. More common in today’s writing is the countermelody being found in the mellophone section.

The “Simplicity System II” was also suggested by Prenshaw” (p. 116). The main difference between the first and second “Simplicity Systems” is the trumpets are split into
two voices: one melody and one harmony. Similar concerns from the first simplicity system are still present in the second.

Prenshaw goes on within the “Simplicity System II” to state, “Five-way scoring. If the trumpet section is strong enough to be divided into three parts, a fuller sound can be achieved” (p. 119). In this case, it should be noted that beginning arrangers are not commonly writing for groups that can support three trumpet parts. World and some open class drum corps, in addition to larger college and high school marching bands are the only groups that can support three trumpet parts effectively. Dividing the trumpet section too much will make the students in the ensemble sound weak and thin. This is a common writing error amongst young arrangers.

Part assignments for the “six-way method” are very interesting to study. Prenshaw suggests expanding the trombone section to two parts “if the trombones are of sufficient strength” (p. 121). Here, the same caution of dividing the trumpet section, resulting in the section sounding too thin needs to be observed.

Prenshaw provides a chart (p. 124) that shows where melody and harmony should be placed in the “six-way method.” The part assignments suggested by Prenshaw are “Melody, Harmony I, Harmony II, and Bass.” Harmony II is doubled by the third trumpet, alto saxophone II, and the French horn. This is very similar to stock arrangements produced today. The low brass within the same chart, have also been assigned Melody, Harmony II, and Harmony I. Baritones and tenor saxophones have the melody, with the trombones being split between the two harmony divisions.

The assignment of melody and harmony should be dependent on the arranger’s desired color of the ensemble. The baritones being scored above the trombones can
produce a very warm sound. If one of the trombone parts were to have melody, the sound might be brighter. Unfortunately, Prenshaw does not discuss color as it relates to orchestration.

Prenshaw also fails to discuss flexibility in voicing for the melody and two harmony parts in the tenor voice (trombones and baritones) when the ensemble is scored tutti. It is important, especially at strong moments when the tenor voice doubles the parts of the soprano voice (trumpets) an octave below, to re-order the parts for the tenor voice in a manner so that they resonate better (e.g., breaking away from trombone I doubling trumpet I, etc.). It is possible, depending on key center and harmonic function, that the melody would be assigned to the second part within the tenor voice with the harmony being placed in the first and third parts. This is a commonly used orchestration technique within drum corps to produce a rich texture when three trumpet and baritones play melody and harmony.

Following Prenshaw, Branson (1976) begins to connect the 1950s and 1960s era of marching band to the modern activity. Branson states “there are only four functions an arrangement can serve: fanfares, marching or drill arrangements, feature arrangements, and concert arrangements” (p. 1). The four functions stated by Branson are the framework to which the current segments of field productions are categorized: opener, ballad, percussion feature, production number, and closer.

Our modern classification of movements, though, is much broader and more flexible than Branson’s “four functions.” For example, in today’s marching activity, it is common to not have any silent space in-between most movements of the field show. Seamless transitions are planned, discussed, and executed by all arrangers and designers
in order to achieve a desired aesthetic effect. These transitions do not fall under
Branson’s “four functions.”

Branson does, however, discuss the methodology of arranging, as well as the
qualities of musicianship that an arranger should have:

The arranger should familiarize himself with all styles of music: symphonic,
marches, show tunes, jazz, opera, swing, Dixieland, pop, country-western and
rock. Not only should he understand what these styles are, but also should
understand the characteristic elements and scoring techniques of each. These are
the tools of his trade (p. 1).

Any arranger should understand the specific musical elements of a particular style.

Typical harmonic progressions, rhythmic patterns, mode, notation, and meter are all
characteristics of a particular style that an arranger should know before writing. Score
study is one way of learning about a particular style.

Following an understanding of the musical components of a given style, Branson
offers suggestions on the initial steps in the writing process that are still relevant to this
day:

A method for “laying-out” an arrangement without writing any music is to take a
lead sheet, a melodic line with chord symbols, and mark the ideas in
instrumentation above each line. In doing this the arranger will give himself a
sketch of the basic arrangement before he starts to score; thus, saving time by not
having to rewrite large sections or phrase. … These markings should include what
instruments are playing the melodic line, what instruments, if any, should play a
countermelody, and any rhythmic figures he thinks might be appropriate as a
background. … Remember, marching band arrangements should be at maximum
no more than two and one-half minutes in length. The arranger must hear the
arrangement in his own mind before he starts to write even a single note. (p. 42-43)

The process of sketching out the formal structure of an arrangement is a crucial step to
having a piece of music that is organic and aesthetically pleasing. Flexibility is very
important during this stage of the design process. Hearing an arrangement in one’s mind is of utmost importance. This is where some of the creative aspects in arrangements come from. The musician’s ear should guide the arranger on deciding which instrument group is featured when. It is not a matter of sketching, then hearing the arrangement, but rather having the two work together during the initial arranging process.

Ken Dye (1983) covers *The Evolution of Arranging Techniques Exemplified in Selected Published Marching Band Arrangements from 1970 to 1981*. Dye (1983) lists three criteria for the selection of arrangements in his study: “1) a grade level of III through VI; 2) reviewed in *The Instrumentalist*; and 3) published during the time span of 1970 to 1981” (p. 51) Arrangers and publishing companies who had a reputation in the profession as being prominent were identified, and 12 of their works were selected for analysis. These arrangers and publishing companies consisted of Bill Moffit, Jay Bocook, Wayne Downey, Hal Leonard and Jenson Publishing Companies. Each of the twelve selected works from these sources was analyzed using several criteria: a) score layout and presentation; b) instrument ranges; c) form; d) rhythm; e) harmony; f) voicing; g) scoring for percussion; h) musical style; i) technical difficulty; and j) special effects.

Dye’s (1983) work demonstrates, through the selected examples, a significant evolution in marching band arranging. With the growth of the drum corps activity, and equipment improvement for the field, Dye illustrates important characteristics in arranging. Emphasis on difficulty, large and small band considerations, and added importance for the alto voice are all changes seen from the 1970 to 1981.

Dye discusses that Jay Bocook helped begin the corps style influence in published stock charts with his arrangement of *España!* in 1978. Here, the alto voice becomes
increasingly more prevalent in the arrangement. Dye concludes that this change as a result of the “bell front French horn,” also known as the mellophone. “Bocook’s frequent use of countermelodies in the alto voice can be partially attributed to the development and widespread use of substitute marching band instruments for French horn” (p. 159).

Dye goes on to discuss Bocook’s “Tone Color Effects” where “the French horn is scored relatively high, thus providing a piercing sound” (p. 160). The highest note for the French horn in Dye’s example is a concert A₄, written as the top space E for the mellophone. Drum corps and some college marching band arrangers will score part of the mellophone section on a concert F₅ (written C, two ledger lines above the treble clef staff) on power chords. Although most mellophone players in the section cannot control the F₅, especially at louder dynamics, it does add a bright color to the ensemble. The concert A₅ discussed by Dye is not considered “bright” by today’s standards. This note is well within reach of most high school students, and contributes a full rich sound to the ensembles texture.

Spohn and Heine (1980¹) collaborated on the text The Marching Band: Comparative Techniques in Movement and Music. The book consists of five chapters that discuss logistical operations of a marching band, show design, drill design, special techniques, and arranging. The show concepts presented by Spohn and Heine illustrate

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¹ Questions arose when reading the text about the accuracy of the date provided in the book. The book’s binding and penciled in call number had a date of 1980. Questions of the dates accuracy came about after: reading the text, applying a comprehensive knowledge of the Ohio State University Marching Band’s history, and relating the information stated in the book to the time of 1980. After a conversation with Dr. Paul Droste, former director of the Ohio State University Marching Band, he commented that the book was written much earlier, during the late 1960s.
their philosophy of trying to appeal to the college football crowd, while still maintaining the educational value of a musical product.

For Spohn, the timing of the shows, when to begin planning shows, and remaining relevant to the audience were of high importance: “Spring planning for fall presentations provides ample time for initial ideas, modification, preparation, and rehearsal plans” (p. 25). Suggestions of gridding out field productions that a show band will perform in a single season were made. Spohn and Heine’s matrix shows the themes of, “American music, special occasions, television, travel, and patriotic” (p. 25).

In today’s modern activity Spohn’s timeline is not ample enough to put together a product that is demanded by performers, audience, and judging communities. With a much wider spectrum of music to program, the increased amount of detail, and the possibility of special details such as props, planning for shows must start at a much earlier date. Interestingly, picture forms, such as music notes and houses, were found, in the text as examples of drill design. This is relevant information due to the recent success of bands like The Ohio State Marching Band and their picture animation designs. The drill designs, and most information presented in the text, show the influence of military band design rather than corps style show design in the authors’ philosophy and approach. While the style is much different, a core set of principles of entertainment is still relevant:

Many shows lose their impact, because they are too long. The audience loses interest. Teachers should realize that audiences are not captives. They do not have to listen and attend to everything the group is doing. The performance must interest and entertain the audience in such a way that they will attend and follow the band (p. 30).
The arranging portion of the book was contributed by Heine, and consists of similar information found in his masters’ thesis (1950). When comparing his thesis to the arranging chapter of the book, it is clear that Heine made very few changes. Indeed, Dr. Paul Droste, former director of The Ohio State Marching Band, also commented that Heine’s arranging portion of the book was an abridged version of his master’s work (P. Droste, personal communication, February 6, 2014).

While Spohn and Heine produced shows in a different age of marching bands, the core principles that they suggest are still found today. The writing style has changed greatly since the 1980s and before; however, remaining relevant to an audience, and determining musical and visual pacing were as important then as they are today.

Cichy (1985) discusses editing arrangements and instrumentation for marching bands. Cichy provides relevant information for an arranger to consider when editing and revising their score. Concerns did arise when looking at Cichy’s approach to orchestration, especially as it relates to power and projection; however, those concerns were fairly minimal. Large and small ensembles alike will have strong moments when the arranger uses a simplified method of orchestration. Cichy states, “It is possible, in marching band arrangements, to subtract divided parts and maintain (if not improve) the necessary sound for outdoor performance” (p. 37). This is relevant information considering that the initial opportunities a marching band arranger is typically given is for small marching bands, which can be inherently more difficult for which to arrange.

Shellahamer, Swearingen, and Woods (1986) provide a text for undergraduate music education majors that addresses pedagogy, show and drill design, and logistical operation of a high school marching band. Criteria for selecting marching band
arrangements were provided: “It should be noted that the quality of sound from the total ensemble will be greatly affected by the ability level of the majority; not by a ‘handful’ of advanced players” (p. 24). Oftentimes directors and arrangers alike think of the one trumpet player that can play a note in the high register, rather than arranging parts for the majority of players’ abilities. Making sure the arrangement is attainable and age appropriate for the entire group is of tremendous importance. Shellahamer, Swearingen and Woods note other key factors to consider when selecting an arrangement. Chief among them are “range, scoring, key, length, form, difficulty, melodic interest, use of soloists, and relationship of percussion parts to the rest of the arrangement” (p. 24-25).

Shellahamer, Swearingen and Woods also present principles of show design that are very relevant today. Their “key concepts of drill design” are “continuity, coordination, field placement, field coverage, versatility, difficulty, staging, general effect, clarity/readability, and imprint” (p. 36). Difficulty, clarity/readability, and general effect are all relevant to all areas of the design team. While Shellahamer, Swearingen, and Woods discuss these concepts in the context of drill design, modern practice uses these criteria as benchmarks of the designer’s work.

**Secondary Sources**

*The Instrumentalist* provides a few articles that discuss arranging for marching band. Colnot (1977) and Higgins (1977), for example, provide brief articles that describe orchestration approaches, structure, and techniques for corps style arranging. Information presented by Colnot (1977) and Higgins (1977) was found to be very important to the scope of this document (e.g., considerations for solo and section features, emotional
contour, woodwinds, tempo and meter changes, percussion, adjudication, general arranging considerations, voicing, editing wind parts, range, and balance).

Similarly, Cole (2009) and Maher (2011) have written documents that are relevant specifically to the drum corps activity. Cole provides a work that discusses philosophical, historical, and ideological perspectives of drum corps. Maher (2011) discusses the controversy and application of amplification of the front ensemble. Maher cited changes in writing for the front ensemble such as the keyboards being able to perform melodic or accompaniment material when the hornline was performing at a loud sustained volume. Information provided in these texts did not influence the aspects of show design or arranging discussed in the present document; however, they served as a historical reference point. Maher’s work would serve as an important document if presented in a scholarly study of percussion arranging for marching band and drum corps.

Podcasts from marchingroundtable.com proved to be of high importance to the writing of this document, as well. The hosts of these podcasts bring in top arrangers, educators, and show designers involved in both marching band and drum corps. Michael Klesch, J.D. Shaw, and Jay Bocook, all respected wind arrangers within drum corps and marching band activities, represent some of those who have appeared on podcasts to discuss various topics related to marching band arranging and show design.

DVDs produced by Drum Corps International prior to the production of blue-ray disc technology had a narration option by the show designers and corps directors. The narrators would explain what the program was communicating during the corps performance. Subtleties within the programs design were highlighted, and assisted in clarifying several moments within each corps performances.
In addition to the above sources, *The Teaching of Instrumental Music Fourth Edition* by Colwell and Hewitt (2011) provides a basic overview of marching band for music educators. Topics in the text include: pedagogy, specifics on current marching technique, introduction to the football field grid, competitive bands, and selecting music are all covered in the text. Most importantly, information on marching specialty instruments is provided. Band directors oftentimes know very little of the mellophone, the battery, marching baritones and euphoniums, and the convertible tuba. The mellophone, for example, had a reputation of being an instrument with a lot of intonation issues; however, the quality of instrument manufacturing of the mellophone has alleviated a lot of the pitch issues originally associated with this instrument. Although, an abundance of information is presented, supplemental sources should still be sought out in order gain a deeper understanding of the marching band, as the marching band represents only one chapter in Colwell and Hewitt’s text.

Adler (2002) wrote *The Study of Orchestration* (3rd ed.), a text that discussed in detail, every string, wind, and percussion instrument utilized within the orchestra. Additionally, several excerpts from composers (e.g., Berlioz, Baber, Ravel, Strauss, Stravinsky) were provided to illustrate several points: contrapuntal writing, color of orchestration, articulation, doublings, and special effects. Adler gives information that is predominantly directed towards orchestral writing; however, he does mention, briefly, concert, wind, and marching bands. Adler’s work is relevant to this document, even with its orchestral focus. Adler writes when discussing scoring for the band, “The similarities are, of course, the techniques of performing on woodwind, brass, and percussion instruments, which are the same whether these players are performing in an orchestra or
in a band” (p. 772). Additionally, Adler discusses the orchestration similarities between the orchestra and band: “...balance within the ensemble as well as scoring the foreground, middleground, and background are very much the same for both ensembles” (p. 772).

Adler (2002) presents minimal information regarding marching band instrumentation. Adler (2002) writes about the minimal use of the Db piccolo in today’s marching band, which is typically not used any more. Additionally, Alder comments about the use of both “Bb cornets (usually two parts) and Bb trumpets (usually two parts)” (p. 774), which again is not typical in today’s instrumentation. Adler also provides a lack of information regarding marching band specialty instruments such as bell front baritones and euphoniums, mellophones, and convertible tubas. Missing from Adler’s marching band instrumentation is the trombone. The missing information regarding the trombone is potentially an oversight due to Adler’s thorough and scholarly approach to the text.

Finally, several texts provided information on music composition and arranging, but were not specifically aimed at marching bands. For example, Sussman and Abene (2012) and Grove (1977) provided scholarly texts for stage band and jazz band arranging. Certain arranging techniques and approaches provided by Sussman and Abene, and Grove were found to be very appropriate when used in a marching band context. Likewise, Erickson’s (1983) Arranging for the Concert Band provides some relevant information for marching band arranging due to the similarities between marching band and concert band. Kostka and Payne (2004), likewise, provide a scholarly theory text for
undergraduate students that give a solid foundation of harmony, chord function, non-chord tones, and compositional techniques.

**Summary**

Over the last few decades, both show design and arranging have gradually become more detailed and have become a more interconnected process. With this increase of detail in show design and arranging, pedagogy and educational values have also increased within the marching activity. It now takes months to create wind arrangements, percussion arrangements, and drill that are adequate to foster student growth. While a single arrangement of poor quality may not be completely detrimental to a student’s musical education, creating an arrangement under a “time crunch” does happen. A band director should prepare as much as possible to prevent being placed in a situation where only a short time is allowed to create an arrangement.

Show design and arranging have undergone significant change since the 1950s. Educational and philosophical ideologies have also paralleled the change in show design. Through this historical perspective of marching band show design and arranging provided by the review of literature, a foundation is established that allows the reader to contextualize more thoroughly the information presented in subsequent chapters.
Chapter 3

Show Design

The level of depth involved in creating a production for the field has been greatly influenced by drum and bugle corps, especially those participating in Drum Corps International’s (DCI) summer competitions. These corps have been on the cutting edge of program design and arranging over the last several decades. Drum Corps International (2013) is an organization that has branded itself as “Marching Music’s Major League” partially due to the high degree of sophistication found in musical and visual performances that are achieved by the participating corps.

During the summer months, corps travel across the country performing in competitions throughout the United States. By the end of the summer tour a champion is determined for that competitive season through a final competitive event. Membership in drum corps is limited to persons who are under the age of 21. Most participants in the corps are high school and college musicians (Drum Corps International, 2013). Although, some specific design elements of DCI do not translate to high school groups, partially due to difficulty, they have greatly influenced program design for marching ensembles at all performance levels.

Looking at one of these corps’ programs in detail will assist the reader in understanding the types of modern trends now incorporated in marching show design.
For this example, I will use Carolina Crown. Carolina Crown (sometimes referred to as Crown) is a world-class drum and bugle corps. Crown has been performing in DCI’s annual summer competitions since 1990, and has performed in world-class (formerly Division I) since 1994. Crown won their first DCI championship in 2013, and has finished in the top 10 for the last decade (Carolina Crown, 2013).

Crown’s 2007 program *Triple Crown* centered on the theme of horses. Brass arranger and music director Michael Klesch and visual designer Leon May collaborated on *Drum Corps International 2007 World Championships DVD* to provide narration on *Triple Crown*’s overall design. Klesch and May stated that the different movements of the program reflect wild horses, taming the horses, training the horse, and racing the horse (DCI 2007 World Championships DVD, 2007).

*Triple Crown* is a preeminent example of contemporary drum corps music arranging and show design. The program begins with an introduction featuring a delicate brass quartet, soft chords from the rest of the hornline, and the battery staged in the backfield. As the introduction progresses the battery begins to enter mimicking a stampede of horses, thus reflecting the movement theme of wild horses. The final movement, which depicts a horse race, uses Rossini’s *William Tell Overture* for the musical selection. Horseracing gates line areas of the field as props to represent the racetrack. A select few of the color guard portray jockeys, and, in a novel twist, wear different blankets to represent the top twelve competing drum corps from that season. As the race draws to a close, the tempo changes briefly to a halftime feel just as the music climaxes. During the halftime feel, a single concert bass drum sounds as a beating heart at the photo finish. The members of the corps stop and move very slowly during the
heartbeat moment. The tempo then returns to the fast pace as the climatic final push brings the show to an end.

While there are many other specific design features to discuss within *Triple Crown*, the amount of detail and thought put into the program is very clear. Show designers for any style of marching ensemble should strive to put in as much detail that is appropriate for the theme of the program and age of the group. The most lavish show concepts can become failures if the ensemble cannot clearly communicate the idea. Organizations like Crown are highly sophisticated in their design approach. The following sections in this chapter will help guide show designers from the inception of show design to the beginning stages of music arranging.

**Music Selection**

Music selection is the most important decision show designers make. “Nothing will make up for poor music choices” (Markworth, 2008, p. 107). The educational opportunities are solely dependent upon the programming choices of the design team. A show’s emotional contour is determined by the order of the musical selections. Bands of America (2013), one of the largest host organizations for high school marching band adjudicated events clearly states, “It is the position of Bands of America that music is the more important aspect of the Performance,…” (p. 30). Careful decisions need to be made when in the early planning phases so that the appropriate musical choices are made.

It is important as musicians, educators, and designers that we understand the characteristics of a quality piece of music that has been designed for outdoor performance with the intention of having movement combined with it. Quality literature will be
educational in nature for the students. As Bough (2011) states in his article *Designing a Custom Field Show for Marching Band*:

> The single most important goal should be to create educational opportunities for all performers, especially the musicians… Show design starts with the selection or creation of music to be performed. Any field show should maintain a high level of musical artistic and aesthetic value from beginning to end (p.34).

The program designers must always have the students in mind when working on a program. Bough’s philosophy is one that is nurturing to student growth. Designers who adhere to a method that is creative, critical of every moment, and well planned will have a better chance of producing an educational and aesthetically pleasing product.

In the beginning phase, designers should discuss criteria for quality song choices for marching band. Song difficulty, tempo, the esoteric nature of a work, and overused songs are all concerns stated by Markworth (2008). Moreover, the music needs to be at the appropriate difficulty level for the ensemble. Oftentimes directors will select music that is too difficult and ask the arranger to adapt it for their ensembles needs. This can lead to the music losing its essence and identity. Klesch, in a podcast by marchingroundtable.com (2013), mentions this philosophical approach in reference to arranging Aaron Copland’s music for high school groups by stating, “it would depend upon the group”. Klesch goes on to discuss:

> When you write for any group the goal should be that you are teaching the kids something and that they are able to enjoy performing that music by the last few weeks of the season. And, to give them something that is out above their heads, or out of their abilities, or it is just going to be a struggle to do, it is a disservice to the kids that you are trying to teach.
Markworth (2008) states that the “Essential music elements” are “melodic content, harmonic content, rhythmic content, tension and release, form and development, variety of styles, moods and expressions, tempi, scoring/voicing textures (orchestration)” (p. 107). If a variety of these elements are found within all song selections for the show, then the chance of the shows success has greatly increased. An arranger cannot develop a show into a high quality product if the wrong choices are made. “The music must have direction or forward motion” (Markworth, 2008, p. 108). An arranger can extend “direction or forward motion” through creative arranging techniques when phrases are extended or during codas; however, the specific source material must inherently have merit.

In addition to Markworth’s suggestions, consideration must be given to the tempo of a song. The tempo must naturally lend itself to motion of the field. Adjusting a tempo to meet visual needs is possible when the character of the music is not lost. Forcing a tempo change can result in the music losing its aesthetic qualities. Students must also be able to handle, with some ease, the tempos given in the music.

Popular music selections offer their own challenges. Some popular music selections do not adapt well for a marching ensemble. With the greater influence of special electronic effects and lyrics being spoken on a single pitch, it becomes much more difficult to adapt those style of songs for marching band. Markworth (2008) states, “Caution should be exercised when selecting popular music even for half-time shows. It often lacks musical content or is monotonous and will get old to the players, staff and audience by fall” (p. 107).
Esoteric music often will not have appeal to the audience or judges; however, when esoteric songs are adapted for the marching band, a new energy and sound can be created. Ryder (2005) and Markworth (2008) give caution to programming esoteric music. Care must be taken when listening to esoteric music. Designers should listen to music, esoteric or not, and try to hear it as if a marching band was performing it. This should not be the deciding factor, but rather it should be used as a guide.

**General Effect**

The *Bands of America Procedure and Adjudication Handbook* (2013) defines music general effect and visual general effect separately. While defined separately, both have a similar meaning: music or visual general effect “is the utilization of all elements to bring about maximum effectiveness of” either “the musical performance,” or “the visual representation of the musical performance” (p. 34-44). Both areas of general effect (sometimes referred to as “G.E.”) are adjudicated by what was written and the quality of execution during the performance.

Music General Effect, an adjudicated component in Bands of America competitions, assesses the “Effectiveness of the Musical Repertoire” based on several criteria. The “Effectiveness of Musical Repertoire” is the caption that evaluates the written musical material. “Creativity/Imagination, Coordination/Staging, Appropriate Range of Expression, Use of Time/Pacing, Continuity/Unity, Contribution for Enrichment/Enhancement of all elements” are all elements that are critiqued in Bands of America competitions (2013, p. 34). Similar critiques are made of the visual program: “Creativity/Imagination, Coordination/Staging, Interpretation and enhancement of the
music, Use of audio-visual Blend/Balance/Focus Elements, Continuity/Unity, Appropriate use of Movement/Form/Color” (p. 44). The criteria provided have functioned to encourage arrangers and show designers to think outside the box, in addition to holding the writing for every aspect of the program to a high standard. Moreover, each area of the show must be congruent to help maximize the overall general effect of the show.

The purpose for presenting judging criteria set forth by Bands of America is to illustrate the tremendous importance of how general effect is now considered a combination of visual and musical elements. Although many might debate the various judging criteria employed by Bands of America, it is important to note that Bands of America holds participating school band programs and designers to a rigorous performance standard.

Fortunately, general effect does not have to be complex. Acting, elaborate costumes for the color guard, uniforms, props, specialized drumheads, and color of the battery equipment are all various examples of general effect. The point of “G.E.” is to produce a unified product while eliciting a response from the crowd and to set the overall mood for the production. Two important characteristics of “G.E.” are first, that it is relatable to the audience and judges, and second, that it carries an emotional impact.

“50 Second Rule”

J.D. Shaw (Santa Clara Vanguard, 2013) is the current brass arranger for the Santa Clara Vanguard Drum and Bugle Corps, and has arranged for Phantom Regiment Drum and Bugle Corps, East Coast Jazz Drum and Bugle Corps, Beatrix Drum and Bugle
Corps, The Academy Drum and Bugle Corps, and the Boston Crusaders Drum and Bugle Corps. Shaw is a former frenchhornist and arranger with the Boston Brass. Shaw appeared on a podcast produced by marchingroundtable.com (2013) in which he discussed the various differences in arranging between Phantom Regiment and the Santa Clara Vanguard. One important thing he stated about show design during the course of the podcast is commonly referred to (in some variation) as the “50 second rule.” Specifically, Shaw stated that every 50 seconds something memorable must happen in a marching band show (marchingroundtable.com, 2013).

The “50 second rule” is an informal “rule” that is used by show designers. Other nomenclatures of the “rule” have been used, but the definition remains relatively consistent. Musically and visually impactful moments must happen approximately every fifty seconds in a well-designed marching band show. The purpose of these moments is to keep the audience engaged. The “50 second rule” is meant to guide and assist with the pacing of a field show.

Markworth (2008) states, “There needs to be an effect or applause point every 20-30 seconds in the show. It can be a ‘stand up and shout’ moment or it can be a beautiful phrase that ‘takes your breath away…’” (p. 114). Both suggestions by Shaw and Markworth have the same principle concept. Neither is inherently right or wrong, nor should someone sit with a stopwatch to make sure they happen precisely at these intervals. What is important is that the emotional pacing, in an organic fashion, takes the audience on a journey, which ends at various arrival points.

As an example, the “50 second rule” was used in The Ohio State University Marching Band’s *Tribute to Classic Video Games*. Not every moment happened exactly
Impact Points

Impact points are the specific moments that elicit a reaction from the audience. Their purpose is to leave an impression. Impact points are a result of general effect and the “50 second rule” coming together. The term is sometimes misconstrued as a loud and forceful moment in a show. Although such moments are indeed impact points, they can be the exact opposite such as a soft solo voice with supported sound from the hornline playing backfield. Impact moments should leave an impression and elicit a reaction from the audience. They can either bring the audience to their feet cheering or they can take their breath away. Planning these impact points are crucial to the overall success of the production. A wind arranger should naturally be able to put these into the music.

Competitive and Non-Competitive Bands

There are two dominant styles of marching ensembles in today’s school band program: competitive and non-competitive groups. Competitive groups typically will model their productions off the format of DCI’s performing corps. Non-competitive groups, called *show bands*, will model their productions from various college marching bands, while still borrowing elements from drum corps. The show style for competitive groups is more dictated because of competitive guidelines from the host organization, such as Bands of America, Ohio Music Education Association, and MidStates Band Association.
Competitive and non-competitive bands have different design characteristics in their field productions. Competitive programs typically have more complicated music and drill due to the larger amount of time spent rehearsing a single production compared to non-competitive groups. For most competitive groups, the exact same program is performed at weekend competitions throughout the fall. This usually means competitive bands will end the fall months with a higher level of musical proficiency and visual clarity on this show. A common misconception regarding bands that compete is that they play only the same show throughout the fall. Oftentimes these groups will perform a new selection or two with new drill at Friday night football games in addition to other selections in the stands. This benefits both the audience and students. If a program is designed properly, students in competitive organizations will be exposed to various styles and genres of music.

In direct contrast to competition bands, show bands normally spend only a week or two learning music and drill when preparing for a performance. A non-competitive band will typically play a larger selection of music throughout the fall ranging from four to six different shows. Due to the time restrictions the drill is less complicated and the music will vary significantly in difficulty to insure a new show can be performed at an acceptable level.

There is a debate within the music education community over the value of competitive and non-competitive marching bands at the high school level. When an appropriate philosophy is applied, both can benefit students’ overall musical growth. Likewise, the “marching season” versus the “concert season” needs to be perceived not as two disparate seasons with disconnect, but rather one school year of musical growth. It is
important to note, though, that neither philosophy of ensemble style is inherently superior to the other. Both will have a positive influence on the students when quality music is selected, and students have been set up for success by the designers and educators.

**Stock and Custom Arrangements**

Stock arrangements are commercially available and produced by publishing companies. Show bands will typically use stock arrangements for the bulk of their fall repertoire. Competitive groups in contrast, generally have custom arranged shows and augment their fall repertoire with stock arrangements. Show bands will typically have very little custom arranged music due to the difference in price between custom and stock arrangements. Caution needs to be exercised when purchasing stock arrangements because the quality of writing varies significantly.

For both competitive and non-competitive groups it is the director’s responsibility to make sure quality literature is selected. Ryder (2005) discusses characteristics of quality marching band arrangements. The perspective Ryder gives is related to the music affecting the drill:

The more contrasting and exciting an arrangement, the easier it will be to design drill. The arrangement should have the melodic line changing to many different sections. Avoid arrangements that have the melody only in the trumpets and trombones. Every time the melodic line changes, there are staging variations. When a phrase repeats, another section should be featured… (Ryder, 2005, p. 152-153).

The wide range regarding the quality of stock literature could result in a study of its own. When looking for an arrangement, age appropriateness, music that foster growth for all sections (woodwinds, brass, and percussion), and musical choices that appropriate for
field performance should all be considered. Suggestions made by Ryder will aid a director in screening various published arrangements and can be a good source of evaluative criteria for any arranger looking to improve and evaluate their own writing.

Markworth (2008) gives valuable information regarding “pros” and “cons” for published and custom music arrangements. Regardless of published or custom arrangements, his suggestions of characteristics that makeup “quality music arrangements” are still important to both types:

Variety of orchestration techniques, dynamics and shaping clearly marked for every phrase, articulations for every note clearly marked or indicated, interesting melodies, counter melodies, harmonies, and rhythms, music should have direction, builds, impacts, tension and release, key centers utilized for resonance of the wind instruments, particularly at impacts, music selected should be challenging but achievable by the middle of the season (Markworth, 2008, p. 105).

Published music arrangements allow for easier, and more immediate access to the arrangement and its recording (Markworth, 2008). Copyright permissions for published arrangements also do not need to be obtained. Publishing companies also grade the music and streamline the ordering process. The cons of published music arrangements are that they are marketed to a wide variety of ensembles. Sometimes this limits the musical quality of the arrangement. Additionally, instrumentation and difficulty, because publishers are marketing the music to multiple groups, often might not meet the specific needs of the group buying the music.

Custom music arrangements allow for an “almost limitless” selection of music. Markworth (2008) does make mention of copyright restrictions that could limit licensing of certain songs. In addition to the copyright restrictions, copyright holders and arrangers will often charge fees for the use of their music. The structure of the custom arrangement
is more flexible, though, and can better meet the shows demands. More planning is thus required of the design team to allow for a professional quality product.

**Original Music**

The design team must also choose between using arranged or original music, or a combination of the two. A programs budget, the amount of time that is left for designing, copyright difficulties, and the purpose of the music are all factors that should be considered when finalizing the decision to either use arranged or original music.

Originally composed music for the field is becoming a more popular trend, especially with competitive high schools. “Quite a few bands are successfully using music originally created for them to get a unique show. They can obtain the exact style, form and pacing that they want and be thematically coordinated” (Markworth, 2008, p. 109). With original music, copyright clearances do not need to be obtained. This will help the band program save money. Typically, arrangers will charge more for original music due to the longer period it takes to create a quality musical product.

An arranger must feel comfortable with the musical styles and direction of the program when composing music for the field. Markworth (2008) discusses the caution of selecting a “quality composer” when developing music for the field. If the staff does not select a quality composer/arranger, then the programs educational value could suffer significantly. It will normally take an arranger a longer period of time to create a program when composing the music.
Copyright Law Issues

There are several issues regarding copyright law that require some discussion. It is important to state that this document does not serve as legal council for copyright law. Laws are ever changing, especially copyright law; therefore, anyone who seeks further knowledge regarding current copyright law should look for other sources.

When competitive marching bands choose their music and have the show custom arranged, the band program or organization must obtain performance permissions and permissions to arrange. Permission to arrange and performance clearances need to be granted by the copyright holder in order to legally use the music. As previously stated, stock arrangements and original music do not require a band program or organization to obtain copyright permissions.

Some musical selections are very difficult or sometimes impossible to be granted permission to use. Copyright holders have the right to grant or refuse the use of their music. Most competitive band organizations require any participating group to provide all legal documents that grant the ensemble to use the music programmed.

There is a fee associated when obtaining copyright clearances. Fees for music licensing have a wide range of variance. The price is dependent on the popularity of the music and is typically determined by copyright holder. Most band directors contact a company who specializes in obtaining copyright clearances. These companies will negotiate and obtain all desired and available licenses for a fee. It is common that a fee for a certain piece of music is too expensive and prohibits the ensemble from programming the selection.
Formal Sections of a Program

For the novice show designer the placement of songs in a field show can be a difficult task. In addition to music selection, the order of songs is an equally crucial aspect of show design. The emotional contour of the show largely depends on song order. Much like the structure of an orchestral symphony, the organization of music in a field show deserves similar attention. Memorable moments are created when show designers figure out how to put their own personal twist into the expectations of a field show in an aesthetically pleasing manner. Just as in any style of music, the art form is constantly evolving and maturing. The expectations of competitive and show bands are much different today than they were decades ago.

While there are common trends and certain expectations when analyzing the structure of a show, it is important to note that no two shows are the same. There is some flexibility that designers use when planning the stages of a show. There is a need for balancing audience expectations and trying to remain on the cutting edge of the marching activity when programming music.

The number of segments an ensemble performs is determined by two main factors: the theme and elements of the show, and performance level of ensemble. Most shows consist of three to five different segments for a total of around eight minutes and thirty seconds of music. The pre-show is sometimes added to augment the number of segments. The following provides a discussion of show segments found typically in contemporary performances.
**Pre-show**

Within the drum corps activity and now in some competitive high school groups, the pre-show is becoming part of the standard group of segments. When groups perform in competition they are allotted a warm up period before the judges begin assessing the performance. During the pre-show period, the ensemble is setting up pit equipment, props, and sometimes will take one last chance to warm up. Some designers have treated this portion of the show as an overture to the entire show, utilizing originally composed music, a vamp, or a minimal amount of music to focus mainly on visual elements (e.g., acting). The length of the pre-show varies, but should last no more than one minute. Design of the pre-show should be somewhat flashy, simple, and not physically stress the performers.

The pre-show should set the mood for the audience, and have a dramatic build and transition into the opener – the moment when adjudication begins. Performing backfield and moving the instruments to the front, long builds on a V chord or other chord progressions, ending on a half cadence, going from a loud chord to soft resolution, or any of these combinations are all tools arrangers use when creating the pre-show.

One example of a pre-show that sets the mood very well is the introduction of the 2011 Cadets Drum & Bugle Corps program, *Between Angels and Demons*. Discussing his use of the pre-show on a podcast from marchingroundtable.com (2013), Jay Bocook, longtime brass arranger for the corps, provided insight into this process. In the show the corps was broken up into two groups: white representing angels, and maroon to represent devils. Brass, guard, and battery were evenly divided into the two groups. The color choices were no accident because white and maroon are the Cadets colors.
As an aside, Bocook also discussed challenges of writing approximately one third of the show in two different scores. Reduced instrumentation from the typical drum corps score were utilized for the two different brass groups in order to allow the groups to still sound strong (marchingroundtable.com, 2013).

When watching a video produced by DCI (2011) of the Cadets’ performance at DCI Finals in Indianapolis, Indiana, one can see the two halves of the corps enter from different corners in the backfield: first the angles and then the devils. As the angels enter, they are more subdued. The devils, however, enter in a more provocative manner. This provocative manner is established by the body language of the devils and the toss of a baritone, which has a violent crash to the ground. The shocking nature of throwing an instrument is enough to make any musician cringe. The announcement that follows states, “Presenting their 2011 program, Between Angles,” brief pause, “and Demons,” another brief pause, “Drum Corps International is proud to present, the Cadets!” During the brief pauses, to announce the angels and demons separately, an “amen” from a choir and “rumblings” come from the pit, respectively.

Simple gestures, like the Cadets 2011 pre-show, set the emotion for the entire program. Although minimal music is used during the pre-show, exaggerated acting with colorful guard costumes make the moment very effective.

**Opener and Closer**

The opener and closer should be the strongest musical segments of the production. When selecting music for the opener and closer, the designers should consider tempo and how recognizable the music is to the audience and performers. The
more appeal the music has to the audience will result in a better chance of receiving a
strong reaction from them. Original music can be very effective, too, if the qualities of an
opener or closer are found within the compositions construction. Ryder suggests, “The
purpose of the opener music is to attract the attention of the audience” (2005, p. 154).
The opener is your “hook” to the show. If the audience is not curious or drawn into the
production through the opener, then they probably never will be.

Music in the closer must leave the audience satisfied. “The most important
characteristic of the closing tune is its ending. The ending brings the show to its final
climax” (Ryder, 2005, p. 156). Placing a new twist on a previous theme, strong impact
points, brighter tempos, and a clear emotional direction are all characteristics a closer
should have.

The length of the opener and closer depends on the needs of the overall program.
The opener and closer should each be around two minutes in length, respectively. If
either movement runs slightly longer than two minutes, then the music must be engaging.
These are not rules, but more of guidelines. Anything longer than two minutes and thirty
seconds will come across as “drawn out” to the audience. The designers also run a greater
chance of physically taxing the performers.

A selection that opened the show can return as a major impact point to bring the
show to a final conclusion. Phantom Regiment did this to great effect in their 2003
program entitled, *Harmonic Journey*. Their program opened with Pachelbel’s *Canon in D*
with a high brass choir and gradually pushed to a lush full statement of *Canon in D* as
their opening impact point. Their final movement included *Ostinato* from Bartok’s
*Mikrokosmos*. The nature of the closer was very aggressive. Percussive hits, and
dissonance helped create energy and momentum throughout the movement. As the closer climaxed, the corps returned to *Canon in D*. The corps immediately went into a halftime feel in the brass, with the pit and battery maintaining the previous fast tempo (2003 DCI World Championships DVD). This is an example of cohesive musical design by taking elements from the beginning of the production and placing them at the end. Phantom Regiment did open *Harmonic Journey* with a slower tempo; however, they immediately segued seamlessly into their production number that had a brighter tempo.

**Production Number**

“The music selected for the production drills should contrast the opener. A show should have one or two production tunes that also contrast one another” (Ryder, 2005, p. 154). The music’s style, tempo, harmonic vocabulary, and pacing are all elements that should be in contrast to the opener; however, Ryder (2005) goes on to state, “Contrast within the production composition does not have to be the most important characteristic as it does in the opener” (p. 154). Contrast should still be found within the production number. In order to keep the interest in the program, various arranging techniques should be employed to maintain some level of contrast. Timing for the production number can range from one minute and fifteen seconds to two minutes.

Constructive characteristics of the production number vary significantly. The choices an arranger makes must clearly communicate the goal of the production number within the context of the show concept. Impact points, display of technical proficiency (both within specific sections and as an ensemble), soloists, small ensembles, and giving
opportunities for both the pit and battery to be musically involved are all elements found within the production number.

When comparing the pre-show and opener to the production number, an arranger should not overuse certain constructive elements. If the opener features a soloist, it is best to avoid using another soloist in the production number. The use of a second soloist in close proximity to the first will disengage the audience and lose its desired aesthetic qualities.

Featuring different sections and choirs of instruments is very common within the production number. During the various features of sections, soloists, and choirs, arrangers will alternate between various instrument groups (e.g., trumpets, pit, snare line, mellophone, low brass, etc.). Melodic phrases are sometimes fragmented, and altered to display technique. When one group is featured in one key, the next group might enter after a short battery solo with a similar variation in another key. One soli section can either flow right into another, or some other connective element might continue until the next soli a couple bars later. The constant changes made by the arranger will hold the interest of both the performers and audience members.

At the conclusion of the production number, tension and release are key to the overall effectiveness of the movement. The ending of the production number should be impactful, but not the strongest moment of the show. The production number, when appropriate, should seamlessly move to the next segment. Abrupt changes and awkward transitions can distract from the musical goal of the next number.
Ballad

Ballads offer an opportunity for an ensemble to demonstrate lyrical playing, and to present a different emotional character in the program. Physically, it gives the members time to move to slower tempos, which allows them to regain energy for the upcoming closing movement. Ballads should use clear musical direction to add dramatic effect. A good visual designer will be able to create motion and body movement that is appropriate for the music. Lyrical style and tempo are the biggest classifiers of a ballad. The ballad should explore all dynamic ranges during its portion of the program. When musically appropriate, more transparent orchestration, and woodwind solis should be used.

Timing for the ballad will vary from program to program. It is recommended that a ballad have a shorter timing of no more than one minute and thirty seconds. This is due to the visual demands of the modern era, and the limited motion that sometimes occurs within the ballad.

Percussion feature

The percussion feature is one structural component of a production that is optional. In the past shows used to showcase the percussion by having a long battery solo. Frequently the battery solo would be placed in the middle of a movement, such as a closer. Now, due to more structured show design, the percussion section is given an opportunity to be featured throughout the entire program. If both the pit and battery have opportunities to demonstrate their musicianship throughout the rest of the production, then a percussion feature may not be necessary.
Summary

The order in which the segments are presented between the opener and closer do not have to be first, production number, then ballad, and finally percussion feature. The creative genius comes when designers figure out how to put a new spin on these segments. Designers should strive to listen to the music they have selected in a random order to hear the selections in a new fashion. It is impossible to say definitively what is musically acceptable. Ultimately, it is up to the designer’s musicianship and creativity to determine the pacing of the program within the overall framework of the eight minutes and thirty second time limit.

Staff

The staff of any marching organization can range from a single person to ten or more members. It is important for head directors to surround themselves with sound educators, philosophers, designers, and musicians. A director cannot handle every task; therefore, the director must trust the staff to ensure the students of the organization will receive the best experience possible.

Competitive and show bands will have any combination of head director, assistant director, percussion instructor, and guard instructor as full time staff. It is common for both types of bands to hire band camp staff to work as technicians for each specific section of the ensemble for only a week or two over the summer. In rare circumstances, due to financial resources, visual, brass, percussion, and woodwind technicians are brought in for the full season. Competitive groups will often hire music arrangers to write their competitive program for the year, and show bands will often hire out for either an
individual selection or an entire show. It is not recommended that a wind arranger with no percussion experience create music for percussion in a competitive group due to the specific requirements of this caption. Visual designers for both color guard and drill are frequently hired for their specific creative skills.

Every organization hires their staff due to their specific needs. Factors that determine these needs are the strengths and weaknesses of the instructional staff, the organization’s philosophy, and the desired goal at the end of the marching season.

Carolina Crown (2013) during their 2013 championship season had six areas of staffing: Administration, Design Team, Brass Staff, Percussion Staff, Visual Staff, and Guard Staff. Each section of the staff had an integral part that determined the level of success for the 2013 competitive season. Table 1 shows the area and job title of Carolina Crown’s 2013 staff (Carolina Crown, 2013). Responsibilities of each position are explained below.
Table 1. 2013 Carolina Crown Staff

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<td>Designer / Choreographer</td>
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Administrative roles in the organization handle financial responsibilities, organizational growth, and logistical issues for the group. The design team consists of a staff coordinator, music director/arranger, program concept/visual coordinator, visual designer, percussion coordinator/arranger, arranger – front ensemble, and design/music consultant. Coordinators will communicate all information to their specific areas of brass, percussion, and visual. The arrangers will create the brass, battery, and front ensemble books for their specific area. The percussion job titles are very specific for the front ensemble and battery arrangers. Both battery and pit have their own specific skills, thus it is not uncommon to have two percussion arrangers.

The brass, percussion, visual, and guard captions are each organized in a similar manner. Each area has a Caption Supervisor and sometimes an Assistant Caption Supervisor. These members are in charge of the education and development of the
performers in their respective area. The bulk of the staff for each of these four areas are
technicians. Technicians (commonly referred to as techs) are those with knowledge and
expertise on a specific instrument or visual instruction. It is not uncommon to have a tech
for trumpets, mellophones, baritones, and tubas for the hornline. Frequently there are
multiple techs for each section of the hornline. Percussion will have techs for each
instrument in the battery and multiple techs for the front ensemble. The arrangers and
visual designers are listed in their respective categories as well.

At the high school level the director has many different roles that reflect the
specified jobs at larger organizations such as Crown. Many high school and college
organizations of all sizes mimic the operations of corps due to the professional manner
they go about designing and executing their programs.

**Timeline of Events**

Throughout the calendar year there are a series of events that must take place in
order to produce a professional product. Adequate planning is needed to prepare the
designers to do their job effectively. When marching band has concluded (usually in
November or December) it is recommended that planning and designing for the next
season start in January or February of the same academic school year. Ryder (2005) gives
some great recommendations for show planning and writing during the winter, spring,
and summer months. Music is selected in December and January, arranging happens
between January to March while auxiliary props and staging ideas are formulated, and the
drill is written between March to August by the show designer. The timeline, which is
given by Ryder for music arranging is a bit narrow. Music arranging can take anywhere
from two to four months depending on the comfort level of the arranger with the
demands of ensemble and the style of music. The overall timeline Ryder presents, if on
time, can give all creative members of the team ample time to work on their craft.
Markworth (2008) however provides a more typical approach of completion dates.

The timeline presented by Markworth (2008) gives design completion dates for
winds, percussion, drill, and choreography. The wind arranger should complete all four
segments of the show in two-week intervals starting on April 1st. The percussion
arrangers should finish their product for the opener in two-week intervals with their first
date two weeks after the wind arranger submits the opener. Drill and choreography
follow a similar two-week pattern with drill being completed for the opener two months
after the wind arranger has submitted it (Markworth, 2008).

It is important that directors do not procrastinate in January. Organizing early
design meetings in January are crucial to the success of the next season’s activities.
Arrangers and drill designers are very busy year round, and especially in the winter and
spring months.

Designers must be encouraged to meet all deadlines. Markworth (2008) writes,
“There is a ‘domino effect’ if one of the designers gets behind – everything else will be
late” (p. 113). If the wind arranger is behind, then everyone else will feel the pressure to
complete their job. Ample time must be budgeted for the designers of all areas to create
and revise their products.

The horn book is the first product that is created for the program. The majority of
musical responsibilities of the program are carried by the winds. Music for the horn book
will dictate the percussion writing for both the battery and pit in addition to the visual pacing and development of the program.

**Design Meeting**

The purpose of design meetings, especially the initial one, is to discuss potential themes, concepts, and musical selections for the upcoming marching season. Multiple meetings are usually needed throughout the process. By the conclusion of several meetings a common ground amongst all members should be established. Theme, message of the program, musical selections, specific musical and visual moments, and the emotional contour of the production should be finalized.

The members in attendance of the initial design meetings should be the head of the educational staff, all arrangers and visual designers, and anyone else who has specific interest or talents in program design. The fewer members involved will often give a better chance of a successful production. When more than a few key members are present at the meeting, discussions can grow long and drawn out. More conflict than resolution can possibly arise between staff members.

The designers should attend the meeting with multiple pieces of paper, audio recording devices, their individual music library, a white board, and Internet access. Members who cannot attend the meeting could still be present via Skype, Google Chat, or any other form of communication. An audio recording should be taken of the entire meeting for future reference. This is in case the conversation deviates from the original path. A white board should be used to write down every idea that is mentioned.
Each member should come to the meeting with any ideas of musical selections and visual concepts they have. These ideas do not need to be a full production concept from start to finish. Ideas that are brought to the table can be a song, visual ideas, theme, or anything else that can add aesthetic value to the field. Every idea is important, even the “outlandish” ones. For example, if an idea gets a strong laugh from the members of the meeting it could very well be a humorous idea for the field that would create a reaction from the crowd.

It is important that every designer bring a large repertoire of music to the design meeting. Any musical selection that someone is interested in programming should be mentioned during the course of the design meeting. Designers should also use sources such as YouTube, Pandora, and other Internet sites to look for new possibilities. Pandora, for example, can offer designers the ability to search for different song choices within the same style of a song they might not be able or want to use. Audio recordings presented in the meeting should be, when possible, cut down to the specific musical moments that are being recommended for use. This will help expedite some parts of the meeting.

When designing shows for the contemporary marching band, show designers can choose between themed and non-themed shows. Ryder (2005), for example, was one of the first to suggest this distinction. In his text, he gives several examples of themed shows such as “music of similar styles, works of a composer, musicals, movies, historical events, cultural music, and pop performers” (p. 148-149). His list is a great foundation for the novice designer, and can assist any design team looking to start discussion at the initial meeting.

In Ryder’s (2005) section of non-themed shows he states:
It is much easier to select music for a non-theme show… The show can have music from different periods and contrasting styles. The opener could be a classical piece, the production number a jazz tune, and the closer a Spanish tune (p. 149).

Although Ryder suggests that non-themed shows can be easier, caution must be exercised when putting together a non-themed production. It can be very difficult to put together a visual program that will communicate clearly the music’s intent when music is selected somewhat randomly. Important to note, as well, is that competitive groups today are usually expected to perform a themed production. This is due to the high level of detailed design needed in the competitive community. Non-thematic shows are great for show bands that seek to combine educational music that does not fit in any of the other productions that are planned for the fall. Themes offer cohesiveness, and will create a product that the performers and audience can understand.

It is important to discuss when initially planning the show whether the theme or music comes first. Sometimes a show comes to fruition because it has been built around a single or multiple musical selections; however, sometimes a theme or concept has been presented and music has been found that communicates the ideas. Either approach is acceptable as long as the end result has a product that can be effectively communicated by the students and is well thought out. Most importantly, the program must be musically driven and have quality literature.

As the meeting begins, every theme, concept, visual idea, and musical selection should be written down. Every musical and visual element must relate to the theme. Any visual or aural iconology should be written down. Although some iconology might not be used, even the simplest visual or aural element can potentially add to the program;
however, sometimes these elements can also have a distracting quality. After a substantial list of concepts and musical selections has been offered, the design team can begin to elaborate on ideas that they are excited about.

Musical selections should be appropriately placed at certain moments of the production and should be guided by the designers’ musicianship. Each song should have a natural flow to the following selection; however, sometimes it is important to deviate from this approach. Various musical styles should be portrayed throughout the production. The amount of variety is sometimes dependent upon the show concept. For example, a show that portrays American composers could potentially have a wider variety of musical styles in contrast to a show that features the music from a single Broadway musical.

One important element to stress is that not every single second of the production will be determined at the end of the first couple design meetings. A theme and a framework of the musical selections, with a certain degree of flexibility, should be the goal. Markworth (2008) recommends several brainstorming meetings:

All staff members should feel free to bring any ideas for music or themes to the table. A white board or large paper on easel will help to focus ideas. Recordings should be listened to and a free discussion of all ideas should ensue. Unless everyone immediately agrees on an idea as The show to do next year, it is best to let everyone think about it for a week or two and do more research and listening. A second meeting can produce the show or narrow it down to a few ideas and finalize it at a third meeting. The marching band works on a show and lives with it for many months, so this is not a decision to be made too quickly (p. 107).

Space between meetings is extremely important. Not every idea is thought of on the spot. Several meetings are usually required to finalize the majority of details of the program. It is important that everyone leaves the initial meeting energized about the upcoming
marching season. “The show selected must be exciting to the staff or the season will not be exciting for the students” (Markworth, 2008, p. 106).

It takes months of edits, critique, and thought to get to the finished product. The design team for Crown, for example, worked for months critically evaluating their production *Triple Crown*. It is impossible to speculate whether the entire closing moments of their production were finalized in the early planning months or the final weeks of tour. In the final analysis, Crown finished the 2007 season with a well thought-out program. Effective communication between all members of staff, music and visual iconology, and a simplistic approach helped create an effective product. Design meetings are just the beginning in developing a quality field show.

**Storyboard**

With so many members participating in the design of a program, it is recommended that all members of the design team use a storyboard. Several texts have included recommendations for various types of storyboards. Earlier texts by Shellahamer, Swearingen, and Woods (1986) recommend using the “Marching Band Music Analysis Sheet” to assist in both analyzing the music and going from music to drill (p. 39). Markworth (2008) provides a similar chart, but has a slightly different goal. Markworth discusses the philosophical shift from drill writers using a storyboard to the entire design team using them. “A Data Module Sheet is now written to assemble all of the ideas in one place. Many band staffs call this ‘developing the storybook.’ …Measure, counts, time, melody, background, and ideas” are all found on Markworth’s suggested chart (p. 110-
A chart of this nature is perfect for high schools looking for a more organized approach to show design.

Bands of all sizes should utilize a storyboard. Even when the design team is relatively small (e.g., one or two people), there is great benefit from using the storyboard. The storyboard organizes all ideas and provides a detailed emotional direction for the structural features of the show.

The storyboard helps communicate information to all members of the organization (e.g., instructional staff, band camp staff, student leadership, students). Structural, emotional, and analytical information can be communicated to the students efficiently through the use of a storyboard. Due to the information that augments their specific part and drill assignment, the students are able to gain a greater understanding of the program. The holistic perspective that is gained by both students and staff results in a unified approach to communicating the program to the audience.

In the beginning, the storyboard should be used to sketch in physical features of the show (e.g., specific musical moments, visual moments). From there, the arrangers should fill in more specific information as they work. Visual designers can then begin to look at the storyboard, and begin to create visual concepts. It is important to note that the storyboard should not replace score study for the visual designer or any other member of the organization.

There is not a standard storyboard sheet that is utilized from group to group. Any team can create one for their own specific needs. The more information that is found on the storyboard will offer better understanding to other members of the design team.
Table 2 shows the storyboard used by some arrangers and visual designers at The Ohio State University. This sheet was developed for the 2013 season and used in the Country & Western Show. It was inspired after work was completed on the 2012 Tribute to Classic Video Game show. The music was arranged for both shows by myself, percussion by Aaron Bell, and visual design by Dr. Christopher Hoch – all in consultation with director Jon Waters. The sheet itself is broken into three parts. The first section takes note of structural and analytical components of the music. The first section is duplicated in a vertical orientation so that the information can be used for both music and visual information. The other two sections of the storyboard are stacked vertically upon one another, and aligned next to one of the structural and analytical sections. One section covers specific musical elements such as placement of melody, secondary musical roles, dynamics, percussion considerations, and the overall desired feel of the music. The visual section covers any desired visual moments and needs of the program. Notes should be made for every section of the ensemble: winds, percussion, and guard.
### Table 2. Sample Storyboard

<table>
<thead>
<tr>
<th>Movement III: Zelda</th>
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<tbody>
<tr>
<td><strong>Musical Structure</strong></td>
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<td>Song</td>
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</table>
A storyboard will change and evolve throughout the design process. As ideas become clearer, music becomes solidified, and the final shape of the show is available the storyboard can be used to critique and guide the changes of a show. Segments that seem drawn out will be highlighted in the elapsed time portion of the storyboard. A storyboard should not negate the musical integrity of the production, but should serve as another perspective for the design team to assess their work.

**Design Considerations**

**Physical Pacing**

Both visual designers and wind arrangers must be sensitive to the physical demands placed on the performers. Fast tempos with large steps that span over several charts will physically wear down a performer rapidly. The musical equivalent is an arranger expecting a trumpet section to play in the upper register at a loud and sustained dynamic for the duration of at least one segment of a show.

When editing music, an arranger must assess from where the music came, the specific moment at hand, and where the music is going for each individual part. The brass performers, especially high brass (trumpets and mellophones), after playing high notes will feel physical stress in their embouchures. Purposely placing in moments of rest is extremely important. Musically, rests add punctuation. Physically, rests allow the musicians to focus on their visual demands and relax their embouchures. It is also equally important for arrangers to add in moments where the high brass performs in the low to middle register of their instrument at softer dynamics. This, too, will allow the performers
to relax their embouchures, thus making the stronger moments more impactful. It is common after strong impact points that percussion takes the musical lead to allow the hornline to rest.

**Overwriting**

Band directors frequently go out and watch a drum bugle corps perform and want to mimic these groups with their high school bands. Blinded by the great design features, the music and drill are not always appropriate for the abilities of their students. The result usually ends with designers overwriting for the band, and the students not being able to handle the demands asked of them. Overwriting will also result in a lack of effective communication of the program from the students to the audience. Students will leave marching band feeling unaccomplished with little to no musical growth.

**Variety**

Variety is important when placing impact points and other design elements into a show. Overusing certain music and visual tools will cause them to lose their effectiveness, especially if placed in high frequency. Variety will keep the audience engaged in the performance.

**Small Band**

There is a great amount of skill needed to effectively design and write for smaller marching ensembles. Small bands can achieve the same aesthetic qualities of a larger ensemble. Several considerations have been presented in this chapter and the subsequent
chapters regarding writing and designing for small marching bands. The following
paragraphs will augment some of the information provided in other areas of this text.

The design of the field show for smaller marching ensembles should still have
similar characteristics of larger groups. Typically, a more simplified approach for these
groups will allow them to have great success. Impact points, general effect, and
emotional contour are all components that should be present in a program, regardless of
the ensembles size.

Markworth (2008) provides several bullet points that serve as recommendations
for directors of small bands. Programming recommendations such as not performing
large symphonic works, staging wind instruments close together for section features, and
use of a synthesizer to support the wind sound are all tremendous recommendations by
Markworth. He goes on to write, “Make sure the marching technique and execution is
elegant. Although there is a greater exposure (no room to hide), in many ways it is
easier to clean a small band visually than a large one” (Markworth, 2008, p. 115). Any
director can demand a higher-level performance from individual members of the
ensemble. Not only does this apply to the visual program, but the music program as well.

Both Ryder (2005) and Markworth (2008) caution against programming ballads
for smaller groups. While Ryder recommends not playing ballads, Markworth
recommends using them as shorter segments. Ryder’s suggestion may not help an
ensemble grow, musically, though. Ballads, after all, can be very effective on the field
with small bands when written and scored properly.

Some special techniques are not possible with small bands. For example, long
sustained power chords used by drum corps are not possible with small bands, partially
due to the lack of numbers needed for stagger breathing. Power chords should still be written for these smaller ensembles; however, care needs to be taken so that they have an appropriate duration for the group.
Chapter 4

Arranging for Winds

This chapter provides an overview of commonly used wind arranging techniques currently utilized by marching band arrangers. Where possible, musical examples are provided for clarity. The goal of every music example and concept presented in this chapter is to illustrate arranging practices in a manner that is easy for the reader to comprehend. The musical context of an arrangement outside of this study should guide the appropriateness of the various concepts presented in this chapter. Every concept should be challenged and expanded upon by any arranger or designer who takes a scholarly approach to the marching arts.

Some music examples that are provided in this chapter do not reflect the typical format of a score for either a large or small marching band. The reason for these slight changes was to make it easier to illustrate and understand the concept being presented. Most examples are in concert pitch in an effort to make the analysis of the music more clear. If an example is not in concert pitch, it is clearly stated either prior or after the example.
Roles of the Wind Arranger

The wind arranger for any marching ensemble has arguably one of the most crucial jobs in show design. The musical choices that are made by the wind arranger will affect the writing of the other captions. The emotional pacing and impact of the program are also influenced by the horn book.

There are many different roles a wind arranger must consider throughout the creative process. The wind arranger first and foremost must be a musician. Without the ability to feel rise and fall, and tension and release in a natural musical flow, writing becomes more challenging. Similar to a conductor or performer, an arranger must be able to emotionally commit to the music. The arranger must be able to “hear” the music as it is being created. Arbitrarily writing music at the computer can either get rid of writers block, or adversely create music that lacks clear direction and structure.

Arranging music is very similar, if not synonymous, to composing music. Music must have a logical formal structure, organized harmonic content, appropriate elements of part writing, and emotion, amongst other aspects – all of which are fundamental to composition. True musicianship in arranging for marching band prevails when the arranger adds a personal twist to the music. Simply put, the arranger of music for a marching band show must be a composer.

After the music has been created, the final step is to bring the music to life with musicians. Teaching and creating educational music should always be a priority for any arranger. An arranger must use their compositional skills to create educational music for the students. Educational music, through the use of various compositional tools, inherently has substance for each part, which fosters growth for the performers.
Arrangers must have a comprehensive understanding of the pedagogy for every wind instrument they write for. With this knowledge of pedagogy should be an understanding of abilities for different grade levels. For instance, a high school band will have different limitations compared to groups of a professional nature such as The Ohio State University Marching Band or a world-class drum and bugle corps.

In addition to pedagogy, an arranger must have a clear understanding of the rehearsal sequence for their group. A group who has ten rehearsal hours will have a much different instructional sequence in comparison to ensembles that will have prepared the music and drill over several weeks. The amount of time before a performance, and the structure of the rehearsals can influence decisions made by an arranger regarding the overall complexity of the music.

**Equipment and Items**

There are several pieces of equipment and items that can assist with the arranging process. Manuscript paper, pencil, piano, and sound system should be the essential items used by any arranger. Even with technology becoming more integrated with our daily lives, paper and pencil is still the best place to start. A sound system should be used to record ideas, as well as playback source material. The piano also can help with improvisation (which leads to composition), orchestration, part writing, and dictation skills. Once a draft (or most of it) is placed on paper, then moving to a computer and inputting the manuscript score into a notation program is appropriate. Those who compose through audiation, that is mentally hearing the music, should still begin with manuscript paper to write down their ideas.
Notation

The notation of the score and parts should be concise and clear to both the conductor and performer. Adler (2002) and scores of quality marching band arrangements should serve as reference points when questions arise about how to clearly notate musical ideas. If the notation is clear and concise, then it is possible that musical intent will be effectively communicated to the conductors and performers. Typically, the simplest choice is the best one when working in the score.

Notation Software

Notation software has seen a tremendous growth over the last decade; however, there are limitations to the software. Musical style, tempo changes, balance of the ensemble, emotion (or lack there of), and timbre are just a few of the concerns that notation software presents. These concerns should not deter a novice arranger from listening to the computer playback. The use of a piano or high quality digital piano should always be used to double check the orchestration and part writing. Additionally, there is no supplement for hearing your arrangement performed by a live ensemble.

Marching Band Specific Instruments

Due to outdoor acoustics, the construction of brass instruments used for concert ensembles, and the choral like approach to marching band orchestration, the marching band activity has seen a variety of change regarding instrumentation. The horn and baritone voices specifically have seen substantial growth over the last few decades. Driving this change has been a greater need of musicality, and an emphasis on the
direction of sound. Colwell and Hewitt (2011) write about specialty marching instruments: “the emergence of corps-style marching bands brought about a need for instruments whose direction of sound could be manipulated, similar to the trumpet and trombone” (p. 374).

Mellophones, which resemble a trumpet in shape, are the alto voice in the hornline replacing the French horn in a concert band. The overtone series and fingering system for the mellophone is similar to a trumpet; however it is typically pitched in F (less frequently in Bb). Baritones and euphoniums have various options for the marching activity. Some directors choose to use equipment similar to concert horns while others opt for the newer bell front instruments designed for the marching activity. Neither choice is wrong, but it is important for the arranger to know what type of instrument is used due to the slight timbre differences between the concert and marching horns.

The concert models typically used in a marching band only come in the form of a baritone, and not a euphonium. The bell front marching instruments come in both baritone and euphonium models. Colwell and Hewitt (2011) state the difference between the marching baritone and euphonium is consistent with the concert horns when comparing the conical and cylindrical bore of the instruments. “Marching euphoniums are newer than the baritone. They are more elongated, have a more conical shape, a larger bore, and bigger bell than the baritones” (p. 375).

Bell front baritone and euphoniums offer a powerful sound like the trombone. The timbre of the bell front baritone is not as bright when compared to a trombone at louder volumes. It is however much stronger in sound than the concert style models also used by some marching band. The timbre of a bell front euphonium is still not as bright as a
trombone. The bell front euphonium produces a darker and deeper sound than the bell front baritone.

The tuba section has also seen some variance in standard equipment. Colwell and Hewitt (2011) have also cited this variance in equipment. The sousaphone is still the most common choice used by high school and collegiate marching bands. Drum corps and some high schools use the convertible tuba, which resembles a concert tuba but sits on the performer's shoulder. Some convertible tubas do have a slightly different tubing wrap and valve position in comparison to the concert tuba. There is a slight variance in timbre between the sousaphone and convertible tuba with the convertible tuba having a slightly brighter and more direct tone.

Instrument Ranges for Outdoor Performance

Several texts have been written that discuss the full range and timbre of wind instruments (Adler, 2002); however, it is still important to discuss ranges that are best used for wind instruments in an outdoor setting. Obviously, the full range of an instrument within reason is available to the arranger for use if the texture of the ensemble is reduced or transparent. Ability level, and musical context should ultimately guide the range of the hornline.

Adler (2002) provides a thorough and scholarly approach to each wind instrument used in the marching band, to which the text serves as a good reference for notation, full range, timbre (in relation to register), articulation, trills, and various other aspects: piccolo (p. 189), flute (p. 180), clarinet (p. 205), saxophone (p. 217), trumpet (p. 220), and others.
325), trombone (p. 340), and tuba (p. 349). There is no mention of the mellophone, or other specialty marching band instruments.

The mellophone, as previously stated, responds similarly to a trumpet and not the French horn. Additionally, the written range of the mellophone should be similar, if not exact to the trumpet. When the orchestration of the mellophone resembles that of the French horn, especially in low registers, the mellophone can be either difficult to hear or inaudible.

When an ensemble is written in a manner to achieve a strong volume, both brass and woodwind instruments have certain registers that allow them to contribute to the ensembles overall sound. On the other hand, there are certain notes and registers of each instrument that don’t allow them to project, and, thus the sound gets “lost.” This “lost” sound does not support the ensemble. The lack of supporting sound is due to the outdoor acoustical properties, and the instrument’s response in the low register. For example, low registers for both the mellophone and trumpet can result in poor intonation, and an inability to project on the field when the rest of the ensemble is scored tutti at a loud dynamic.

A typical power range has been recommended for most collegiate and high school level groups. It is possible to extend the range higher for each instrument presented on the chart if the ensemble can handle those demands. The following ranges should be used as a guideline, and can change depending on the musical context and ensembles abilities (see Figure 1).
Instrumentation for Large and Small Marching Bands, and Drum Corps Hornline

The instrumentation for a marching ensemble is organized similarly to a concert band score. Erickson (1983) and Adler (2002) both provide sample instrumentation of a concert band. The score for a marching band consists of three main families: woodwinds, brass, and percussion. Woodwinds are found at the top of the score, brass in the middle,
and percussion at the bottom. Adler (2002) and Spencer-Pierce (2008) both provide sample score setups for the marching band, both of which resemble this order.

In the woodwind family, the piccolo/flute staff is at the top and descends next with the Bb clarinet, bass clarinet (if used), Eb alto saxophone, Bb tenor saxophone, and Eb baritone saxophone (if used). Some texts have discussed the use of both the Db and C piccolo within the marching band (Adler, 2002). In today's current activity, only the C piccolo is used.

Most ensembles will elect to use only flutes, piccolos, or a combination of the two. If both flutes and piccolos are used, the piccolo and flute typically perform the same part. The arranger should understand that the piccolo will sound an octave higher than the flute if they both perform the same part (Adler 2002). It is up to the arranger’s discretion to create a separate staff and part for the both flute and piccolo. If a separate staff and part is not created and the use of the piccolo is not desired for a certain section, then it is appropriate to notate clearly when the piccolo should and should not play.

For both large and small marching bands, it is common for the flute, Bb clarinet, and Eb alto saxophone parts to be divided into 1st and 2nd parts. If two flute parts are present without a separate piccolo part, the piccolo will perform the first flute part. When the flute, clarinet, and alto saxophone have more than one part, both parts are usually found on the same staff within the score. It is up to the arranger or directors discretion to engrave the part with both first and second on the same page, or to engrave them separately.

The brass family begins with the Bb trumpets and descends next to the Bb horn (an optional part usually played by a flugelhorn or Bb mellophone), mellophone (pitched
in F), trombone, baritone, and tuba. Depending on the ensemble’s needs any of the following sections can be found with divided parts: Bb trumpets, mellophone, trombone, and baritone. Some high schools today do not march trombones, and instead march only bell front baritones to model the drum corps activity. If this is the case, either one to three baritone parts are found. In addition, if the trombones have two parts, typically only one baritone part is used.

Large marching bands and small marching bands will have similar instrumentation. The main difference is the number of divided parts when comparing a small and large marching band. If either group has too many separate parts within a given section (e.g., trumpets), the result will cause the ensemble and section to sound thin.

A large marching band, typically, will have the following instrumentation: piccolo / two flute, two or three Bb clarinet, Bb bass clarinet (optional), two Eb alto saxophone, Bb tenor saxophone, Eb baritone saxophone (optional), two or three Bb trumpet, Bb horn (optional), one or two mellophone, one or two trombone, baritone, and tuba. Larger marching bands, depending on how large and the ensembles ability level, can utilize some of the same techniques drum corps use such as long sustained power chords. With the larger amount of divided parts it is easier for an arranger to expand the harmonic color of the ensemble without running the risk of making the group sound weak. The arranger should not become complacent when writing for larger groups, and should still write in a smart manner. Even with each section and individual part having more members, it is still possible to write music for the ensemble that is beyond their ability level. Figure 2 shows the typical instrumentation of a large marching band.
Smaller groups, which can sound very powerful when scored properly, will normally have the following part distribution: piccolo / one or two flute parts, one or two Bb clarinet, Bb bass clarinet (optional), one or two Eb alto saxophone, Bb tenor saxophone, Eb baritone saxophone (optional), one or two Bb trumpets, one mellophone
(sometimes no mellophone), one trombone, baritone, and tuba. Great care must be taken when orchestrating for smaller ensembles.

Small marching bands, even with a reduced number of parts, can still have a variety of color in orchestration. There are still several options that an arranger can use when orchestrating for a small marching band. More care must be taken when determining whom the woodwind section doubles. Any range restrictions given to the arranger from the director must be taken into consideration as well.

Certain arranging and compositional techniques do not work well with smaller marching bands. It is easier to physically tax the performers in smaller marching bands. For example, an arranger must take care to not over extend the trumpets and mellophones in the higher registers for too long and too frequently. Figure 3 shows the typical instrumentation of a small marching band.
During a telephone conversation with professional arranger Jay Bocook (J. Bocook, personal communication, January 22, 2014), I asked him about the typical instrumentation of a world-class drum corps. Bocook stated that the standard instrumentation is three trumpets, two mellophones, and tuba. What is not standard is the use of baritones and euphoniums. Some corps use two euphoniums and one baritone, two
baritones and one euphonium, or three baritones with no euphoniums at all. Each part within a drum corps hornline should have its own staff. If the euphonium is present in a drum corps score, it is placed between the lowest baritone part, and the tuba. Figure 4 shows the typical drum corps instrumentation of the brass section with 3 baritone parts.
Key Selection

Key selection is one of the most important choices for an arranger to make. Markworth (2008) echoes this concern in a list of bullet points entitled, “characteristics that determine quality music arrangements.” Markworth (2008) goes on to discuss that the key center, especially at strong moments, should allow the instruments to project and resonate. F major, Bb major, Eb major, Ab major, and C major are all appropriate key
choices because they resonate well on brass and woodwind instruments. Further, technique in flat keys is typically easier to master on a wind instrument in comparison to sharp keys. The relative minor of the recommended major keys are appropriate decisions when a minor mode is required.

The desired timbre, placement of melodic material, and the demands of important technical passages should guide the arranger in the selection of key. “The choice of key may affect the timbre of the ensemble. In general, flat keys work better for bands than do sharp keys. The more flats a key contains, the darker the tone quality created by a band; the more sharps, the brighter the tone” (Bailey & Caneva, 2003, p. 66). Some selections, such as concert band music will need very little adjustments to the key of the piece. Other genres such as rock ‘n roll and pop music are often pitched in sharp keys because of their instrumentation. This makes transposing up or down a half step usually the logical choice.

**Harmony**

An arranger should have a clear understanding of chord function, harmonic progression, and harmonic rhythm. Several texts are available that discuss harmony in a scholarly manner. Kostka and Payne (2004) provide a classical approach to harmony while Sussman and Abene (2012) and Grove (1972) discuss jazz harmonic and arranging concepts for stage band. The reader is referred to these texts for a full exposition of the topic, as it is not within the scope of this document to discuss harmony in a detailed theoretical context.
Traditional classical theory is present in marching band arranging. Chord progressions studied in theory textbooks that use examples from the works of Mozart, Beethoven, and many other composers are standard in today’s practices (Kostka & Payne, 2004). Equally important is the concept the harmonic rhythm, which is the frequency that chords change. Harmonic rhythm should bring a natural flow to the music. Chord changes that are abrupt, or do not follow the guidelines provided in classical theory can create awkward musical moments and disrupt the aesthetic qualities of a show.

Extend harmonies found in jazz, 20th, and 21st century art music should also be readily available to an arranger. Extended harmonies and polytonality have also been used in marching band arranging, especially at the competitive level. For instance, groups have featured one choir of instruments perform in Bb major, with another performing in E major – a tritone relationship.

The use of non-chord tones will add interest, motion, and impactful gestures to the music. Passing tones are quite frequent in accompaniment parts and counter melodies. When used in introductions or codas, passing tones (even at the quarter note value), can help maintain momentum and energy in an arrangement. Other non-chord tones such as neighbor tones, appoggiaturas, escape tones, pedal point, suspensions, retardations, and anticipations are frequently used in phrase extensions and strong impact moments.

Arrangers will frequently use chords outside the diatonic scale during originally composed moments. For example, the harmonic progression, bVI – bVII – I is a very common technique employed by arrangers. Picardy thirds, and other chords out of the diatonic scale should be explored and used when musically appropriate. Anytime a chord
from outside the diatonic scale is used, interest is added and serves to focus the attention of the audience.

**Orchestration**

The most important aspect of wind arranging for marching band is orchestration. Orchestration involves the vertical organization of chord members in the score, the desired timbre from each instrument of the hornline, and the various combinations of instruments. Marching bands generally have a simple approach to orchestration; however, it is arguable that there is still a level of complexity present.

Orchestration should be a direct response to the emotional contour of the music. If the music needs to have a strong gesture, then a full orchestration needs to be used. When the music requires a more delicate texture, then low to mid registers should primarily be used with reduced instrumentation. The various possibilities of orchestration for marching band are virtually endless.

For an arranger, of any ability level, it is highly recommended that they consult Adler (2002). Orchestration techniques and considerations are given for individual instruments, choirs (woodwind, brass), in addition to full ensemble suggestions (predominantly orchestra with some band examples). Without a comprehensive knowledge of every wind instrument found in the hornline, it is impossible to effectively arrange music.

Color is the most important aspect of orchestration. The arranger should internalize the timbre, which is largely affected by register, of each instrument before any notes are placed into the score. If it is not possible to hear the orchestration of the
ensemble, the piano will greatly assist in this process. The ability to audiate the ensemble’s color improves through experience and hearing ensembles of all sizes perform your music.

The hornline, due to the choral nature of brass writing for marching band, should be viewed in the same context as a choir: soprano (trumpet), alto (flugelhorn, mellophone), tenor (trombone, baritone, euphonium), and bass (tuba). When beginning to orchestrate for a hornline, viewing the ensemble in context of SATB will allow the arranger to more effectively control the part writing and color of the ensemble. The SATB approach does not mean that each section only has one member of the chord. Various chord members can (and should) be present in each section of the ensemble. Timbre of each instrument and section should always be considered with the SATB approach.

The choral nature of hornline writing allows for an easier organization of musical components: melody, harmony, counter melody, accompaniment, and bass line. For example, at strong musical moments, larger marching bands and world-class corps that can support three trumpet and three tenor voice parts (e.g., two trombones and one baritone, or three baritone) will frequently have melody and two harmony parts within both voices, counter melody in the alto voice, and the bass line in the bass voice. This model works very well for them. This of course is just one of many possibilities.

Smaller ensembles can still utilize a similar approach; however, it needs to be much simpler. Instead of melody and two harmony parts in the trumpets, only one harmony part might be found, which is placed in the second trumpet part. A full sound can be achieved if the alto voice has a counter melody and fills in the missing chord.
member between the two trumpet parts. When possible the tubas should operate independently of the trombones and baritones. Sometimes the tuba in smaller ensembles will need to be doubled by one of the low brass instruments. It is important to note that this can be a very limiting approach.

The SATB approach also allows the arranger to assess, which groups of the hornline have performed together. For example, an arranger can look through the score and see if the soprano, alto, and bass voices have had a moment together or if that combination has been overused. If every movement of the program begins with the alto, tenor, and bass voices, then corrections can be made so more variety is present. Musical appropriateness should be the ultimate factor; however, assessing the various combinations within the hornline will help add variety to the program.

While the SATB approach is very effective with the brass, the woodwinds should still compliment the emotional goals of the music, especially when the ensemble is scored tutti. It is recommended to not solely view the woodwind section in the context of soprano (flute, clarinet), alto (alto saxophone), tenor (tenor saxophone, bass clarinet), and bass (bass clarinet, baritone saxophone). This approach to the woodwind choir can be appropriate in a woodwind feature and in some full ensemble moments; however, when the brass is scored in full, the woodwinds should either use or break away from this mold.

Tables 3 and 4 show various combinations of acceptable woodwind doublings that are not standard (e.g., flute/clarinet – trumpets, alto saxophone – mellophone, tenor saxophone – trombone/baritone). While no music is provided, Tables 3 and 4 were created with the idea of the ensemble being scored tutti. Both Tables 3 and 4 have different brass part assignments. It should be understood that soprano, alto, tenor, and
bass refer back to the previously stated assignments of trumpet, mellophone, trombone/baritone, and tuba, respectively.
Table 3. Woodwind Doublings 1

<table>
<thead>
<tr>
<th><strong>Brass Assignments</strong></th>
<th><strong>Woodwind Doublings</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Soprano (Melody / Harmony)</td>
<td>All (Fl., Cl., B. Cl., A. Sx., T. Sx., B. Sx.)</td>
</tr>
<tr>
<td>Alto (Counter Melody)</td>
<td>Fl., Cl., A. Sx., T. Sx.</td>
</tr>
<tr>
<td>Tenor (Melody / Harmony)</td>
<td>B. Cl., B. Sx.</td>
</tr>
<tr>
<td>Bass (Bass)</td>
<td>B. Sx.</td>
</tr>
<tr>
<td>Soprano (Melody / Harmony)</td>
<td>Fl. / Cl.</td>
</tr>
<tr>
<td>Alto (Counter Melody)</td>
<td>A. Sx.</td>
</tr>
<tr>
<td>Tenor (Melody / Harmony)</td>
<td>B. Cl. (Har.), T. Sx. (Mel.)</td>
</tr>
<tr>
<td>Bass (Bass)</td>
<td>B. Sx.</td>
</tr>
</tbody>
</table>
Table 4. Woodwind Doublings 2

<table>
<thead>
<tr>
<th>Brass Assignments</th>
<th>Woodwind Doublings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soprano (Accomp. I – Percussive Hits)</td>
<td>All (Fl., Cl., B. Cl., A. Sx., T. Sx., B. Sx.)</td>
</tr>
<tr>
<td>Alto (Melody)</td>
<td>All (Fl., Cl., B. Cl., A. Sx., T. Sx.)</td>
</tr>
<tr>
<td>Tenor (Accomp. II – Sustains)</td>
<td>B. Cl.</td>
</tr>
<tr>
<td>Bass (Bass)</td>
<td>B. Sx.</td>
</tr>
<tr>
<td>Soprano (Accomp. I – Percussive Hits)</td>
<td>Fl., Cl.</td>
</tr>
<tr>
<td>Alto (Melody)</td>
<td>A. Sx., T. Sx.</td>
</tr>
<tr>
<td>Tenor (Accomp. II – Sustains)</td>
<td>B. Cl.</td>
</tr>
<tr>
<td>Bass (Bass)</td>
<td>B. Sx.</td>
</tr>
<tr>
<td>Soprano (Accomp. I – Percussive Hits)</td>
<td>Fl., Cl.</td>
</tr>
<tr>
<td>Alto (Melody)</td>
<td>A. Sx.</td>
</tr>
<tr>
<td>Tenor (Accomp. II – Sustains)</td>
<td>Fl., Cl., T. Sx.</td>
</tr>
<tr>
<td>Bass (Bass)</td>
<td>B. Cl., B. Sx.</td>
</tr>
</tbody>
</table>

The timbre of a marching band is a direct response of who the woodwinds double and the register they are scored in. Flutes and clarinets doubling the mellophone section will create a different texture in contrast to the saxophones. The chalumeau register on the clarinet, which does not project well at times when the full ensemble is playing, can be very effective in reduced textures when doubling the trombones and baritones. Also during transparent moments, trills, long eighth or sixteenth note runs, or melody within
the woodwind choir can be audible. The arranger must make a decision whether or not to double the woodwinds in the brass or pit. If the decision has been made to double the woodwinds with specific keyboard instruments found in the pit, then it is appropriate for the arranger to sketch that part into an additional staff of the wind score. The pit should not double the woodwinds for the entire program; however, when employed in certain musical contexts this can be an effective technique. Communication between the wind and pit arrangers is critical when considering doublings.

When the clarinets double the brass, it is sometimes necessary to invert the first and second parts. For example, the first clarinets might need to double the second trumpet an octave higher and the second clarinets double the first trumpet at the octave. This approach to orchestration should be used when the second clarinets would have doubled the second trumpets in the “throat tone” register. If this line is scored an octave higher, it places the clarinet in a range, which adds supporting sound to the ensemble instead of performing in a register that doesn’t project. This is particularly effective when the flute also doubles the first trumpet an octave higher (see Figure 5).
Doublings are important in the woodwind family, but are equally important within the brass family as well. Musical lines become much stronger when the entire hornline performs the same musical line or within a specific section (e.g., trumpets). When melody and harmony is present within a section (e.g., trumpets), it can still have power. The melody and harmony will have a different character in comparison to a unison line. Figures 6 and 7 illustrate two powerful methods of scoring. The melody in Figure 6 is harmonized. Figure 7 shows the melody scored in unison and octaves, which would result in a different character. Both Figures 6 and 7 use an augmented melody of *Battle Hymn of the Republic*.
Figure 6. Harmonized Melody within the Trumpet Section
Adler (2002) expresses concerns about melodic doubling at the unison versus the octave. Adler states solos should not be doubled by “two like winds” because it “often impedes the expressive quality that one instrument can give…” (p. 238). Adler goes on to state that this approach is for “orchestral works, not tutti sections in which sheer volume is required…” (p. 238). There is some parallel in regards to Adler’s comments regarding the orchestra and the marching band. While the comments regarding the doubling of solos and “two like winds” by Adler (2002) are not relevant to marching band, Adler does support the notion that two like instruments that are doubled will not negatively impact the ensemble’s sound. This is important when considering both brass and woodwind doublings at the octave.

Doubling should be used when the arranger desires a certain color. Doublings at the octave within the brass section will create a timbral change. An arranger must understand that if a note at the octave is doubled by two brass instruments, that there is an increase in the number of players performing that note. The increase in number of performers on a single note will naturally result in a stronger sound. Most doublings at
the octave are typically around C₄ and above. This is due to an overlap in power range between the trombone, baritone, mellophone, and trumpet.

Adler (2002) provides “Usual Doublings of the Brass Choir within the Modern Orchestra” (p. 363), which illustrates the voicing of three or four note chords with the eleven different members in the brass section of the orchestra. Adler (2008) also mentions the concept of “overlapping” voices at the octave within the orchestra brass section.

Another consideration of brass doublings at the octave is the concept of dominant and supporting sound. This concept is usually applied to power chords, but can be used for part writing as well. The instrument that has the dominant sound will have the stronger timbre when listening to the ensemble. The supporting instrument will blend in with the dominant voice. Of course the supporting instrument will still provide some (minimal) color to the ensemble, but it will reinforce the dominant instrument and make that particular chord member stronger.

This is best understood through theoretical information and examples. Any brass instrument that performs between the third and sixth partials (and above) will naturally have an increased presence in the ensembles sound. When discussing doublings at the octave, typically, the lower pitched instrument is between the fourth and sixth partial (sometimes higher), and the higher pitched instrument is on a slightly lower partial. The lower pitched instrument, typically, will have a more dominant sound in comparison to higher. For example, if the first trombone and second trumpet were both to perform a concert F₄, the result would be the trombone (sixth partial) having a more dominant presence in the ensembles sound in comparison to the second trumpet (third partial). The
same concept can be applied when the mellophone is scored in a higher register and is doubled by a trumpet part at the octave. The mellophone (fifth partial) will be more dominant, with the trumpet (fourth partial) offering supporting sound.

Figure 8 has two power chords. The first is an F major power chord and illustrates the trumpet and trombone doubling a concert F₄. The other power chord, Bb major, shows the mellophone and third trumpet doubling a concert Bb₄. Both the mellophone and trombone in their respective examples will have the dominant sound in comparison to the trumpets. Principles of power orchestration will be discussed in the following paragraphs.
When assessing the suggested doublings presented by Adler (2002), which also give a basic foundation of power orchestration, it is important to apply the examples in the context of a hornline. The chords presented by Adler are all in D major, a common key with orchestras but not marching bands. While some of the chords would work for a marching band, sometimes the soprano and tenor voices as presented by Adler would need to consist of a more full voicing when scored for a hornline. The ranges presented
by Adler for the French horn in some cases are too low for the mellophone to project. Most chords presented by Adler (2002) follow the use of open and closed orchestration.

For marching ensembles, there is a method that allows an arranger to voice the hornline for power. The brass instruments must be scored in a manner that allows them to resonate and project in an outdoor environment. One way to achieve resonance of the brass family is to use an orchestration technique that utilizes open and closed intervals.

Open and closed orchestration, which primarily affects the low and high brass choirs respectively, will result in a powerful brass sound. Spencer-Pierce (2008) states, “Writing should follow the example of the overtone series – smaller intervals are best placed in the upper voices, and larger intervals in the lower voices” (p. 5).

Open orchestration will use larger intervals, and should be utilized primarily within the low brass choir (trombone, baritone, tuba). Perfect 4th’s, 5th’s, and larger intervals should be used when scoring from around F₃ and below within the low brass. Anything from Eb₃ and above can use open or closed orchestration. Open orchestration can also be very effective when used with both the high and low brass.

Figure 9 shows two chords, Bb major and Eb major, that are both scored in the low brass choir. The interval between each note for each chord is marked. There is a higher frequency of large intervals within the low brass choir in comparison the high brass with closed orchestration.
The high brass (trumpets and mellophones) will predominantly use closed orchestration. Closed orchestration involves the use of 3rd's and 2nd's in higher frequency and closer proximity to one another. Larger intervals such as perfect 4th's are still present. Figure 10 shows a Bb major power chord, and the use of closed orchestration in the high brass choir. The interval between each note has been marked.
Open and closed orchestration practices should be used at some point during a competitive program within the low brass choir due to its effectiveness during tender musical moments. Care must be taken that the low brass does not create a texture that is unclear. This is achieved by making sure the use of open orchestration is used between the tenor and bass voices. The arranger should consider whether or not the range would respond well on the instrument in an outdoor environment, in addition to the chords voicing. Checking the voicing of a chord, even out of rhythmic context, is a necessity at the piano. If the orchestration produces a clear, full sound on the piano, it will likely work for the ensemble. Figure 11 illustrates the use of open and closed orchestration within the low brass choir during a moment where power is not the requirement.
Divisions within specific parts are commonly found in drum corps and marching band arrangements. These splits, depending on the musical context, typically happen in the first parts (first trumpet, first mellophone, first trombone/baritone). The rationale for placing the divisions into the first parts is for several reasons. The performers on first parts have the ability to play higher notes. Typically, the entire section cannot perform the higher notes with control. Additional when considering the acoustical properties of wind instruments, higher voices are heard easier, which means fewer numbers are needed on those notes. Figure 12 illustrates potential divisions in the first trumpet, and first mellophone parts in a drum corps score. The resulting sound of the power chord would consist of a brighter character, especially from the alto voice.
Figure 12. First Part Divisions
A lot of time has been spent discussing power orchestration, and that is due to its importance for any marching ensemble. Equally important are moments of softer dynamics. Effective orchestration still needs to be applied when the ensemble is performing during these musical moments. Adler (2002) provides an example, “How Dynamic Levels Affect Doubling and Spacing” (p. 364). While the example focuses on French horn doublings within the brass section of an orchestra in relation to dynamic level, several characteristics are important in the scope of marching band arranging. Louder dynamics will typically have an extend range in the brass. Previous music examples provided in this text (see Figure 12. First Part Divisions) illustrates a range from F₂ to C₆, which is appropriate for louder dynamics. When an ensemble is asked to perform at a mezzo or piano volume, the range should diminish in comparison to Figure 12.

Adler (2002) illustrates the diminished range between notes in relation to dynamics in his example where he provides fortissimo, mezzo forte, and piano volumes (p. 364). For each of the previously stated dynamics Adler provides three chords. At a fortissimo volume Adler gives the ranges of C₂ to G₅, mezzo forte from C₂ to C₅, and piano from C₂ to E₃. The arranger should score the instruments in a low to moderate range when asking them to perform softer dynamic volumes. As wind instruments increase in register, it becomes increasingly difficult to perform at softer volumes with control. This is due to the balance between the slower air speed required for the performance of the dynamic, and the faster air speed required to produce the note.

Softer dynamics are also affected by the number of parts performing. A mezzo forte with the entire ensemble will sound stronger in comparison to when just a select few
parts are performing. This should also be a consideration when adding dynamics to the score.

**Power Chords**

Power chords are an important musical element of the marching band field show. When approached properly power chords can create an aesthetic moment that brings a culminating moment to finality, or can leave a moment lingering. Usually found at loud impact points such as opening and closing moments of the show, power chords frequently offer punctuation to the music.

Previously discussed open and closed orchestration techniques should be used when scoring power chords. Woodwinds should be voiced in middle to upper registers of their range so that they can support the brass sound. The result will be the ensemble creating a sound that is felt by the audience.

When orchestrating power chords the valve combination and slide position of each brass part is an important consideration. When a combination that involves use of the second and third valves together, or moves downward chromatically within the same partial (or the slide equivalent on the trombone), it is tough for instruments to achieve maximum power due to the faster airflow required to produce the same volume. Intonation, because of the additional length added to the instrument, also becomes a concern with these notes. Poor intonation will greatly diminish an ensembles ability to produce a powerful sound.
Form and Emotional Contour

Form and emotional contour of a program requires a balancing act of listening to the brain and the heart. In both competitive programs and halftime shows, the field production should be planned out start to finish before the first notes are written. The plan of the program should highlight the emotional high and low points, in addition to giving the arranger a flexible roadmap that allows the music to be written in an organic manner.

Within each movement the large formal sections and phrases should have a clear structure to them. Use of cadences such as deceptive, authentic, plagal, and half should all be used throughout the program. Musically each formal section, period, and phrase should have a clear direction. Cadences will help give a target goal, which will help communicate the music. Without a clear plan, purpose of the arrangement, and overall emotional goal, it is more likely to produce a piece of music that lacks direction and effectiveness.

Part Writing

Part writing can be defined as the use of various compositional techniques. These fundamentals, for example voice leading, orchestration, harmony (both horizontal and vertical), formal structure, and rhythm are all very important aspects of good part writing. Articulations and dynamics must be notated with precision, as well, due to the music being performed outside. While not fundamental, part writing should also have clearly marked tempo and style markings, rehearsal markings, and measure numbers. Part writing is a process that takes time to refine. Young arrangers typically will spend a third
of their time editing and revising their writing. Part writing will become easier if adequate planning has happened prior to writing.

The goal of good part writing is to make the music feel as natural and comfortable as possible due to the physical demands that are placed on the musicians. Voice leading is one component of quality part writing. The resolution of tendency notes such as the third and seventh of a dominant seventh chord should still adhere to the theoretical rules governing them, although, sometimes the music does require some breaking of these rules. Stepwise motion, common tones (especially with harmony and accompaniment parts), and avoiding awkward intervals (anything over a major 9\textsuperscript{th} for brass) are all aspects to look for in brass writing. Intervals larger than a major 9\textsuperscript{th} can be made in the brass family, but need to be carefully assessed so that they are not written in registers that begin too low or end too high. Typically, extra rehearsal time will be needed for large or awkward intervals written for brass.

Counterpoint should always be used in marching band arranging. Kostka and Payne (2004) define counterpoint as “the combining of relatively independent musical lines” (p. 71). Grove (1972) implicitly states that counterpoint for stage band does not follow a classical approach. Grove does suggest making a composite rhythm out of the all the parts. Classical theorists use various approaches to study counterpoint (species, free counterpoint, deviations, etc.); however, these theories are not typically used in marching band arranging. Rhythmic motion will allow the ensemble to maintain tempo, which minimizes the possibility of phasing while moving on the field. The battery will help with keeping the cohesiveness of the ensemble, but movement in the wind parts will only reinforce tempo. Counterpoint in marching band arranging should have both the winds
and battery complimenting one another. If the contrapuntal lines do not compliment one another, then rhythmic ambiguities and instabilities can occur on the field. Adler (2002) provides a study of contrapuntal writing for both woodwinds (p. 261) and brass (p. 392). Some of the contrapuntal writing is not idiomatic to the marching band activity. It is recommended that novice arrangers look for quality marching band and drum corps arrangements in order to study counterpoint, as it applies to the marching arts.

All arrangers must be aware of the technical demands asked of the musicians. The fingerings, valve combinations, and slide positions should always be in the arranger’s mind when working in the score. A balancing act of writing demanding but achievable technical passages should be the goal. Awkward runs and trills should also be avoided for woodwinds and brass. Arrangers for drum corps and other professional level marching ensembles disengage the use of the ring finger (third valve) as much as possible in technically demanding passages to allow the musicians to obtain proficiency faster. This does not mean the passage is technically easy, or that the third valve can’t be used. Trills for brass should be scored so that minimal (if any) jumps are made from one partial to the next. An arranger should notate alternate fingerings whenever possible for any instrument to assist the musician.

Complex rhythms should be simplified, or scored appropriately for an ensemble. Cichy (1985) writes, “Repeated notes that lack clean articulation can be simplified by reducing the amount of notes” (p. 62). Register of an instrument can negatively affect a performer’s ability to clearly articulate complex rhythms. Complex articulations should be used in ranges where the performers have complete control over their instruments. Typically for brass instruments, this falls between the 3rd and 6th partials of their
instrument. Flutes are able to double tongue and will be able to clearly articulate in any range that is recommended for outdoor use. Clarinets and saxophones should use simplified rhythms similar to the low brass in low registers. It has been the personal experience of the author that any figure that requires successive articulation of the same note (single or double tonguing) should stay within in the power range recommended earlier in this chapter.

Complicated rhythms can either be dove-tailed, a concept discussed later in this chapter, or simplified depending on the desired musical effect and ability of the group. Simplification should be used to allow the ensemble to sound clean and strong outdoors; however, musical integrity should not be diminished. Simplification can also be found in just individual parts, typically the second part. Figure 13 gives an example of a desired composite rhythm for the trumpet section and an option of simplification. The rhythm has been simplified for the second/third part.
Dynamics and articulations are oftentimes overlooked and not given much thought by novice arrangers. The fine details of music are created when care is given to the placement of dynamics and articulations. Dynamics must not be randomly placed into an arrangement. Register and the number of parts that are playing will affect dynamic markings. Dynamics will also give contemporary drill designers cues in regards to staging. Louder dynamic markings will typically (not always) indicate to the drill designer to stage the ensemble towards the front sideline. It is important that an arranger carefully place dynamics in an arrangement to insure the appropriate musical pacing of the arrangement.

Articulations unify and give clarity to the ensembles sound. Because of the physical space between the performers and the audience, and the outdoor environment, which does not contain the acoustics like that of a concert hall, specific notation of articulations is important. Virtually every note of a score should be marked with various
articulations: slurs, ties, and various accents. The style of the music and the desired
dynamic marking should influence the articulation marking.

**Meter**

Mixed meter is appropriate for marching ensembles. Some directors have reservations about changing meters due to the marching demands placed on the performers. Mixed meter, even for two bars should serve as another tool for an arranger. Some marching bands have marched to complex meters such as 7/8. Whenever an odd number of beats are found in a meter (e.g., 3/4 or 7/8), there should be some repetition in close succession so that the ensemble does not start the next phrase on the wrong foot. A meter change should be used only if it enhances the quality of the music. Figure 14 shows a phrase extension using the melody from *When Johnny Comes Marching Home* with mixed meter.
Figure 14. Mixed Meter
When arranging music for any marching ensemble two things must always be considered: physical movement, which, will be in some way assist in the communication of the music, and the music will be performed outdoors. Spencer-Pierce (2008) writes, “Outdoor groups have to contend with a lot of variables – spatial, acoustic, and weather
conditions influence the total sound” (p. 4). Another reason for having the woodwinds 
double the brass, outside of the issue of projection, is due to rain or snow. Rain or snow 
will affect the pads on a woodwind instrument greatly affecting the instrument’s ability to 
function properly (and perhaps rendering a costly repair bill!). Heat and cold will change 
the overall pitch of the ensemble, but it does not affect the writing of the music.

Designing the movement is not the responsibility of the arranger; however, certain 
techniques can be suggested to the visual designers, such as playing backfield or moving 
the horns to the press box (box) in a slow or quick fashion. These types of visual effects 
do add a timbral change to the music. When performing backfield the hornline will create 
a sound that is distant and echo-like. Depending on the stadium, there is a possibility of 
reverb. Moving the horns to the box will increase volume for the audience. Simple 
notation can help illustrate these suggestions. Figure 15 provides notation to have the 
horns move their instruments slowly to the box over four counts. Figure 16 shows how to 
notate having the hornline backfield.
Figure 15. Horns to Box
The use of various compositional devices is common in modern marching band arranging practices. These techniques are used to heighten the integrity/quality of the
music and to enhance its aesthetic qualities. Specific devices such as fugues and canons, have been used by ensembles, such as the Cavaliers Drum and Bugle Corps in their 2007 program entitled, *And So It Goes*, which features the music of Billy Joel (Drum Corps International 2007 World Championships DVD, 2007). Other compositional devices have also been used and are discussed below.

**Countermelody**

Countermelodies have been used in multiple genres of music. Sousa, for example, used them frequently in his marches. Henie (1950), writing about the march tradition, recommended use of countermelodies in marching band arrangements to be placed in the trombone and baritone voices.

Henie (1950) notes several suggestions for countermelodies that are still relevant to this day.

2) If a harmonic variation from the original is indicated by a natural motion of the countermelody, the arranger should by all means make the change. If the harmonic change does not sound good, the motion of the line is probably forced rather than natural.

3) An old but reliable technique in writing is: when the melody sustains, the countermelody should move; when the melody moves, the countermelody should sustain. (p. 33)

Erickson (1983) states that countermelodies can either be “secondary to the melody, but in some cases almost take over the music” (p. 109). Erickson provides several music examples that characterize Heine’s principles of countermelody writing (see, for example, p. 110-112).

There are several differences in countermelodies today in comparison to earlier decades such as the 1950s and 1960s. Henie’s basic principles are still used in the
construction of a countermelody. Dye (1983) cited the growing predominance of the countermelody being placed in the mellophone section in the late 1970s and early 1980s. The main difference, outside of typically being placed in the mellophone section, is that the countermelodies of today are not as melodic in character such as their predecessors in the marches. Today’s countermelodies typically entail virtuosic runs in the alto voice to add flash and motion to the music. Figure 17 provides an example of *When Johnny Comes Marching Home*, which uses a countermelody that would be similar in today’s marching band writing.
Figure 17. Example of Countermelody
Hemiola

Hemiola is a rhythmic technique that pairs a duple with a triple idea. When using this technique, it is important to use it where there is an even amount of eighth notes for both duple and triple figures. Figure 18 demonstrates how a hemiola can be used as a part of a transitional moment within an arrangement. The mellophones, trumpets, and tuba are written in a duple feel with two beats per measure while the baritone accompaniment part has a triple feel with three beats per measure.
Changing the mode of a melody is very common, especially within codas or phrase extensions. Oftentimes mode mixture comes in the form of a melodic fragment and does not consist a full statement of the melody. Moving a melodic fragment to Lydian mode is very common because of the desired use of the tritone (see Figure 19).
Figure 19. Mode Mixture

Figure 19, which uses melodic fragments from *When Johnny Comes Marching Home*, was written as a phrase extension. The tuba offers a harmonic foundation solidifying the subdominant, submediant, and tonic chords in the key of Bb minor. A Picardy third was used at the end of the phrase, and was preceded by a Bb\textsuperscript{sus4}. The baritones carry an answer in the second measure in response to the mellophones initial statement. The trumpets sustain with power to add to the culminating moment of the
Picardy third. Notice on beat four in measure thirty-three, the trumpets rhythmically compliment movement with the mellophones and baritones.

While the submediant chord is played on beat three in measure thirty-three, the mellophones are performing a melodic fragment in Lydian mode. The melodic fragment in the horns is pitched as if it were in Bb minor. The harmonic change underneath the melody has allowed for the melody to be heard in a different mode.

**Modulations**

Modulations allow for energy and excitement to remain throughout an arrangement. When material is repeated in a song, such as a chorus of a rock tune, modulations can help keep interest in the arrangement for both performers and audience alike. Various types of modulations have been used in marching band arrangements.

Common chord and direct modulations are some of the most common types. Common chord modulations offer a way to change keys to either a major second above the original or to any other desired key. Direct modulations, which have no harmonic preparation, usually involve a modulation to the key a major second above the previous.

In a personal conversation with Jay Bocook (J. Bocook, personal communication, January 22, 2014), he stated that modulating either up or down a 3rd interval from the original key is more dramatic than modulating up a major second. Bocook noted that little harmonic preparation is needed. The key change should be driven by the motion of the bass line.
**Ornamentation**

Ornaments are little details that can make a simple phrase more interesting. Ornaments must be musically appropriate and not overused. Glissandos in the trombones, mellophone rips, trills (especially in the brass), pitch bends, and grace notes are all possibilities to add interest. Clearly notating each ornament is extremely important. Figure 20 provides simple notation of each ornament just mentioned.

Figure 20. Trill, Horn Rip, Grace Note, and Glissando

**Style Change.** Changing the style of a piece of music is one arranging tool that can be difficult to use; however, it can be a very effective technique. Taking a song and adding a swing feel, or moving a jazz piece into the style of a chorale are both effective approaches. Caution should be exercised to make sure that the style change is appropriate. For example, songs such as the *Star Spangled Banner* should not be changed to a jazz style. Figure 21 uses the melody of *When Johnny Comes Marching Home* in a chorale setting.
Variation

Variations of a melody, such as augmenting or using diminution, are great compositional tools that are used by arrangers. Retrograde and inversions, although still effective compositional devices, are techniques that are not as frequently used by today’s arrangers. When appropriate in context of the shows design, retrograde or the inversion of the melody could be a viable possibility, however.
Special Effects

Marching band arrangers have many special tools that they can use within an arrangement. Some authors have referred to these tools as special effects. These special effects create a “wow factor” to illicit a response from judges and audience members. Spencer-Pierce (2008), for instance, states, “Special effects can elevate the interest level and musical value of an arrangement” (p. 65). Each special effect has a certain musical character. The character of a special effect changes depending on music context it is used in. The following paragraphs highlight several of the most common special effects used by arrangers today.

Bell tone / Pyramid

A bell tone, sometimes referred to as a pyramid, is an effect with staggered, accented and sustained entrances by the wind instruments. Bell tones typically begin with the tuba and enter in score order from low to high within the brass section. Bell tones have also been used in a descending manner. Woodwinds can also be an effective starting point of a bell tone moment. The approach of using woodwinds as the initial voice is effective when the whole woodwind section is employed on a unison note (not limited to the same octave).

The harmony of a bell tone moment must be organized. Beginning a pyramid on the fifth scale degree and resolving to tonic is very common. Stacking perfect fourth intervals beginning on the dominant is also a frequently used technique. Figure 22 illustrates a possible pyramid effect. Notice that the entire cluster stacks the notes F
(dominant of Bb), Bb, Eb, Ab, Db, and Gb, respectively. It is important to note that all intervals are perfect fourth intervals, and ultimately resolve to tonic.
Dove-tailing

Dove-tailing is a technique used by arrangers to create a seamless transition from one instrument group to another. Colnot (1977) describes dove-tailing as “phrase endings to disguise releases and attacks” (p. 25). Dove-tailing can make the passing of the melody
from the trumpets to the trombones very simple and straightforward. Sussman and Abene (2012) mention to “use a little musical common sense when applying this technique. For example, entrances at the beginning of a phrase should include any pickup notes, and an instrument shouldn’t stop playing abruptly in the middle of the phrase” (p. 274-75). Figure 23 shows how to seamlessly pass the melody from the trumpets to the trombones seamlessly by dove-tailing the melody from one section to another.
Dove-tailing in the marching band activity can also be used to heighten the
general effect of a show. Frequently drum corps and high school bands that can handle
the musical demands of this effect should use it in an attractive manner. Arpeggios and
long sixteenth note runs in the trumpets can be dove-tailed within the section to give the
aural illusion to the audience that the line is being played in its entirety by every member.
Care must be taken to make sure that every part is smooth, and not musically awkward to play. Figure 24 shows the composite arpeggio and the arpeggio that is dove-tailed within the trumpet section.
Long 16\textsuperscript{th} note runs that are performed by the entire ensemble can be used to add flash and show the musician’s virtuosity. These runs are also frequently dove-tailed. Oftentimes an arranger will use various colors within the ensemble, such as parallel 5ths, or 4ths for the line. Just as any good melody, these long lines must have a clear harmonic direction, usually pushing towards tonic or the dominant. Drill designers, as one possibility, can stage the different parts so that the line sounds as if its being passed from the 30 yard line on side A, to the 30 yard line on side B of the field. Figure 25 shows what a possible dove-tailed line might look like that utilizes the entire ensemble.
Figure 25. Dove-tailed Ensemble Moment

**Silence**

Silence is a great musical effect. When set up properly, silence can be breath-taking and keep the audience on edge. Usually preceded by a half cadence, arrangers can employ a grand pause for dramatic musical effect. Importantly, silence should still have a pulse, which will allow for the ensemble to have consistency from performance to performance. Adding in percussion such as a suspended cymbal roll before the hornline re-enters can also help enhance this dramatic moment. Visual movement is also
recommended during the silence. A formation solidifying as the ensemble enters after the moment of silence will achieve great musical and visual effect. Clear notation where the silence happens will allow for the performers to understand the effect better. Figure 26 illustrates how to clearly notate silence. The impact moment in measure 28 in the example uses an augmented melody to *Battle Hymn of the Republic*. 
Tone Cluster

Tone clusters can add tension to a piece of music. Specific notes can be assigned to each instrument or part, or each section or instrument can be limited to a specific range.
Clarity in the instructions for the performers is crucial. Changing the note head is one option that will give the musicians a visual cue that something different is occurring.

Figure 27 shows how to notate a tone cluster. Notice that every chromatic note between F₃ and F₅ has been covered.
Introductions, Endings, Transitions, Codas, and Phrase Extensions

The value of the arranger is apparent once the previous techniques have been mastered and are synthesized into a creative interpretation. Introductions, endings, transitions, codas, and brief phrase extensions are the result of the arranger adding his/her
own creative twist to the music as well as adding the specific aesthetic qualities
demanded in the marching arts. Arrangers are expected to be able to compose with the
material they are arranging. Modulations, melodic fragments, chords that are not within
the diatonic scale, and other techniques (discussed above) can be present within these
composed moments. In all instances, though, the planning of the show should guide the
compositional decisions made by the arranger.

When novice arrangers begin to write these various moments, they often create
music that is out of the original music’s character or style, and often create a very abrupt
and inconsistent change in the music. Introductions, phrase extensions, codas and endings
should all be organic. Bocook stated in a phone conversation that the music should feel as
if it is an extension of the original composers work (J. Bocook, personal communication,
January 22, 2014).

Transitions often pose some of the biggest problems for arrangers. When
designing a program, a musical connection between songs is of paramount importance.
Arrangers are encouraged to use musical devices, such as (but not limited to) tempo,
harmony, style, and modulations to assist in connecting one song to another. Some
programs have been designed to purposely avoid these connections, which is an equally
effective goal depending on the desired affect.

When an arranger is having difficulty with writing any section of music, it is
advantageous to take a few days away from the process. Over-listening to the music can
desensitize the musical qualities of a new arrangement. Space away from the music will
offer a fresh perspective. Awkward moments might not sound as bad as originally
thought, and vice versa.
Percussion Considerations

The percussion book should complement the wind book. An experienced percussion arranger, or separate pit and battery arrangers, should do the writing for the percussion books. Their writing involves certain specific nuances such as rudiments and part writing for tenors and tonal bass drums that are idiomatic to marching percussion.

There are certain characteristics of the pit and battery writing that a wind arranger and band director should look for. The battery parts are very important. The battery will stabilize pulse, create a sense of momentum, and determine the overall feel of the music. Rhythmically the writing should complement the winds and not create an ambiguous texture.

Keyboards (vibraphone, xylophone, marimba) should support the wind writing but not always double their music. Keyboards should be treated as both textural and melodic instruments. The use of auxiliary instruments should also complement the arrangement and not feel out of context in the music.

The percussion arranger should be a sound composer. For both battery and pit arrangers, there should be a sense of phrase structure. Pit arrangers should have a strong understanding of harmony. Both types of arrangers should be able to sufficiently analyze the wind score to meet the needs of their respective programs. Regardless whether writing for the pit or battery, the percussion arranger should be sensitive to the texture of wind score. Moments within the wind score that use reduced instrumentation should be mimicked in the battery parts. Typically, the full battery should not play at those moments.
Chapter 5

Conclusion and Final Recommendations for Arrangers

Creating an arrangement can be a difficult and overwhelming task for the novice arranger. There are many steps needed to reach the desired final product. Several authors have also provided insight into their own working processes. Before outlining my process of arranging a brief overview of Branson (1976) and Spencer-Pierce (2008) will be provided for comparison.

Branson (1976) discusses various aspects of his working process: planning and setting up the score, laying out the arrangement, types of scores, and blocking-out the score. Branson (1976) suggests a novice arranger should begin with a song that is appropriate for his/her abilities. From there, the arranger should indicate on a lead sheet who will play melody, limit the arrangement to one minute thirty seconds to two minutes in length, write a draft on a piano or full score, and fill in as much information as possible on the initial draft. Branson (1976) also recommends beginning with a larger ensemble setup of three trumpets, one horn, two trombones, one baritone, and one tuba. Large ensembles do present more ease for a beginning arranger; however, working in a score for a smaller ensemble will have more practical application for most band directors and beginning arrangers.
Spencer-Pierce (2008) describes a similar working process to Branson. Planning, developing a sketch, scoring, proofreading, extracting parts, and printing are all steps he recommends. “Consider the purpose and desired length of the arrangement as well as the ability level of the performers. Aim to strike a balance between too easy and too hard – people want a challenge, but an attainable one” (p. 59). Professional groups will purposely write in moments that are very difficult, and place easier sections (by comparison) around them. This approach allows for moments of virtuosity while not overly stressing the performers.

Spencer-Pierce (2008) also provides the following advice: “Sketch in landmark features first – melodic lines, bass parts, and so forth – and fill in the blanks” (p. 60). It takes days for an arrangement to come into focus. Looking at a blank sheet of staff paper can be overwhelming. By writing in what you know, other sections of the music will begin to fall into place.

Following Branson and Spencer-Pierce, I have developed my own working process that allows for efficiency, while also considering musical integrity. Not every arrangement I have written has been constructed the same way. Much like someone giving a roadmap and asking to go from point A to point B, there is more than one-way to arrive at your destination. This analogy applies to arranging. I feel it is important to speak in generalities, and to highlight common steps that are utilized.

The process that I discuss below was my own approach when creating and developing the arrangements for the 2012 Tribute to Classic Video Games show, performed by The Ohio State University Marching Band. This process has also been used when working with high school groups of all sizes, especially smaller marching bands of
The provided working process has been broken down into three phases. Some phases blend into one another, and should *not* be seen as a rigid framework. The phases are merely guidelines to assist the arranger throughout the process of creating an arrangement.

**Phase I: Musical Analysis and Plan**

The goal of Phase I is to have a comprehensive analysis of every musical selection and to outline the structural features of each movement. It can take several days to a couple weeks to finalize the form of an arrangement. Creative ideas are not always discovered immediately; however, this should not be an issue if there is ample time to address any major concerns.

Phase I begins after the show concept and theme has been determined and discussed in detail by the design team. The musical selections should have been made at this point after a thorough amount of research and discussion. The order of songs should also be somewhat solidified; however, there is typically some flexibility in the order of songs.

At the beginning of Phase I, the arranger should be learning everything possible about the musical selections. Studying of the music should encompass any musicological information, a theoretical analysis, and listening to as many quality recordings of the music (and similar styles) as possible. YouTube, iTunes, Pandora, and other online outlets allow for a multitude of listening possibilities. Listening to the source material should be done throughout the entire arranging process. It is advisable to sometimes avoid other marching band or drum corps recordings of the songs that are going to be
programmed. Other marching band arrangements can influence an arranger’s musical choices when writing, which sometimes does not allow for an authentic interpretation.

A lead sheet and/or score should be obtained for each selection. If music cannot be located, it is appropriate to dictate portions of the music. It is very difficult and typically time consuming to accurately dictate a song. Dictation can be further compounded depending on a number of variables (e.g., audio quality, extended harmonies, balance of the ensemble, etc.).

While listening and analyzing the source music, any theoretical connections should be made for single and/or multiple selections. Modulations, harmonic progressions, melodic material, or any other noteworthy musical aspect are important to highlight. Finding these common connections should allow for a smoother transition between portions of the show unless an abrupt change is desired. If an abrupt transition is considered, the impact and effect within the context of the overall show should be thoroughly contemplated.

As the analysis is coming to a close, the arranger should attempt to hear the selection as if a marching band or drum corps were performing it. This listening approach can be applied for the entire selection or just a portion of the recording. While utilizing this listening approach, an arranger should consider the size of the ensemble they are writing for, instrumentation, any limitations for the group, and the context within the field production for which the music is being used. Listening and following the sheet music is an equally valuable approach. Key musical features and ideas can be marked on the sheet music while listening (e.g., assignment of melody or accompaniment lines, beginning of phrase extensions, etc.).
Additionally, the arranger should play along with the audio recording on a keyboard or their primary instrument. This will help the arranger emotionally connect with the music. Ideas that come from either listening or performing with the music do not only have to be written down on the sheet music. It is recommended that a sketchbook be used so that ideas for a particular moment can be written in detail. A single sketchbook should be used for multiple projects. By using the same sketchbook it is possible to reference previous ideas or ones that haven’t yet been used.

Planning of the arrangement should follow once an emotional connection has been established to the music. Planning each movement carefully will likely yield a much better product in comparison to arbitrarily writing in a software program. Both the musical analysis and emotional connection to the music will prove to be very beneficial to the successful planning of the arrangements. The show most likely will have specific musical and visual moments that are desired. These moments will help guide the structure and musical direction of each movement.

Planning should start with the segments that the arranger feels most comfortable with. The arranger should structure the arrangement by outlining ideas on a piece of paper. Any known information should be written down (e.g., placement of melody, form, key center, etc.). This overview of the structure should guide the writing process; however, sometimes there is some deviation from the initial plan. Additionally, the aesthetic and emotional qualities should not be lost when planning the arrangement.

Occasionally there are moments when challenges arise when planning an arrangement. The arranger should do any combination of the following: contact members of the design team for clarification or additional planning, creatively explore music at the
piano, or take a few days off without thinking about the project. When difficulties arise when planning the arrangement, typically, the best choice is the simplest one.

During the creation of the *Tribute to Classic Video Games* show brass program, Phase I presented various challenges when studying the music. Sheet music was obtained (when possible) from various stores. Other selections had to be dictated by ear due to the lack of sheet music or scores.

A concert pitch piano score of melody, harmony, accompaniment parts, countermelody, and bass line was created in order to help determine the best key. By looking at the piano score, each musical line was thought of as an array of potential key centers. While considering each musical line in various keys, the transposition and register of each musical line for every brass instrument was an important factor for determining the key. Additionally, the desired “bright” or “dark” timbre of the ensemble was another factor that guided the key center. A balance between these two considerations helped determine the key center for each song.

After a thorough analysis was complete, difficulties were found when trying to audiate a marching band performing the themes from *Super Mario Brothers*, and various other titles. In an effort to overcome this, YouTube videos were found amongst other recordings from iTunes enabled me to hear the music in the context of other ensembles (e.g., steel pan band). Performing the music on a digital piano with a ‘sawtooth’ patch allowed for a closer representation of a hornline performing the music. The ‘sawtooth’ patch more closely resembled the hornline’s sustained power and organ like quality in comparison to the other brass patches. Timbre, created by various colors through instrumentation and orchestration, was still considered when working at the digital piano.
and using the ‘sawtooth’ patch. Any ideas that were thought of or created, especially those at the keyboard, were written down into a sketch notebook.

The planning of the musical arrangements for the *Tribute to Classic Video Games* show began after completing an analysis and performing the various songs at the piano. The order of musical selections was one of the most difficult aspects when developing the show. After careful deliberation and discussion, the show was broken down into four movements: *Part I: Nintendo Medley* (opener), *Part II: Halo* (production number), *Part III: Zelda* (closer), and *Part IV: Super Mario Encore* (closer).

*Part I: Nintendo Medley* consisted of the *Red vs. Blue Battle Theme* from *Pokémon*, *A Theme* from *Tetris*, and selections from the series *Super Mario Brothers*. The *Red vs. Blue Battle Theme* served as the opening statement of the show due to its aggressive nature and the visual iconology of *Pokémon* that was easily recognized by the audience. The *A Theme* from *Tetris*, which features the Russian folksong *Korobeiniki*, served as perfect music for the second selection in the opening medley due to its musical differences between *Pokémon* and *Super Mario Brothers*. Structure of the music from *Super Mario Brothers* was designed so that it was similar to someone playing the actual video game: *Super Mario Brothers Overworld Theme* (Mario playing in level), *Star Theme* (Mario gets a star), and *Super Mario World Overworld Theme* (Star has expired and returns to the main theme). The *Flag Theme*, which is a part of the closing moments the various levels in *Super Mario Brothers* was placed at the end of the show to be congruent with the video game itself. The music featured in the “end credits” of *Super Mario World* offered for a light-hearted encore to the show due to its playful nature and was placed appropriately to symbolize the end show.
Music from the video game *Halo*, enabled the show to feature music of a more orchestral nature. During the musical analysis, it was very apparent of the quality composition within video games. Not all video games, of course, exhibit quality music composition. Games like *Super Mario Brothers*, which has some of the most recognizable themes, is assumed to lack compositional craft due to the poor quality of music playback; however, compositional craft was very apparent within the music of the *Super Mario Brothers* series. Due to the advancement of gaming systems, the quality of musical playback has significantly changed video game music into more of a theatrical production. *Halo*, because of its recognizable music and popularity amongst “gamers” was a logical choice as the production number for the halftime show.

*Zelda*, due to its high popularity within the gaming community, was the ideal choice for a closer. The goal of *Part III: Zelda* was to be a false closer. At the initial moments of planning *Part III: Zelda*, the show designers knew that the *Flag Theme* from *Super Mario Brothers* would be the last moments of the movement. The desired musical direction was strong in nature for the end of *Part III: Zelda* and allowed for a false ending to be achieved. *Zelda’s Main Theme* has a very iconic fanfare to open the song. It was then decided to open with the fanfare, and not go immediately into the *Main Theme*. This change to the music captured the audience’s attention because it deviated from their expectations. *Gerudo Valley*, another popular selection from the video game series *Zelda*, served as an energetic choice to fit between the opening fanfare and the *Main Theme*. *Gerudo Valley* was the musical selection performed during the iconic sequence of the horse galloping across the field. In order to tie *Zelda* back to *Super Mario Brothers*, a brief percussion moment separated the ending moments of *Zelda’s Main Theme* to the
coda. The transition to the coda included the *Hurry Theme* from *Super Mario Brothers* to symbolize that time was running out. True to the game *Super Mario Brothers*, the *Overworld Theme* returned with a quicker tempo after the *Hurry Theme* was performed; however, to allow the music to stay consistent with the style of marching band arranging, melodic fragmentation of the *Overworld Theme* was used in combination with mode mixture and chords out of the diatonic scale.

The formal structure of the entire show was a byproduct of emotional pacing, sequencing within the specific video games, and audience expectations. Cadences, placement of melody, important secondary lines, key, dynamic levels, special effects, and any other known information were all important elements that were written down. By writing down the road map to the arrangement, it became increasingly easier to begin working with the score.

**Phase II: Draft**

The goal of Phase II is to create an initial draft for each movement of the entire show. Correcting writing problems and clarifying any musical ideas will need to follow in Phase III; however, the most difficult aspect of creating any arrangement is completing the first draft.

Phase II should start with the creation and drafting of music on manuscript paper, or possibly at the computer, providing the arranger is able to use notation software with ease. Work at the piano during the beginning of Phase II is extremely important. The musical structure that was created during the end of Phase I should be referenced, critiqued, and revised during this step.
As the arranger begins to write, the music will initially have a bunch of holes and areas of incomplete scoring; however, the holes will become filled as the ideas are written down. The arranger should begin by writing down any known information for a given section. It is recommended that the arranger work in a concert pitch score. Due to extended harmonies, modulations, and other musical components, it is much simpler to think in the context of one key instead of four. While working in a concert pitch score the arranger should be aware of the written range of each instrument once the score is transposed.

Moments such as phrase extensions, codas, introductions, and transitions specifically employ the use of the arrangers’ compositional skills. These sections can take anywhere from a day to weeks to create and edit. Each moment should be well organized and designed with some level of simplicity. An idea can be complex in concept; however, simplicity of the part writing will typically result in a stronger product. Ideas should be developed as an extension of the music.

As specific musical moments are being added to the score, the arranger should check for appropriate voice leading and harmonic organization of the music. Any specific instrument timbre that is desired should be help guide the arranger in tailoring the voice leading so that particular moments sound natural to the performers and audience.

If working from a manuscript draft, the arranger, once comfortable with the written score, can transfer the music into notation software. By using manuscript paper to start, ideas that are heard in the arrangers mind won’t be lost as easily. Because of the steep learning curve associated with most notation software programs, frustrations with its functionality can cause an idea or concept to be lost.
It is important to remember when creating the arrangement that the percussion section needs to be featured in its own musical moments. Because the percussion music is typically arranged separately, the lack of percussion in the wind score can make the arrangement sound empty and unsatisfying at times. Jay Bocook also expressed this concern of balance on a podcast with marchingroundtable.com (2013), but noted how important it is to have a solid musical arrangement: “The brass score has to be written first. If its not interesting in its own right, others on the staff don’t seem as interested”.

There is a balance between over and under writing when integrating percussion. Percussion will make an empty score sound full, but when that emptiness is present the wind arranger can sometimes overthink the music. It is appropriate to lightly write in percussion parts to help fill in the silence throughout computer playback.

It is sometimes important during the middle of Phase II to step away and not work on it for a few days. Space away from an arrangement can offer a fresh new perspective once returning to it, in addition to helping with “writers block.” Moments that were initially thought to be awkward might seem fine, or vice versa. New relationships and connections from one song to the next can also be recognized more easily after some away time from the project.

At the end of Phase II, the arranger should begin to place musical components into the storyboard. Several changes will be made between the first and final drafts; however, it is still important to fill in as much information as possible. The information added to the storyboard will allow the arranger to more effectively review and revise later. Other designers should look at the storyboard only if the arranger is fairly comfortable with the first draft.
With the structure of the *Tribute to Classic Video Games* show kept in mind, the initial sketching within the manuscript score evolved by first writing down the melody, bass line, and important accompaniment lines into a reduced score. Space was left in the score while transitions, phrase extensions, and codas were still being developed. Every movement for this show had an introduction that was expected for that musical selection, which aided in the ease of writing the arrangements. After a substantial amount of music for each movement was written on manuscript paper, ideas were then transferred to a computer score.

Phrase extensions and transitions were written as they were developed. These moments typically took anywhere from a day to a few weeks to develop and build connections. While these moments were created, difficulty arose frequently when trying to connect two sections harmonically. It proved more effective to work backwards and forwards, from the two musical points, as a way to connect them harmonically. This process worked well; however, it is important to state this process did not sacrifice musicality or the aesthetic qualities.

**Phase III: Revising and Engraving**

Phase III should consist of revising the part writing, and the engraving of the score and parts. Similar to writing a thesis, a completed draft will go through numerous revisions and changes. Decisions made when revising can have either a positive or negative impact on the students’ ability to clearly communicate the music.

It is the arranger’s job to critically assess several aspects of each arrangement and the entire program as a whole. Part writing, physical pacing for individual parts,
emotional pacing for the entire program, and musical variety from movement to movement are important characteristics to review. Every idea should be both aurally and visually organized on the score.

Consulting the storyboard can help with revising various aspects of each musical selection. Timing issues, variety of instrumentation, and placement and frequency of dynamic levels are all aspects that can be critiqued when looking at the storyboard. The storyboard should not determine the aesthetic and emotional qualities of the arrangement; however, it should serve as another perspective and way to foster critically thinking about the music.

Revising can take place while looking at the computer; however, a printed score is equally effective. The arranger should begin revising by performing each part independently on a piano and using a color pencil or pen to mark corrections. A quality digital piano can allow the arranger to record multiple tracks (each individual part) to a single song bank, which allows the arranger to gradually hear the full score. By performing each part, it is possible to revise part writing (e.g., voice leading, harmony) and to make sure other aspects have been notated with clarity, consistency, and accuracy; e.g., articulations, dynamic markings, wrong notes, courtesy accidentals, tempo markings, measure numbers, rehearsal markings, and any comments.

Finally, the last step of creating an arrangement is the engraving of score and parts. Engraving parts refers to the process of extracting, and giving the score and parts a professional presentation. This is a tedious and time-consuming final step. Care must be taken when engraving both the score and parts so they have a publisher type quality to them.
Revisions for the *Tribute to Classic Video Games* show arrangements began with listening to the notation software playback and making changes to the score. This was the initial step of my daily routine. Following this work on the computer, a concert pitch score was printed and each part was recorded into a song bank on a digital piano. A color ink pen was used to mark the various corrections for each part (e.g., changes to the part writing, balancing of a chord, consistency of notation, structural changes to the music, etc.). Corrections were placed into the computer, and another score was printed. This process repeated itself several times a day and spanned several weeks.

Although not developed until after the creation of the *Tribute to Classic Video Games* show, the storyboard has served as a successful way to assess show design. The storyboard was utilized in 2013 when writing the *Country & Western* show, which was also performed by The Ohio State University Marching Band and mimics the creative process used for the *Tribute to Classic Video Games* show. The storyboard was updated daily and sync’d with Dropbox. Dropbox, a file sharing service between users, enabled instant communication between all designers with new scores, audio files, and the storyboard. Table 5 shows the completed storyboard that has been for *Movement III: Zelda*, from the *Tribute to Classic Video Games* show. After the scores were finalized, parts and score were extracted, engraved, and saved as PDF documents over the course of two to three days.
### Table 5. Movement III: Zelda Storyboard

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<th>Major Mode</th>
<th>Minor Mode</th>
<th>Song Name</th>
<th>Key</th>
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<th>Phrasing</th>
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<td>C Minor</td>
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<td>C Minor</td>
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### Brass, Percussion, and Visual Programs

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<th>Visual Section</th>
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### Summary

- Zelda's Theme: Introduction, Development, Transition
- Legend of Zelda: Transition in Key
- Hyrule's Theme: Transitions to Key

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**Movement III: Zelda Storyboard**

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<th>Expression</th>
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<th>Timbre</th>
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**Table 5. Movement III: Zelda Storyboard**
Conclusion

Arranging for a marching ensemble has many challenges. The gratification of a completed project will easily negate the challenges that are encountered throughout the process. Equally gratifying is the success and enjoyment the students demonstrate throughout the rehearsal sequence and performances. This document has provided an overview of the arranging process and compositional techniques employed by many arrangers of contemporary marching band music. It is the charge of any composer or arranger of any medium to create art and educational music. By employing the techniques described in this text, hopefully the reader can become proficient at both.
References


Cichy, R. (1985) *Procedures for editing marching band arrangements to achieve maximum sound for outdoor performance* (Master’s thesis). The Ohio State University, Columbus OH.


Heine, R. W. (1950) *A method of simplified scoring for the marching band* (Master’s thesis). The Ohio State University, Columbus OH.


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