MUSICAL IDENTITY AND ARRANGING STYLES

OF DRUM CORPS FRONT ENSEMBLES
Musical Identity and Arranging Styles of Drum Corps Front Ensembles

by

Leah Meredith Dunbar

A thesis presented for the B.A. Degree with Honors in Music

Kenyon College

March 2020
ACKNOWLEDGEMENTS

First and foremost, I thank Mark Sachetta, who has seen this project grow from the very beginning: starting with my first corps rehearsals, and later from the many conversations that helped formulate this idea over a year ago. Without his encouragement and suggestions, this project would have never been started or completed.

I am incredibly grateful to the arrangers and staff (James Ancona, Omar Carmenates, Brian Dinkel, Matthew Jordan, Iain Moyer and Tom Rarick) who generously gave of their time, knowledge, and scores. I am so thankful to have had the chance to learn directly from those who have made such an impact in DCI. Thanks also to Emma Carpenter, Sarah Culbertson, and Nina Smith for sharing their experiences, and Matthew McGuire for writing pit books that sparked my love and interest in the pit and arranging.

It goes without saying how thankful I am to the Spartans organization and for the many friends I have met through drum corps. Thanks especially to those who have supported this project in numerous ways: Lindsey Augustine, Sam Bodo, Shay Brooks, Matt Duguay, Ryan Enos, Gabe Klavans, Gabe Labell, Austin McKinlay, Coleman Moore, Danny Nguyen, Sean O’Rourke, Matt Pantanella, and KT Taylor.

Thank you to my amazing parents who have encouraged my interest and love for all things music from the beginning, even when it involves adding a marimba to our living room or understanding when I spend far too many hours driving to/arranging for/writing about band. Your love and support mean the world to me.

Finally and most significantly, thank you to the Kenyon College Music Department for encouraging my ideas and giving me the words, knowledge and support to achieve them. I am so grateful for everything I have learned at Kenyon. Thanks most especially to my honors advisors, Prof. Buehrer and Prof. Mendonça, for their wisdom in discussing and shaping ideas, and for their dedicated patience in editing pages of this long project over the course of the year.
ABSTRACT

Drum corps is a competitive music activity that has evolved from its militaristic origins into a theatrical activity that uses brass and percussion instruments in exciting musical performances. Through focusing on the percussion subsection of the front ensemble, I examine the practices, traditions, and controversies of drum corps, studying the ways which individual corps develop a musical identity that balances tradition and innovation. Part of this involves researching the structure of drum corps shows, incorporating Turner’s theory of communitas and Csikszentmihalyi’s concept of flow to describe how this structure interacts with the development of the activity and the creation of corps identity. Using this understanding of corps traditions, and incorporating ethnographic interviews with arrangers, I then analyze the arranging styles of five World Class front ensembles (Bluecoats, Blue Devils, Boston Crusaders, Cadets, and Santa Clara Vanguard), illustrating how the front ensemble contributes to corps identity and becomes an integral part of the modern drum corps. Finally, I reflect on a drum corps arrangement of my own and the techniques and arranging styles which influenced it.
# TABLE OF CONTENTS

## Section I: INTRODUCTION

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>History</td>
<td>2</td>
</tr>
<tr>
<td>The Front Ensemble</td>
<td>3</td>
</tr>
<tr>
<td>Basics of Front Ensemble Arranging</td>
<td>5</td>
</tr>
</tbody>
</table>

## Section II: TRADITION AND IDENTITY

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drum Corps Traditions</td>
<td>8</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>10</td>
</tr>
<tr>
<td>The Amplification Controversy</td>
<td>12</td>
</tr>
<tr>
<td>Shared Flow, Communitas, and Drum Corps</td>
<td>14</td>
</tr>
<tr>
<td>Show Structure</td>
<td>16</td>
</tr>
<tr>
<td>Openers, Closers, Ballads, Production Numbers, Percussion Features</td>
<td>17</td>
</tr>
<tr>
<td>Drum Corps “Moments” and the Importance of Flow</td>
<td>19</td>
</tr>
<tr>
<td>Evaluating Shared Flow: General Effect</td>
<td>24</td>
</tr>
<tr>
<td>Corps Identity</td>
<td>25</td>
</tr>
<tr>
<td>Programming</td>
<td>29</td>
</tr>
<tr>
<td>Corps Songs</td>
<td>29</td>
</tr>
<tr>
<td>Arrangers, Identity, and Intentionality</td>
<td>33</td>
</tr>
</tbody>
</table>

## Section III: FRONT ENSEMBLE CASE STUDIES
INTRODUCTION

During hot summer nights on football fields across the country, thousands watch excitedly as America’s drum and bugle corps take the field for thrilling musical competition. The thunder of drums and the blast of the hornline can be heard from blocks away, while sitting in the stands brings the performers and fans face-to-face. The music is irresistible, building to climactic moments that bring the audience to their feet, captivating them with the outpouring of expression, musicality and talent.

Drum corps looks similar to marching band, but it is often referred to as the “NFL” or “Major Leagues” of the marching arts.¹ The members, who are all under the age of 22, are expressive performers and athletes, and above all, excellent musicians. They balance emotional and theatrical expression, technical precision, and musical skill to perform eleven-minute shows that entertain, excite, and strive to raise the competitive standard. The marching members play brass instruments (hornline), marching drums (drumline, also called the battery) or dance while spinning flags, rifles, sabres, or other props (color guard). At the front of the field are players who perform as part of a stationary ensemble of percussion and electronic instruments, called the front ensemble or the “pit.”

History

Drum and bugle corps began within veterans organizations following World War I. These early ensembles used traditional drums and bugles to continue a connection to the military

history that was important to their adult, military veteran members. It was not uncommon for small communities to have their own drum corps, with thousands existing around the country.\(^2\) As these local corps became more common, there was an increased attention on competition as well as forming junior corps to "keep kids off the streets."\(^3\) Competitions were offered by numerous groups including the American Legion and the Veterans of Foreign Wars.\(^4\)

In 1972, Drum Corps International (DCI) was formed with the intent of creating a unified governing body for junior corps across the country and the world. Due to an increased focus on a competitive touring schedule by DCI, there was a large decrease in local corps as groups merged to form more economically stable groups who could afford to travel. There are currently forty-five competing drum corps registered with DCI, each fielding a membership of up to 154 players between the ages of 13 and 22.\(^5\) In recent years, corps from Ireland, Indonesia, and the Netherlands have come to the United States to compete in the International division.\(^6\)

The corps are now split into Open and World Class, somewhat comparable to the minor and major leagues of baseball, respectively. The twenty-four Open Class corps attract a membership of mostly high school students and accommodate school schedules, traveling for around a month, while the twenty-two World Class corps attract a membership of mostly college students and spend 85 consecutive days rehearsing, competing, and touring with the corps. Both

\(^2\) Lane Summerlin, “The History and Development of the Front Ensemble in Drum Corps International,” PhD diss, Ohio State University, 2016, 10

\(^3\) Summerlin, “The History and Development of the Front Ensemble,” 9

\(^4\) Dennis E. Cole, “What is a Drum and Bugle Corps? Reinterpreting Tradition Inside the Musical Community,” PhD diss, Kent State University, 2009, 8


classes compete throughout the summer, culminating in a week of competition in Indianapolis, where the corps strive to secure their respective championship titles (and where some Open Class corps even beat some of the World Class groups).

The Front Ensemble

Early drum corps consisted of a hornline (using bugles, not the valved instruments of modern corps), a drumline, and sometimes a color guard. The 1970s introduced marching timpani (first used in 1968) and marching keyboard instruments (glockenspiels in 1974, marimbas and vibes in 1974, later marching chimes). These instruments were bulky (“like carrying a sack of potatoes strapped to one’s neck”), difficult to tune, and offered poor sound quality. A 1978 rule allowed corps to have stationary instruments on the front sideline that gradually became a pit in the 80s and 90s. In these early days, parts needed to be very loud and bombastic to compete with the hornline and drumline. This led to a “drum corps playing technique,” where players approached the keyboard instruments from high heights with intense velocity and hard mallets in desperate attempts to be audible.

In 2003, DCI approved a controversial measure allowing for instrument amplification. While critics asserted that this amplification took away from the acoustic, brass-based marching ensemble tradition which drum corps was based on, the inclusion of amplification solidified the front ensemble as a permanent and equal section of the modern drum corps and “infinitely

---


8 Summerlin, “The History and Development of the Front Ensemble” 64
expanded the sonic possibilities of the front ensemble.”9 (See Section II for further discussion of its impact on the front ensemble.) Now that the keyboards could be amplified, arrangers could make more musical decisions about their writing. The music for front ensembles could be more densely detailed and span a wider range of dynamic levels, and ensembles could work with players on artistic decisions such as mallet choice, balance from player-to-player, and an overall increased sense of touch and nuance.

As a result, the front ensemble has “evolved from a novelty section that provided color and support, into a musical force that has an equal voice as the other musical sections in the drum and bugle corps.”10 Where the early front ensembles acted only as textural support and had to fight to be heard, modern pits have the capacity to act as the sole voice for the corps throughout large portions of the show and are able to express musicality on par with concert marimbists and percussionists.

The intense rehearsal schedule of the World Class corps especially allows for these groups to achieve excellence in challenging shows that expect to set new standards in musicality, creativity and accomplishment in the activity. Yet there are many diverse ways in which excellence can be achieved in the front ensemble. The majority of this project will focus on the front ensembles of five World Class Corps: Bluecoats, Blue Devils, Boston Crusaders, Cadets, and Santa Clara Vanguard, groups that I feel best represent the diverse approaches of front ensemble arranging and innovation.

---

9 Summerlin, “The History and Development of the Front Ensemble," 1

10 Summerlin, “The History and Development of the Front Ensemble," 1
**Basics of Front Ensemble Arranging**

In order to fully appreciate the nuances of each individual pit’s style, it is helpful to have a brief understanding of front ensemble norms. (Further detail about technique and terminology can be found in the glossary)

Instrumentation of the front ensemble generally includes four to six marimbas, four to five vibraphones, one xylophone, one glockenspiel, two synthesizers, and two auxiliary percussion players (colloquially called ‘racks’ based on the metal contraption to which their instruments are attached). With some corps adding a drumset player, bass guitar player, or adjusting levels of keyboard and rack players, most pits have a membership of 13-18 performers.

Arrangers generally use the marimbas as the melodic foundation for the front ensemble. The marimba’s ability to articulate while maintaining a warm, resonant sound allows the instrument to be the carrier of melody and intricate melodic changes while also providing precise rhythmic variation during fast runs. The versatility of the instrument also allows arrangers to use the marimba as a textural instrument to support the rest of the ensemble. The marimba players are often more experienced musicians who are able to take on the challenges and responsibilities of this writing.

The xylophone’s timbre cuts through the sound of the drumline, hornline and front ensemble, acting as an auditory “glue” for the rest of the keyboard ensemble when playing dexterous passages that require exact timing. The xylophonists often play unison passages with the marimbas on runs. These players are also often given a glockenspiel to add a bright and metallic texture.
Contrasting the wooden timbre of the marimba and xylophone is the vibraphone, which offers a metallic timbre that can resonate longer than the other keyboard instruments with the use of a sustain pedal. For this reason, the vibraphone players often play melodic lines or structural content which the marimbas fill in.

Completing the keyboards are the “rack-tronics,” which can be any amalgamation of drums, drumset, racks, auxiliary percussion, bass and electric guitars, synthesizers and other electronic instruments. Use and instrumentation of the racks and electronics varies greatly by corps and is one of the clearest signs of differentiation between them.

The pit’s roles in the full corps ensemble vary by corps, but can generally be categorized as Color, Solo, or Transitional.\footnote{Chris Koenig, “Growth of the Modern Front Ensemble”, Morehead State University, 2014, 11.} Color moments are parts that accompany the main focus (usually the brassline) with inessential color. Solo moments feature the front ensemble as the main focus of the show. Often, this is during a ballad or introductory moments. Finally, transitional moments are when the front ensemble is the main focus, but they are acting as the moving parts to lead to the next full ensemble moment. Examples of such moments should become more clear through the excerpts used in this project, though these contain a focus on solo pit moments (see Glossary for further information about instrumentation, show structure, and general drum corps terminology).
SECTION II. TRADITION AND IDENTITY

Drum corps is a historic, storied tradition with an enthusiastic fan base. As I will discuss below, this fan base (particularly in the older generation) is often nostalgic for the drum corps of the past. Traditionalists say that “drum corps is dead”\textsuperscript{12} - last seen alive in the 1980s before kevlar drumheads, B-flat horns, and the “monstrosity”\textsuperscript{13} of the amplified front ensembles were introduced and before the activity became, in their eyes, only “glorified marching band.”\textsuperscript{14} As I suggest below, these beliefs stem from a nostalgia for early drum corps: militaristic, acoustic, G-bugle and drum ensembles which had their origins in the historic military cadets-style bands which were formed across the nation after the first World War.

With each change to style, show design, instrumentation, and presentation, some in the drum corps community\textsuperscript{15} bring up the idea of “tradition” as a basic standard which must be respected, warning against anything that takes the activity “too far from its origins.”\textsuperscript{16} It is an activity that is consistently affected by a “fundamental divide between the notion of tradition and innovation, a delicate balance which has manifested in the form of generational, technological, and ideological divides.”\textsuperscript{17} Yet with each change, the activity evolves and continues to grow, expanding into an updated version of its past - but still remaining identifiably “Drum Corps.”

\textsuperscript{12} Dave Volkman, “I am leaving this group…” \textit{Facebook}, June 3, 2019
\textsuperscript{13} Cole Heisler, Comment on “The Pit on the Field” \textit{Facebook}, July 1, 2019
\textsuperscript{14} Donald Kneuer. Comment on “The Boston Crusaders” \textit{Facebook}, July 21, 2019
\textsuperscript{15} My use of ‘drum corps community’ is the same as used in Maher, 2011, and Cole, 2009: “participants, alumni, staff, fans, and anyone else with an involvement in the activity.” (Maher, 1)
\textsuperscript{17}Cole, “What is a Drum and Bugle Corps?,” 2
What, then, are the traditions of drum corps and what is their importance in the activity today? More significantly, how have these traditions been shaped by the presence and integration of the amplified front ensemble?

**Drum Corps Traditions**

Some of the traditions of drum corps are standard performance rituals that developed out of the early drum corps performances which were sponsored by the American Legion or other veterans organizations. These sponsors required a “strict adherence [to] military practices” through rituals such as “uniform inspections,” the “presentation of the [American flag] colors.” 18 While the activity gradually “pushed performance standards away from its militaristic origins and towards new artistic endeavors,” 19 many of these rituals went out of practice, or were adapted into others. One of these is the announcement and salute of corps. While it is not clear which year the tradition of announcing corps began, a 1973 documentary about Santa Clara Vanguard records the announcer saying “Judges and timers ready?...Corps ready?...Santa Clara, you may enter the field for competition” 20 suggesting that this practice began with the founding of DCI in 1972. However, it is possible the tradition began even earlier, given a 1968 audio recording of the Chicago Royal Airs which records a similar announcement. 21 Now at every DCI show each corps is presented by the show announcer first asking, “Drum major, is your corps

---

18 Cole, “What is a Drum and Bugle Corps?”, 110

19 Cole, 120


ready?”, a modification of the “Corps ready?” heard in the early videos of Santa Clara Vanguard and the Royal Airs. While a few corps have broken the expectation for artistic purposes, generally the title of the show is announced and the corps’ performance only starts after the drum major responds with a sharp, militaristic salute. (An idea of the variety of salutes for all corps competing in 2015 is demonstrated by a compilation video published in that same year.) This ritual presumably developed out of the salute of patriotic respect when presenting the colors of the flag (see, for example, the video recording the flag presentation and salutes of the 1967 Troopers and the 1971 27th Lancers, among numerous other corps). The salute is no longer used to show respect to the American flag, as the presentation of the colors has gone out of practice, but the salute continues as a way of recognizing the audience at the beginnings of shows or when the corps are announced for awards.

Uniforms are one of these most central traditions, the “source of a corps’ collective identity.” Until the mid 2010s, corps created a brand for themselves through use of a classic uniform, which stayed the same through multiple years, grew “to signify the corps’s individual

22 The 2010 Phantom Regiment (Into the Light) began with the hornline off-field. The announcer completed all announcements before the hornline started playing, still off-field. The drum major still saluted and was welcomed with applause, but this occurred while the hornline was already playing. The 2014 Bluecoats (Tilt) drum major saluted before the corps performed, but the official announcement of the corps happened about a minute into their performance through a pre-recorded track. Videos of these examples can be found online.


25 The use of salutes during awards ceremonies is seen in the official Drum Corps International videos of awards ceremonies spanning from 1972 to the present.

identity,” and was evident immediately when they walked on the field. Halftime Magazine states that when Carolina Crown changed their uniform in 2013 and every year following, other corps followed suit, changing their uniforms each year “to emphasize the story or theme of each individual show.” Some even have taken to calling them “costumes” rather than the militaristic “uniform” of the past, like the Bluecoats, who announced in early 2020 that they are hiring a “Costuming Manager” and a “Costuming Intern” for their upcoming season. The controversy and discussion around this growing trend is perhaps unsurprising given the activity’s past in military-inspired ensembles and its adherence to these militaristic qualities. Because this paper is focused on the musical (rather than visual) identities of these ensembles, the details of uniform development will not be discussed, but do merit future research.

Instrumentation

It could be said that the most fiercely protected aspect of drum corps is its instrumentation. In its early days, drum corps was classified as the “regulated performance of military-standard drums and bugles...derived out of an historically-rich militaristic tradition and carries profound socio-cultural significance for both the drum and the bugle.” These percussion and brass instruments are central to the uniqueness and exclusivity of drum corps as an art form.

---

27 Cole, “What is a Drum and Bugle Corps?,” 123.
30 Cole, “What is a Drum and Bugle Corps?,” 2
by fans and members. The term “wall of sound”\textsuperscript{31} has been used by fans to describe the feeling when a full 65-80 person hornline plays at full volume. In July of 2019, DCI used the term to accompany a picture of a hornline with their horns all parallel to the audience.\textsuperscript{32} Other fans consider the overwhelmingly powerful effect of a musical wall hitting the audience as irreproducible through other instrumentations. “[Drum corps] is a unique activity,” wrote one fan in a 2017 online post. “Nowhere else can you feel the impact of the wall of sound.”\textsuperscript{33} Some fans believe that the characteristic brass-based sound and the high level of difficulty makes drum corps more elite than other forms of marching arts. For some, “marching band is perceived as less serious than drum corps, but more importantly, it simply is not drum corps; its history, traditions, and central goals are all different.”\textsuperscript{34} Trying to retain that independence and elite status from marching band results in some fans having an insistent avoidance of comparing the two activities, attempting to keep safe the brass-only status as it is the “last remaining veil that separates DCI’s brass-based sound from their high school and college marching band brethren.”\textsuperscript{35} One alumnus wrote in 2019 about the offensive nature of such a comparison: “[The] worst insult when I marched drum corps in the 60s was to be called a band.” Another used the comparison to express his disgust at the use of amplification, writing “If your [sic] going to call yourself a drum and bugle Corp [sic] then [sic] be one. Stop trying to become marching bands.”


Even though the two activities may appear near-identical to outsiders, the participants involved in drum corps have centered its core identity around the early instrumentation of drums and horns.

The Amplification Controversy

Because of the importance of maintaining the distinction between drum corps and marching band, the incorporation of a stationary, melodic percussion ensemble has been highly controversial, especially in light of the 2003 implementation of amplification which was ratified following fifteen years of heated debate. Erin Maher’s 2011 dissertation discusses this controversy in detail. She notes that allowing amplification drew almost entirely negative commentary online, with some fans “threatening to withhold support or stop attending shows," and a group of alumni who stated that they would “rewrite their wills” to prevent corps who used amplification from “receiving any part of their estates.”

Fans who did attend shows sometimes bonded together to wear shirts as protest, printed with the words “Keep Drum Corps Unplugged.”

The front ensemble upended the marching brass-and-drum foundation by its mere presence, and despite protests, the addition of amplification “infinitely expanded” the front ensemble’s presence and addition to the original structure of the activity. The pit has been a slowly growing staple of the activity since the early 1980s, and even though amplification has been widely used at every level of drum corps since the mid 2000s, some older fans refuse to

36 Maher, “The Amplification Controversy," 34
37 Cole, “What is a Drum and Bugle Corps?” 154
38 Summerlin, “The History and Development of the Front Ensemble," 2
acknowledge the legitimacy of the section. Instead, they pine for the drum corps of their youth: competitive, rough-and-tumble ensembles that used only G-bugles and marching drums. The increased use of the pit is “not just a technological or aesthetic change, but one with fundamental ideological implications about what drum corps is and should be.”

Even in 2019, there remains a small but vocal segment of the fan base which rejects the front ensemble entirely, citing it as the primary reason behind the “death” of what they view as true drum corps. “Eliminate the pit,” wrote one Facebook comment. “They don’t belong in real drum corps anyway !!!” “The pit was and IS a waste,” stated another. For these individuals, the front ensemble has been an unforgivable “bastardization of what drum corps should be” because of how it has reshaped the instrumentation often considered by fans to be the most fundamental and unique quality of the activity.

Despite these protests, the front ensemble has undoubtedly become a part of all modern drum corps, appearing in some form in each of the top finalist corps since 1983. This integration has resulted in the genesis and blossoming of unique aesthetic identities for the front ensemble and for the corps as a whole as seen through the varied groups analyzed in the following section. The pit writing has bridged the old traditions of drum corps with a new modern style, thus shaping the current identity of the activity. This also suggests that although instrumentation is a highly important value in understanding the traditions and unique nature of drum corps, there are other distinguishing features which also define the activity.

39 Maher, “The Amplification Controversy,” 1
40 Linda Liebermann Evans, Comment on "Three Thoughts," Facebook, August 16, 2019
41 Summerlin, “The History and Development of the Front Ensemble,” 143
Shared Flow, Communitas, and Drum Corps

Psychologist Mihaly Csikszentmihalyi identified the concept of flow as an important element in human relationships, activities and activities. Flow is defined as a psychological state often found in sports and music (among other activities) where individuals reach an “optimal experience”\(^{42}\) of concentration and awareness, resulting in a heightened sense of fulfillment, timelessness, and joy. Those who experience flow also have the experience of “merging action and awareness,”\(^{43}\) living fully in the moment which is “intrinsically rewarding”\(^{44}\) and leads to repeated involvement in the activity.

While flow generally refers to the people involved in the actual effort of an activity—here, the performers on the field—the term “communitas” from Victor and Edith Turner may more accurately include the audience members. This term refers to an “intense temporary experience”\(^{45}\) that is described as “a group’s pleasure in sharing [a] common experience,” where a group of people are ignited with a “collective joy” and a natural feeling of connectedness that is a “bond...uniting people over and above and formal social bonds.”\(^{46}\) Turner continued the definition of communitas to specify that it can be described as “shared flow,” an experience that “can only be brought forth in the context of a community”\(^{47}\) such as among teammates or fellow performers. The feeling of shared flow is so powerful that Ramsey described it as “the ultimate


\(^{44}\) Ibid., 146.


experience of being alive,” a happiness that is brought to “an ecstatic dimension when the experience is communal.”

It is important to understand how structure impacts communitas. Structure is the “distinctive arrangement of mutually dependent institutions” which separate people into roles and social positions. In a drum corps performance, this is the relationship between the audience members (recipients of the performance, but also active in the response), judges (who hold the competitive power), and performers (creators of the performance, who must adhere to their rehearsed roles in order to succeed collectively). When communitas succeeds, it “dissolves the norms that govern structured and institutionalized relationships”, creating “something magical” within it.

Flow and communitas are certainly present in other types of music experiences. However, in those cases they are usually a byproduct of the composition or performance rather than an intentional creation. As I will explain below, in drum corps these flow-inducing moments are instead encoded into the shows, having been carefully designed to generate this feeling of communitas at very specific times for performers, observers, and judges in order to create the maximum effect. The moments which have achieved this most successfully are the ones which are considered the most iconic and representative of the activity.

---

48 Ibid., 172.
49 Ibid.
52 Turner, Ritual Process, 139.
Show Structure

Show designers work within the framework of the musical structure of drum corps. Though not explicitly outlined in any rulings, most shows I have seen contain roughly five sections that often comprise an opener, ballad, percussion feature, production number, and a closer. These categories have been recorded as show elements as early as 1976.\(^{53}\) These sections help formalize the theme of the show, which can “promote contemplation of a subject, while still remaining somewhat abstract”\(^{54}\) by uniting elements through an ambiguous “concept” theme. Corps can also develop a show "around an explicit theme, or [by] creating a narrative through the juxtaposition of different pieces in the musical arrangement.”\(^{55}\) Naming shows was not common before 1987, and “explicit themes for shows [were] rare before the 1980s,”\(^{56}\) but contemporarily it can be easy to guess if a show is a concept show or narrative show through the title. Some show titles like *Juliet*, *The Call of the Wild*, or *Goliath*\(^{57}\) immediately suggest a narrative structure from their connections to literary works. Shows such as *subTerra*, *i*, or *Tilt*\(^{58}\) indicate a more abstract approach.

The sections (opener, ballad, percussion feature, production number, and closer) are each carefully paced to keep the attention of the audience throughout the approximately eleven-minute show. Some designers use the “50 second rule” as a guide, where “musically and visually

---


\(^{54}\) Odello, “Performing Tradition,” 244.

\(^{55}\) Ibid, 244.

\(^{56}\) Ibid.


\(^{58}\) Mandarins 2019, Blue Knights 2017, Bluecoats 2014.
impactful moments must happen approximately every fifty seconds...to keep the audience engaged.”

Passages of developing tension are built to climatic “impact points” which aim to “elicit a reaction from the audience.” While these impacts can be marked by a full-ensemble horn hit characterized by the classic “wall of sound” hallmark of the activity, they can also be moments which impact the audience by “taking their breath away” through lyrical playing, exquisite small ensemble moments, and virtuosic front ensemble features throughout the show. Moments of flow can be achieved in any type of these sections, but the anticipated show structure helps create the conditions for flow through pacing and building on audience expectations.

**Openers, Closers, Ballads, Production numbers, Percussion features**

Opener and closers act as the bookends of the show’s narrative structure and “should be the strongest musical segments of the production.” The opener initiates the mood of the show and introduces that years’ corps to the audience. A strong opener “attract[s] the attention of the audience” and builds anticipation for the rest of the show.

Consider the opener of the Boston Crusaders’ 2017 program *Wicked Games* (discussed in more detail in the following section). As the opener of a narrative show about the Salem Witch Trials, the segment begins with the haunting sound of children’s laughter underneath an eerie

---

60 Ibid., 40  
61 Ibid.  
62 Ibid., 48  
63 Dan Ryder, *Techniques of marching band show design*. Wylie, Tx: Dan Ryder Field Drills. 2005, 154
rendition of Beethoven’s “Moonlight Sonata.” The innocence of the children’s laughter and the childlike timbre of the kalimba is contrasted by a low, almost indiscernible bass drone that hums ominously, foreshadowing a plot where innocence will be corrupted.

Closers, conversely, must tie up the narrative structure of a show through an ending twist and musical power that leaves “the audience satisfied.”64 The goal is to get the audience on their feet out of sheer excitement for the noise, talent, and electrifying energy which is being expelled by the corps. Examples of some powerful closers will be discussed later in connection to moments of flow.

Ballads have musical and physical contrasts for the performers. They “offer an opportunity for an ensemble to demonstrate lyrical playing, and to present a different emotional character in the program”65 and through moving to slower tempos, performers are able to “regain energy for the upcoming closing movement.” In my experience, ballads are especially able to evoke this feeling of communitas as they are so different from the fast-paced and energetic sections which drive a drum corps show. The lyrical, flowing phrases (often with a talented brass soloist) capture a pure beauty in a very different way from the rest of the program (see discussion of the Blue Devils Metamorph ballad and the Force of Nature ballad by Santa Clara Vanguard in the next section).

Production numbers are 'developmental' movements in the scope of the show, in the sense of introducing a problem or continuing a relationship between characters. They often contrast stylistically with the opener and act as transitions within the arc of the show. For example, in

---

64 Ryder, Techniques, 156
65 Brennen, “Show Design,” 52
Carolina Crown’s 2016 program *Relentless*, the production number “El Tango Roxanne” is a playful musical number that contrasts the dark opener of Barber’s “Medea’s Dance of Vengeance.” Thematically, it introduces a new character who instigates heightened tensions between the two main characters, driving the narrative development forward.

Percussion features often act as a developmental movement, while focusing musically on the percussion ensemble and specifically the drumline. The brass and color guard members move around on the field to continue the physical and narrative momentum of the show, but the only musical content comes from extended solo moments in the percussion section. Brennan notes that “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,” though in nearly all of the shows I have seen, there are movements dedicated to the percussion section.

**Drum Corps “Moments” and the Importance of Flow**

Drum corps designers and arrangers do not use the words “flow” or “communitas” to describe their goals in writing for their ensembles. They instead use the word “moment” to point to those places where they intend to spark a reaction with the audience (see interviews with Brian Dinkel and Matthew Jordan in the upcoming section for examples). Centering shows around these identifiable “moments” displays an important feature of the overall style of drum corps: the quest to create a sense of flow at very specific points for audiences, members, and judges. In order to be memorable and moving (and usually competitively successful), shows must distinguish themselves from the competition through aiming to move audiences viscerally. Corps

---

66 Brennan, “Show Design,” 52
strive to produce moments which are so brilliant, so emotionally compelling and so well integrated into the entire narrative structure that viewers are overcome with a sense of exhilaration. Former DCI Artistic Director Michael Cesario explained that these “magical moments” are “beyond explanation…[they are] when fans are driven to stand up. [The fans] don’t know why they’re standing up, but they’re just standing up and screaming or crying or responding to these super sensitive moments.” The visceral reaction which drum corps performances have been known to produce is another hallmark of the activity, one that explodes with an exhilarating joy and pride brought on by the music and entire live experience. Examples can be seen in observing recordings of audience reactions and standing ovations during shows, such as a video of the crowd at the end of the Bluecoats 2016 show *Down Side Up*, or at the end of Carolina Crown’s 2015 ballad. Experiencing these moments collectively creates an immediate sense of communal enjoyment and communitas.

Closers are often where these moments are found, especially in shows that add a surprising twist ending accompanied by stellar brass ensemble playing. Phantom Regiment’s 2008 program *Spartacus* is one example, a show considered "the stuff of drum corps legend," now relived through a popular video recording. On finals night, the crowd was entranced as


71 The final competition of the drum corps season, held in mid-August, where the top twelve World Class corps compete for a championship title.
they watched the story of Spartacus, a legendary gladiator who led a major slave uprising in the Roman Republic. The drama displays the oppression of the slaves (portrayed by the guard members) by their captors (the brass and drumline). A beautiful love story is developed in the ballad, but it ends suddenly with a graphic murder which Spartacus is prompted to avenge. Supported by brooding musical tension musically and the simmering dissent of the slaves, Spartacus leads the slaves in a rousing battle cry before he takes a spear, sprints across the field and—in an unforeseen twist saved until finals night—brutally stabs the drum major, usurps his podium, and proceeds to conduct the corps in their triumphant, electrifying ending. Drawn in by Phantom Regiment's “complete commitment to selling the theatrical moments of the show,” the audience is fully captivated by the twist and leaps to their feet, clamoring in a “minute-long standing ovation” while the corps still performs with a seemingly endless supply of energy, stamina, and talent. The effect was undeniable, leading the corps to victory against the previously undefeated Blue Devils for the championship title. More than ten years later and viewed through a popular YouTube video, Spartacus is still enjoyed, even considered by some staff and directors to be one of the top five “most legendary shows in Drum Corps International history.” One fan, who had only seen the show through YouTube, enthusiastically notes it as their favorite show, saying that no other show had been “that epic” in eliciting reactions in the crowd and in viewers afterwards. Talking about the ending of the show, they noted that “Everyone has their favorite corps that they want to see win, but in that moment...everyone in the

72 Luberts, "Phantom Regiment 2008”.


audience is unified and wants it to happen. And the show creates that unity, that sense of community.” Another fan who witnessed the performance live remembered, "[I] never experienced anything that ever approached the level of intensity of the connection between the Regiment and the audience in Bloomington…We drum corps folk tend to be a pretty partisan lot...[But] when Regiment hit the field, it didn't matter. Regardless of home team, we were one. We were Spartacus.” These observations reflect that of the Turners: that communitas “occurs through the readiness of the people...to rid themselves of their concern for status and dependence on structures.” The crowd appears to experience communitas as they respond to the stunning display of drama, music, and talent. At that moment, they are unified by the defining “pleasure in sharing common experiences with one’s fellows” of communitas rather than by the structure of competition or their hopes for their favorite corps.

In 2019, a similar surprise ending occurred with the Bluecoats. Their original closer was an exciting, typical drum corps ending based around the Beatles’ song “Come Together” with a delightfully brazen “screamer” trumpet solo as part of a groovy, in-your-face ending. But during finals' week, just when the crowd was on their feet cheering for the ending, the show continued as a Beatles-era narrator declared “Once again, the Bluecoats!”, introducing a surprise encore. With an incredibly joyful, nostalgic, and all-around wholly satisfying rendition of “Hey Jude,” the crowd naturally sang along to the familiar tune, still accompanied by the Bluecoats.

---

75 KT Taylor, personal communication, February 21, 2020
76 Luberts, “Phantom Regiments 2008”
78 Turner, Communitas, 2
79 Term for a brass soloist, usually a trumpet player, who plays virtuosically in a high register.
brass and screamer soloists. The effect was “one of the most incredible crowd responses to ever be seen at DCI finals” because—in my opinion—the music was irresistible, exciting, and most of all, felt good. One fan wrote afterwards on Twitter, “Will never forget the electric moment of “Ladies and gentlemen, once again, The Bluecoats!”...going straight into Hey Jude. It made me start sobbing. I can’t put into words how much the show meant to me. What a wonderful, memorable night.”

Because of the undeniably powerful effect of the “wall of sound” produced by brass ensembles, many of these climactic moments contain some sort of huge ensemble moment. But these moments are only effective when contrasted and built up to by quieter and more nuanced development. Still others work through pure, unrestrained beauty of lyrical brass lines or warm and rich front ensemble writing, often found in ballads or outro endings, such as the “You’ll Never Walk Alone” ballad by the 2013 Madison Scouts (explored in detail below), Santa Clara Vanguard’s 2016 arrangement of “Earth Song,” or Carolina Crown’s 2019 ballad of “Gabriel’s Oboe.” My own favorite example of this is the ending of Boston Crusader’s 2018 program, analyzed in the following section. The front ensemble played fluid, lyrical passages that blended their source music to create a beautiful sense of awe and nostalgia. When this music was paired with the visual effect of the whole corps disappearing under an enormous, silky blue fabric wave, accompanied only by the fading reverberations of hand chimes, it resulted in a highly evocative

---


81 Twitter post, August 11, 2019, 11:29 A.M. https://twitter.com/edgysmedgy
ending. Upon seeing it during finals week, it resonated with me and others in the audience in a way that I felt was unparalleled to many other shows.

Evaluating Shared Flow: General Effect

While performers and audience members may not be actively thinking about the competitive nature of the performance – enjoying, instead, that feeling of flow and performance fully in-the-moment – the judges are required to evaluate the performance. Each judge is assigned to certain captions (categories): Music (percussion and brass, separately), Music Effect (the whole musical package, but not the visual), and Visual Proficiency (the visual output, but not the musical). While judges may be influenced by other categories, they are expected to stay within their assigned category when tabulating scores.

However, some judges are given the task of evaluating the entire product, termed the “General Effect.” General Effect (GE) judges are responsible for awarding 40% of the total score, the largest single percentage in scoring. This caption is often a “good indicator of the overall results.” In the past ten seasons, all but two World Class championship corps secured the high General Effect award, effectively guaranteeing their championship title. In considering the full program, Drum Corps International states that the GE judges must balance and assess “the intellectual, the aesthetic, and the emotional” output of the program. In other words, GE

---


83 The two years which the winning corps did not also win General Effect (2015 and 2019) only saw a score margin of .575 and .087, showing the exceedingly slim margin that exists primarily because they did not secure the General Effect title.

judges are entrusted to quantify clever and novel moments which pique curiosity, evaluate
artistically compelling musical and visual choices, and take in the overall emotional impact of
programs, or how effective the program was in creating that audience and personal reaction.
They must evaluate how successfully a corps is able “produce a unified product while eliciting a
response from the crowd.” According to DCI, these judges “must be the most experienced, most
knowledgeable, and most flexible members of the audience...they’re feeling what the show is
offering and responding to what the show is.”

General Effect judges are not only paying attention to these capital-M Moments of a
show, but also the development and lead up to them. Ultimately, “each area of the show must be
congruent to help maximize the overall general effect of the show” in order to create that
ultimate sense of flow at precisely the right moment. Intentionally crafting these exciting musical
moments not only attracts audience members, but also significantly impacts the competitive
results. In working within the structural framework of the shows, drum corps designers and
arrangers aim to write shows which have moments which are “relatable to the audience and
judges” and cause an “emotional impact” in all who witness their performances.

**Corps Identity**

One way that this can be done most successfully is through the creation of an identifiable
style within each corps. Top competitive corps have done this most through the “[articulation] of

---

85 Brennan, “Show Design” 38
87 Brennan, “Show Design” 38
88 Ibid., 38
their individual history and artistic identity”89 in order to connect with audiences through a familiar rapport. As audiences settle into a show, excited to see the visual innovation of the Bluecoats or hear the impressive hornline of Carolina Crown, they often bring with them the expectations of the overall show structure and an anticipation of the history of a corps. Odello summarizes: “For the casual observer, these performances are varied and entertaining; for the connoisseur, they are political statements on the current state of drum corps as an art form.”90 This knowledge of history may add to the viewer’s experience and may increase the likelihood of flow-inducing moments, “privileging insider knowledge,”91 but the knowledge is certainly not required to enjoy a drum corps show as the expected show structure, pacing, and musical qualities of a show aim to attract any viewer.

Identity blends similarity (“a commonality with others”) with distinctiveness (“a difference from others that is continuous over time”).92 I will analyze both of these and how they relate to the overall creation of identity within drum corps.

Similarity comes from finding common ground through experiences with others. There “can be no identity without community,”93 and the community formed in drum corps is one of the most treasured aspects of the activity. “The friendships we form in drum corps are deeper and longer lasting [than other friendships],” writes one member. “We ‘get’ things that no one else

89 Odello, “Performing Tradition,” 247.
90 Ibid.
91 Ibid.
93 Ramsey, Music, Emotion and Identity, 44.
would understand...There’s a common bond that will always be there, no matter where we are.”

Corps members spend three months alongside each other, undergoing a rehearsal process that is a crucible of physical and mental rigor paired with emotionally charged musical performances. Members of this community therefore create an identity for themselves which is expressed in different ways. Corps members use jackets, mottos, necklaces, and even tattoos as visible, tangible expressions of their identities as members of the group, using these items to “symbolize [their] allegiance” to a corps. Such rituals mark members as part of the organization’s history, sharing a communal bond that extends beyond the current season.

“Whether we marched ten years ago, two years ago, or are rookies [term for members in their first season]...we all have this [necklace] and it connects us through the years,” explained a first-year member.

Identity can also be described as a distinctiveness from others, an identity formed by how a group collectively remains unique through “socially distinguishing features that a person takes a special pride in or views as unchangeable.” These distinguishing features may result in

---


95 Drum corps traditions such as mottos and necklaces are a fascinating area of drum corps culture, also worthy of future study. Some mottos are public (7th Regiment’s “Rise as One,” Blue Knights’ “Finis Coronat Opus”), while others have meaning secret only to the members (Phantom Regiment’s “SUTA,” or Bluecoats “Six Words”). Necklaces are unique to each corps and are usually given to new members after an important rite of passage, like a first performance.


98 James Fearon, “What Is Identity?” (As We Now Use the Word), Stanford University, 1999, 1
qualities that cause audiences to refer to something as “unmistakably the Blue Knights” or quintessentially the Cadets. This distinctiveness is especially relevant for competition, as corps must fight to be memorable among their competitors. As a result, this results in a performative projection of the identity of a corps that is displayed each season.

Every year a corps performs, their staff makes decisions about how to present their corps on the field to audiences and judges. Competitive and performative success is obviously a central factor when making these design choices. However, by harnessing a corps’ history and prior identity, corps can create a recognizable yet evolving style for themselves, an identity that “comes into being as it is expressed” each year.

Iain Moyer, arranger for the Boston Crusaders, explained this as one of the parts of the activity which he appreciates the most: “I would hope that the musical style and the musical identity [of a corps] is similar from year to year. When I listen to the Blue Devils’ front ensemble, even though their shows may be drastically different, I still feel like there’s an identity there...If I looked at a Cavaliers’ show and didn’t know it was the Cavaliers, I could probably figure it out pretty quickly, even though what they did in 2019 was drastically different from what they did in 2018. That’s a very cool part of our activity! A lot of times, the corps’ musical, visual and conceptual identity transcends the uniform, which is pretty neat.”

---


100 Corps from Rosemont, Illinois, founded in 1948 and a top competitor. The Cavaliers are the last remaining all-male drum and bugle corps.
Programming

One of the ways corps cultivate this style though music is the use of programming. As will be discussed in the following section, the corps each tend to select music or arrangements which contribute to a certain aesthetic quality considered to be distinctive of each corps and which best fit the type of show they are performing. The Cadets and Santa Clara Vanguard are two corps who have been known for using classical music nearly every year of their existence. With shows that center around music from one composer (such as Copland\textsuperscript{101}, Bernstein\textsuperscript{102}, or Rimsky-Korsakov\textsuperscript{103}), they create an expectation as performing these works has come to be known as their own style or brand. Though in the past few years they have explored new territory by programming popular music, their long history of classical arrangements has created a precedent for how their shows will function. Conversely, other groups like the Blue Devils and the Bluecoats have consistently included jazz. When corps continue to pull from musical styles used in the past they reaffirm their style; when they choose to divert completely from it, they do so with the explicit intention to change from their past and instead incorporate this new genre into their style.

Corps Songs

Some pieces grow to represent a corps on a long-term basis. Most corps have official “corps songs”\textsuperscript{104} which are sung or played by the hornline in an arrangement that is unique to the

\begin{footnotesize}
\begin{enumerate}
\item SCV 2009 (Ballet for Martha), Cadets 2014 (Promise: An American Portrait)
\item SCV 1997 (Fog City Sketches), Cadets 2017 (Faithful, Fallen, Forgiven)
\item SCV 2004 (Attraction: The Music of Scheherazade), 2014 (Scheherazade: Words 2 Live By)
\end{enumerate}
\end{footnotesize}

\textsuperscript{104} Though musicians often refer to pieces of music as ‘songs’ only if they are sung, drum corps members always refer to the corps song as such, regardless of if it is sung or not.
corps. Most are ballad or hymn-like arrangements formed out of some particularly meaningful performance during the corps history and now are held in high regard. Hearing the corps song performed is a symbolic experience which represents all the values, memories, accomplishments, and history held by a corps and their members, leading to extremely powerful reactions in members and alumni upon hearing it.

Many official corps songs are considered by staff and alumni as “sacred ground,” too special to be performed on the competition field and therefore are reserved for key moments throughout the season. However, they might be included for a few anniversary or particularly significant shows. In 2018, the Cadets were recovering from the shocking investigation of former director George Hopkins’ history of sexual assault against prior members of the corps. As part of their program *The Unity Project*, they included the corps song “O Holy Name” and their traditional uniform as a way of asserting their unwavering dedication to the true values of the corps, values that stood apart from Hopkins. Fans and alumni aware of the classic Cadets identity recognize the heavy significance which the corps song bears. One alumni wrote afterwards, “I was visiting with my 1977 tour partner...At some point in the show she grabbed my hand and we both got teary-eyed. When the [member in the traditional Cadets uniform] joined the company front at the end, we were full-blown crying...So proud of this corps. So proud.”

Especially in a season which began with questions about the mere survival of the Cadets, the corps’ choice to use “O Holy Name” reaffirmed their historic identity while appearing to announce a rebirth of the corps.

---


A similar approach was taken in the 2013 Madison Scouts show, *Corps of Brothers*, a celebration of their 75th season. In light of this anniversary, the corps performed their corps song “You’ll Never Walk Alone” as the ballad and closer of the show. The hornline sung a moving verse of the song nearly a capella and the drum majors turned around to the audience to invite alumni to join them in singing. When the hornline entered again quietly, the audience was prompted to applaud thoroughly - not because of the boisterousness of the horns, but of the vulnerability expressed by the membership in performing their corps song for a public competition.\(^{107}\)

Other songs may not be officially corps songs, but are associated with the corps because of a particularly significant performance: Phantom Regiment is known for “Nessun Dorma,” Madison Scouts for “Malagueña,” and the Bluecoats for “The Boxer”.\(^{108}\) These songs are not corps songs, either because the corps already had an established corps song or possibly because (like “Malagueña”) it is a piece too upbeat for the hymn-like sentimentality often associated with corps songs. However, these pieces are iconic in the activity’s history and, in my experience, are almost viewed as untouchable for other corps, as using it would evoke the song's connection with the corps with which it was originally associated.

For the Boston Crusaders, a version of this unofficial corps song appears through a near-yearly musical quote from “Conquest,” found in the 1947 movie *Captain From Castille*. The full version of the piece was first used in their 1969 show and excerpts were repeated throughout the

\(^{107}\) “Madison Scouts 2013 - Corps of Brothers”, Youtube video, 14:03, “Adam Kehoe”, November 19, 2019, [https://www.youtube.com/watch?v=5rM9Zk0iFHk](https://www.youtube.com/watch?v=5rM9Zk0iFHk)

\(^{108}\) Phantom Regiment 1991 (*Phantom Voices*), 2012 (*Turandot*), Scouts 1988 (Untitled), and Bluecoats 2008 (*The Knockout*).
1980s and 90s. The current excerpt is a two measure quote of six quarter notes split up by rests,

![Image of notation of Boston Crusaders’ “Conquest Shots”]

Figure A. Notation of Boston Crusaders’ “Conquest Shots”

now known as the “Conquest Shots”:

The grouping of these notes also suggests a musical representation of the Crusaders’ nickname, “BAC,” especially when spelled out as dots as seen on Boston media and alumni tattoos, with the dots representing each letter’s place in the alphabet (two dots representing B, one dot representing A, and three dots representing C). The symbol also made an appearance as a drill set in their 2018 program, coordinating with the timing of the musical shot.

![Image of drill set of “Conquest Shots” from S.O.S (2018)]

Figure B. Drill set of “Conquest Shots” from S.O.S (2018)

---

109 “BAC” has a few different alleged meanings: “Boston Area Crusaders,” “Building A Champion,” and the classic “Bad Ass Crusaders.”

110 Drill design is another factor of identity. Symbols like the Boston dots or Phantom Regiment’s chevron are visual hallmarks of the activity and also warrant future study.
Understanding the significance of the “Conquest Shots” and other such musical symbols is a “layer of meaning” which “cannot be perceived without a historical understanding of the drum corps tradition and the individual drum corps performing.” Audience members (especially alumni) wait eagerly to hear the shots, filling in the rests by screaming a gutteral “HUH." These traditions are the products of decades of enactment. Though they are small, they are a way of connecting to the corps past through current performances that form the corps of the future.

Choice of musical signatures and source music are ways that arrangers and designers make conscious decisions regarding how a corps is going to present themselves on the field. Including pieces which have extremely large significance through historical usage (such as corps songs) are decisions which are not made lightly and are a way of connecting to the corps history, past and present.

**Arrangers, Identity, and Intentionality**

Though music selection certainly matters in crafting an identifiable corps sound, the style of the arrangers and how they work within the framework of show design is incredibly important. This “fingerprint," as Carolina Crown arranger James Ancona identified it, is the human touch, the individual tastes and styles that transcend mere music selection. In researching these styles and the identities of each corps, I wondered: is the creation of the front ensemble identity something that is equally intentional by arrangers, or is it merely a byproduct of the choice of source music and the arrangers’ individual tastes?

---

Conversations with the arrangers revealed interesting and similar perspectives: arrangers are intentional and thoughtful in their writing, but their musical choices are not consciously made with the purpose of creating an identifiable front ensemble sound. That identity which the audience perceives is a combination of the source music and corps history, the arrangers’ personal writing style, and the cohesion within the design team. Their comments are enlightening and I believe it to be informative to reproduce them in full here, saving discussion until afterwards:

Brian Dinkel (Blue Devils, Front Ensemble Arranger): “I think you can be new and push the envelope, but do it from your own viewpoint. I think corps have their identity and their style from programming decisions, but I think even within that, the flavor is the people within it and what their background is. You can have a nod to what the past is, but still find ways to be innovative and new within that - Vanguard’s had a lot of success with that in the last few years, finding things that match their identity, but in new ways that are really pushing the activity forward...When there’s a vision for what the group is trying to be, what they’re trying to say, it gives everything a little bit more of a clarity and direction.”

Matthew Jordan (Bluecoats, Music Coordinator and Sound Designer): “With people like Doug [Thrower, Bluecoats brass arranger] and Tom [Rarick, Bluecoats percussion arranger], they have such an identifiable style, but they’re also versatile arrangers. It’s easy to hear their voice within whatever composer they’re writing to without ever feeling like it’s the same show every year. [The Bluecoats’ sound is] identifiable, but I’d say it’s purely not music selection. Tom found a way to still make the [Bluecoats’ high-end contemporary jazz sound] come through and

---

still not adulterate the sound of what the Beatles are...He really can fit like a chameleon into any style, but still sound like himself, and sound like a really good drum corps percussion [section] without getting in the way of what the musical idea is for the total package.”113

Tom Rarick (Bluecoats, Percussion Arranger and Composer:) “I think people gravitate towards things that feel familiar, and they also gravitate towards things that feel like it’s reaching for something...If you can be creative within your identity, if you can be innovative within a style and you have a good idea of what that is and what it looks and sounds like...That’s when it feels honest. When you do things just because (and we’ve tried a bunch of those things that haven’t worked!), that’s when it feels contrived.”114

Omar Carmenates (Cadets, Front Ensemble Arranger): “Composers can’t help but be themselves. They can’t write like someone they’re not, so there ends up being a sound, but I don’t think it’s intentional. I don’t think Ian Grom115 goes “I’m going to write like this because I’m known for it” - it’s just the way he writes…. [When I write,] It’s more that I’m trying to do the opposite [of what I’m known for]. The best phrases - the ones that landed really well emotionally or they really accomplished the job effect-wise - I look back, and those are the ones that I was trying to explore and expand my writing style. When you do that, you end up still being yourself, but you’re pushing forward.”116

115 Prominent WGI arranger who writes for the highly successful Pulse Percussion and Chino Hills High School indoor percussion ensembles.
I asked Carmenates if it was important for corps to actively stay true to their identity. To him, adhering too closely to that concept of self is “a dangerous slope,” noting his hesitancy about anniversary shows: “[Anniversary shows] try so hard to be who they were or to celebrate what they are or were that they never do well...If you spend your time looking backwards, I think you lose that edge, competitively or creatively. The shows that stick in our consciousness are the ones where there was no ‘backwards-looking.’”\(^{117}\)

Iain Moyer: “I think that everything’s changing [from year to year], but the one thing that isn’t changing is maybe the brass arranger or the percussion arranger - you’re always going back to their vocabulary. It’s an evolving vocabulary, but I think that’s the interesting thing about the state of drum corps... Identity is still really important. When I listen to the Cadets now, I can still tell that they’re the Cadets, and I think that’s true for most groups out there that have carved out their niche.”\(^{118}\)

James Ancona: “I think that identifiable sound is going to happen through the writers. Crown’s front ensemble sound is going to continue to sound this way as long as I'm writing for it. If somebody else takes my position, it's going to sound different. It will still be an identifiable sound, but it will sound like whoever that is, you know? I watch Iain Moyer, for example, go from Cadets to Boston. Now Boston's pit sounds like it is an updated version of his old Cadet pits.”\(^{119}\)

Ancona also stressed the importance of arrangers finding and utilizing their own unique arranging voice: “I still think with the top groups, I don't think those [arrangers] are people that

---

\(^{117}\) Carmenates, interview.

\(^{118}\) Iain Moyer, Audio interview with author. November 7, 2019.

are looking at everything that's happening and saying, “I need to be more like that [person].” I think we're just doing our [own] thing… I think anybody who's looking to kind of create their own sound has to make sure that they don't get caught up in the pool of trying to sound and look like anyone else...I listen to and I'm inspired by other writers in the pageantry world, but I don't try to write like them, because that I think that takes away from me and it takes away from them.”

The intentionality behind the arrangers’ process is evident in the detail and precision of their arranging styles which will be explored further in Section III. However, it is clear from their commentary that the identifiable sound of each front ensemble is less of a conscious adherence to an idea of identity and more of a product of the arrangers’ individual voice interacting with the show design choices made for the corps as a whole. The arrangers agree that having an identifiable style is important for carving out a niche in a busy competitive field, but for the front ensemble arrangers, this style results most directly from multiple seasons with the same corps where they have time to develop their voice within the ensemble’s typical music and choices.

---

120 Ancona, interview.
SECTION III. FRONT ENSEMBLE CASE STUDIES

During the final week of competition each summer, the parking lot outside Lucas Oil Stadium in Indianapolis is abuzz with activity. Among the spectators, equipment trucks, and stadium announcements, the competing front ensembles are allowed to warm up in the lot before moving inside the stadium to perform. With numerous ensembles playing at the same time, the lot is a cacophony of scales, drums, cymbal crashes, and runs, with spectators milling around to cheer on their favorite groups.

My first experience with the Lucas Oil lot was during the summer of 2016, as I was finishing up my first season as a member of the Spartans front ensemble, after two years as a curious spectator. While walking through the lot while the World Class front ensembles warmed up, I was struck to find that I could recognize some front ensembles immediately by ear, even if I had yet to see their show for that season. As I learned more about the front ensemble and fell more in love with the activity during my following three years of performing, I found that this awareness and “feel” for the unique styles of these ensembles was growing too, leading me to be fascinated by what I was hearing. What musical qualities was I hearing to make these groups so immediately identifiable? What techniques were the arrangers using to craft their writing? These experiences sparked my interest in this project and led me to research the arranging styles and techniques of a few of these top ensembles.

Section III analyzes five World Class front ensembles, detailing their unique qualities and characteristics through score examples. Conversations with the corps’ arrangers provides extra background into the philosophy and choices that influence their writing. I approached this section by first selecting the corps I wished to research. The Bluecoats (Canton, Ohio), Blue
Devils (Concord, California), Boston Crusaders, Cadets (Allentown, Pennsylvania), and Santa Clara Vanguard are all corps which are consistently in the top of the activity and which had clear styles that I was already somewhat familiar with. I felt that these front ensembles lead the activity through their skill and their unique approaches to front ensemble arranging. Another corps, Carolina Crown, was initially part of the research and interview process. However, due to time constraints I was not able to include analysis of them for this edition of research.

After four years as a performer and two additional years as a spectator, I estimated that I had seen most of these groups at least twice per season (in addition to countless shows online), giving me a significant exposure to the styles of these corps and how they compared to others in the activity. From here, I began to think of my favorite moments from each corps, the passages that were the most memorable or which have qualities I associated with each ensemble. Then I made note of the idiosyncratic characteristics of the selected groups, such as instrumentation or their use of electronics. Once I received scores from the arrangers, I was able to be more specific in analyzing their styles, by taking note of orchestration patterns, types of common phrases, or techniques they use for writing for keyboards.\footnote{Scores excerpts included with permission from arrangers. Captions indicate original composer/piece and year it was arranged.} Taking these observations, I then took a wider look at the corps as a whole and considered connections between the arranging techniques I saw in the front ensemble and the show design or music choices made for the corps as a whole. These large-scale aspects were usually made more clear through insight from the arrangers.

Each corps is analyzed in an individual section that details the key aspects of the ensemble through explaining the history of the corps as well as score examples. When
appropriate, comparisons to the other corps are made, though a brief introduction will outline some of the key points for each ensemble:

The Bluecoats use a wide variety of textures in their groove-based arrangements, supported by arranger Tom Rarick’s use of a drumset in all of their recent shows. All aspects of the corps are in service to the greater picture, including the closely layered lines, split parts between the keyboards, and the many auxiliary instruments. They have also been pioneers in non-traditional pit setups and in the use of electronics.

The Blue Devils share the use of the drumset, also giving them a driving rhythmic presence. The use of hand percussion instruments and metallophones by arrangers Jim Wunderlich (2005-2017) and Brian Dinkel (2017-) brings a unique color to their ensemble that is supported through the extreme professionalism of their keyboard players who perform high-tempo runs and cadenza-like ballad passages.

The Boston Crusaders and the Cadets have both been influenced by arranger Iain Moyer. His style is characterized through very percussive writing on the keyboards and the use of colorful, non-marching percussion instruments. At Boston, the focus is on the clear transmission of the storyline, leading to sharp contrasts and symbolic writing that supports the visual storylines.

At the Cadets, the approach is more music-focused, sometimes leading the writing to be a bit more like a concert percussion ensemble with a high awareness of instrumentation and color. Recent arranger Omar Carmenates maintains this music-focused ensemble through the use of dense scoring and harmonization.
The focus of Santa Clara Vanguard is the acoustic properties of the mallet keyboard instruments. Under Sandi Rennick’s writing, the front ensemble is a constant presence throughout the shows. The stamina and skill required to play octave grip runs and flashing permutations with graceful musicality pushes the boundaries of writing for the front ensemble.
**Bluecoats**

**Founding Year:** 1972

**Hometown:** Canton, Ohio

**Championship Title:** 2016

**Front Ensemble Arranger:** Tom Rarick has arranged for the Bluecoats front ensemble since 2002. In 2009, his role changed to percussion arranger and composer for the corps.

As a corps, the Bluecoats have long been known for their vivacious and entertaining shows that incorporate visual and musical innovation. Their shows have commonly pulled from the genres of contemporary music and jazz or big band charts, with music from Pink Floyd, Radiohead, Chick Corea, Billie Holiday, Wynton Marsalis, and the Beatles. Their interpretations of these recognizable tunes always utilizes an enticing groove and frequent metric mixture.

If we consider the Bluecoats as a large-scale jazz ensemble or big band, the front ensemble most commonly fulfills the role of the rhythm section, supporting the main melodies rhythmically and harmonically while also excelling at select featured solo moments, particularly transitions and the beginnings of movements. Like a jazz band would be woefully incomplete without a rhythm section and vice versa, the Bluecoats pit functions as a fully integrated and integral component of the rest of the corps. The Bluecoats have also been innovators in their use of electronics, the full extent which will be discussed later in this section.

The front ensemble’s function within the corps relates directly to arranger Tom Rarick’s writing style. His intent is rarely to have the audience listen to a singular player or even only the
front ensemble as a whole, but rather to take in the large-scale picture of the section as one coherent idea, with the intent that “everything is in service to the show.”

Because Rarick has been both the front ensemble arranger and the battery arranger for the past ten years, he inherently holds a holistic view of the musical aspects of the corps and the typical music programmed for the group. His expertise in this area, added to the whole-corps focus from the design team, places the front ensemble as a truly integral part of the ensemble.

The pit is essential to supporting moments and contributing to the overall soundscape of the corps, but as Bluecoats Music Coordinator Matthew Jordan noted, these parts are not always the central focus:

If you listen to the pit in the lot, there’s whole moments where the pit doesn’t have any identifiable melodic moments, and a lot of that is because it’s designed to be heard only in its total package…. [We] never write the front ensemble to sound good by itself, because it’s never going to be heard by itself, except for in the lot...And so I think that’s the big difference in philosophy for us, that we’re not writing for the lot, we’re writing for the show.

Rarick achieves this fused sound through writing intricately layered parts with a wide range of subtle accessory colors. At the forefront of this role is the drumset player, a position which has been included in the corps since 2012. In shows since then, the set players have created a near-constant groove for the ensemble, ensuring that the pit and the marching field members are musically integrated through the main connection point of the set player.

Accompanying the consistent rhythmic drive found in the drumset, Rarick often writes passages of “comping,” where the rest of the pit plays secondary lines in parts of the show that have a brass focus, again similar to how a rhythm section functions in a jazz ensemble. Though

---

122 Rarick, interview.

123 Jordan, interview.
not the main focus of the audience, the textures in these moments subtly complement the melodic voice in the brass by providing a consistent rhythmic and harmonic counterpart. These comping passages are also widely varied in content and orchestration to perfectly display the character of the repertoire.

In their 2015 program closer, an arrangement of Univers Zero’s “Dense,” this manifested in a very percussive section where the pit played the same dissonant chord for sixteen bars. Without a moving counterpoint line, the focus was on the brass parts and on the rhythmic interplay between the front ensemble lines. In a riveting closer full of frequent dissonances, syncopation, and metric mixture, these vamping chords offered by the front ensemble fit in with the motives of the rest of the piece and created a rhythmic foundation that highlighted the skill of

Figure 1. Univers Zero, “Dense”, arr. Tom Rarick for Kinetic Noise (2015), mvt V (mm. 42-44).
the brass line, who played melody and counter melody lines that transcended the homophonic texture of the front ensemble.

The rhythmic-focused and homophonic style of the 2015 excerpt fit that particular moment, but the Bluecoats’ approach these comping passages very differently depending on the source music. In the 2019 arrangement of “Eleanor Rigby” the brass line is again featured playing the well-known melody. Supporting the brass’s melodic phrases are repeated chords in the vibraphone part and a repeated block chord line within the marimbas, which play rhythmic block chords connected by short runs. This use of block chord and double vertical stoke patterns in the marimbas is a frequent writing technique within the Bluecoats scores, particularly during passages where the pit functions as secondary accompaniment.

Figure 2. Lennon-McCartney, “Eleanor Rigby”, arr. Tom Rarick for The Bluecoats (2019), mvt II, (mm. 58-60).
Though these parts look complex and more central on paper (certainly compared to the passage from 2015) they only function as a textural partner when played within the intended context of the sustained, melodic phrases from the brass line.

**Auxiliary Instruments & Layering**

However, while the pit is certainly utilized for accompaniment purposes, it is not limited to this role, frequently carrying sections of the show independently, particularly during transitions and the beginnings of movements. Within these sections, Rarick often displays another one of his tendencies: including a wide variety of acoustic auxiliary instruments played by the mallet keyboard performers. These include djembes, cajons, castanets, sleigh bells, finger cymbals, hand claps, and shakers, all which added a tasteful sound to the larger picture. These instruments are written through careful layering that works together to contribute to the overall soundscape of the ensemble.

Through the variety of instruments, Rarick’s writing invites listeners to consider the complete picture in order to fully appreciate it, rather than focusing on just one player, instrument, or subsection of the front ensemble. This contrasts writing like Sandi Rennick’s for Santa Clara Vanguard, who orchestrates mostly unison parts for the keyboards. Her writing is difficult as players must perform exactly the same thing at the same time. Rarick does write these uniform lines, but a more unique feature of his writing is his tendency to layer multiple parts to create a cohesive output when heard together. Consider the second movement of their 2016 show
*Down Side Up.* Opening with the front ensemble, Rarick makes use of the wide range of colors offered by auxiliary instruments.

The keyboard players begin by each playing a set of castanets in their right hand, splitting rhythms between them. Underneath the castanet rhythm they enter at measure 8 with block chords in their left hand at measure 8 that hint at the main theme of the piece, which uses the Phrygian mode of the original marimba duet, “Udacrep Akubrad.” These chords are also split up between players with one player to each note, interlocking the active Middle Eastern-style melody line between them. Meanwhile, the rack players add a final layer of color, using numerous cymbal textures, tambourines, and even an acoustic guitar played with sticks to accentuate the front ensemble presence. As the brass line enters, these textures remain present, now fulfilling the complementary role seen before. Moments like this example display Rarick’s affinity for creative orchestration that centers around rhythmic layering and accessory colors as well as the need for the writing to be heard in its full context.

![Figure 3.1. Project Trio/Dorman, “Raja Raja/Udacrep Akubrad,” arr. Tom Rarick for Down Side Up (2016), mvt II, (mm. 1-7).](image-url)
A similar passage combining these ideas of comping and colorful layering is found in the 2018 arrangement of Billie Holiday’s ballad “God Bless the Child” and the traditional song “Pretty Saro.” Here, the keyboard and drumset players gently layer ride cymbal rhythms, creating polyrhythms and subtle accents.

Figure 3.2. Project Trio/Dorman, “Raja Raja/Udacrep Akubrad,” arr. Tom Rarick for *Down Side Up* (2016), mvt II, (mm. 8-15).
In the introduction to a flowing ballad where a heavy drum presence would feel out of place, the cymbal texture creates a delicate forward momentum and drive without drawing attention away from the primary performers, a brass trio and vocal soloist. The effect makes the front ensemble sound larger, wider, and more nuanced than if players were to play a unison version of the rhythms, and this effect only becomes more impactful as the ballad develops. The chords of the brass line billow and swell, supported by the simply orchestrated *alternating* strokes and rising metallic chords from the front ensemble which continue when the vocal soloist enters at Rehearsal D.

**Figure 4.1. Holiday/The Westerlies, "God Bless the Child"/"Saro," arr. Rarick for *Session 44* (2018), (mm 29-41)**
When the ensemble finally reaches the climactic hit, the pit continues with arpeggios all on the vibes and glockenspiel which glitter and shine within the brass moment.

![Unison vibraphone line in “God Bless the Child”/“Saro,” arr. Rarick.](image)

**Figure 4.2. Unison vibraphone line in “God Bless the Child”/“Saro," arr. Rarick.**

**Vibraphones**

Even as the parts become more involved and exposed for the keyboards, Rarick still experiments with layering, particularly through the use of the vibraphone voice. While the marimbas are generally written to play unison lines (often on closely-voiced chordal permutations or scalar patterns) the vibraphones are more prone to counterpoint lines within the section that fill out the texture and add more detail. Such splitting of lines is heard during the 2019 ballad (“Blackbird”/”Dear Prudence”), which opens with a harmonized vibraphone feature. The line is shared three ways between the five players: a top skeletal line played by the Vibe 1 player using vibe and crotales, and two melody lines with pairs of players that work in tandem, expressing the multi-textured guitar introduction familiar in “Dear Prudence.” In the Beatles’ original recording, the multiple strings on the guitars each speak differently, leading to subtle differences in the moving line. Rarick emulates this variety in texture through splitting the vibraphone line. Following this opening phrase, quarter note block chords are shared between players, with chord changes played by alternating performers for variety and ease of movement. (The second phrase also introduces a cabasa, cajon, and shaker, not pictured, to fill out the rhythmic texture, again, one of Rarick’s specialties.)
Between the vibraphones, glockenspiel, and crotales, there holds the possibility of up to seven metallic instruments in the pit - not to mention the endless sounds offered by the synthesizers. By experimenting with these multiple metallic textures, Rarick creates more variety and subtlety than would be available if he had written entirely unison lines for the large section,

Figure 5. Lennon-McCartney, “Blackbird/ Dear Prudence,” arr. Tom Rarick for *The Bluecoats* (2019), mvt IV, (mm. 1-5, 10-13).
subtly “adding life”\textsuperscript{124} to it. Using multiple performers to express a single thought shows the importance of hearing Rarick’s writing in its entirety. That larger-picture effect is similar to how the front ensemble functions within the corps as a whole.

**Electronics**

No discussion of the Bluecoats’ style is complete without looking at their use of electronics, an area in which they have pioneered a number of daring soundscapes and special effects. Some of the most striking additions have been their use of amplified brass, surround-sound speaker placement, vocal *samples*, and pitch manipulation, in addition to the endless variety of synthesized instruments (such as sitar or tabla) or other uniquely designed sound and samples which coordinate directly with the shows. These sounds are chosen based on their ability to add distinct textures to the show which cannot be otherwise replicated acoustically. When deciding which sounds should be live and which should be produced through electronics, Rarick noted that:

> The preference is always to produce things acoustically if we can and not synthetically replicate them...Things like timpani or accessory instruments in particular, there’s a pretty big difference between that coming through speakers, and that being amplified but being performed live. To me, it's more credible when you can actually see the players performing it rather than some ambiguous button-press-somewhere type thing.\textsuperscript{125}

When it is agreed that a sound will be best achieved through electronics, it is utilized with the same intent as the front ensemble arrangements, with the ultimate focus on the overall picture of the show. “We always try to make the electronic element feel like an organic part of the

\textsuperscript{124} Jordan, interview.

\textsuperscript{125} Rarick, interview.
show,” stated Matthew Jordan, the Bluecoats Sound Designer and Music Coordinator, “It shouldn’t feel like you’re listening to electronics, you know? It should feel like an extension of what the hornline, drumline, and visual team are doing at any given moment.”126

One such moment is the 2014 closer, where the use of electronics proved to be the corps’ most iconic electronic innovation. In this piece, “Platinum Rows” by Tyondai Braxton, the synthetic elements blended seamlessly with the brass line in the final chords of the show and created the illusion of a full-hornline pitch bend, as if the pitch of the entire ensemble was adjusted by a modulation wheel on a synthesizer. It was an incredibly effective and unexpected addition to the program that complemented the show’s concept theme, Tilt. The integration of the electronic design with the acoustic instruments of the corps aimed to ensure that the electronics were not added randomly, but with a careful and thoughtful purpose that assisted the rest of the show, again, always feeling like an organic ingredient of the show.

2019 was Matthew Jordan’s first year working directly as the Sound Designer. In a show that was based entirely on the Beatles discography, the electronics most often included samples from the songs or imitated instruments used by the Beatles, like the sitar. The show also used sounds which contributed to the overall ambience of the show, like a Beatles-era vocal sample introducing the show with samples of a Beatlemanic crowd, or characteristic sounds from individual songs such as the flute in “Strawberry Fields Forever” or the bird sounds in “Tomorrow Never Knows.” Yet the show was not drowned in unnecessary electronics, which was a conscious decision made by Jordan in the design process:

As the Sound Designer (and really as Music Coordinator), I need to know when I don’t need to write anything….As I listened [to the 2019 source music], I realized I was getting

126 Jordan, interview.
paid to be the Sound Designer, but I’m also paid to be the Music Coordinator - to realize when those [electronic] elements are not needed, and to get out of the way and let the brass and percussion do their thing, and not to layer a bunch of sounds on top of it just because I feel like I’m supposed to.\textsuperscript{127}

Finding the balance of electronic aspects to support the acoustic elements has been something that the Bluecoats have experimented with for several years. As with many of their musical decisions, this choice is influenced by how it can best integrate with the visual aspects going on the field. In 2015, their program was entitled \textit{Kinetic Noise}, a perfect description of how the noise from the electronics functioned within the show. By using multiple speaker towers placed throughout the field, they used panning effects on the amplified live brass sound to match the kinetic motion happening in the visual design, integrating electronics in a radically unprecedented way.

\textbf{Setups & Pod Orchestration}

The Bluecoats’ focus on integrating the front ensemble within all aspects of their show has also led them to pioneer non-traditional pit setups. In 2016, 2017, and 2018, the front ensemble played in distinctive “pods,” with each keyboard player responsible for both a marimba and vibraphone, along with the range of auxiliary instruments typical of Rarick’s writing. While the pod set-up is rare in drum corps, it has been seen in some concert percussion programs as well as with multi-percussion pieces.\textsuperscript{128} Musical aspects of Rarick’s writing are still evident in this pod setup, which tasks players with playing marimba, vibraphone, and other auxiliary acoustic instruments simultaneously, laying these elements in his characteristic manner. In a

\textsuperscript{127} Jordan, interview.

\textsuperscript{128} See \textit{Blue Motion} by Stephen Whibley or \textit{Attraction} by Emmanuel Sejourne.
passage directly following the 2016 excerpt from “Udacrep Akubrad” discussed previously, the keyboard players perform a rhythmic ostinato on the marimba with their right hands with resounding metallic chords played on the vibraphones with their left hands. Complementing these voices are shakers and djembes used by the rack players. Each performer balances multiple responsibilities, thus contributing to the driving and colorful texture.

Figure 6. Project Trio/Dorman, “Raja Raja/Udacrep Akubrad,” arr. Tom Rarick for *Down Side Up* (2016), mvt II, (mm. 16-25).

Similar techniques are found in the “Pretty Saro/God Bless the Child” ballad from 2018. Under the gently pulsing cymbal rhythms, each player also performs lovely open vibraphone chords or ostinatos. There, the simplicity and openness of the piece is well served by the delicate front ensemble accompaniment.
Using the pod setup allowed the Bluecoats to be “instrumental” in developing another area of the marching arts: non-traditional placements of the pit on the field. This innovation was the most dramatic in 2016 and 2017 by the placement of the players at large intervals across the field, sometimes up to ten yards apart, an enormous distance for players used to performing right next to each other. To compensate for the difficult listening environment, the members used in-ear monitors to assist them in connecting across the distance.

These placement decisions were made in close connection with the visual design team in an effort to fully integrate the front ensemble within the musical and visual design in order to manipulate the visual “weight” on the field, as described by Jordan:

> When you talk about visuals, you’re always talking about the idea of weighting the field in different ways. And to the visual people, the front ensemble has always been this big, gigantic weight in the middle bottom of the field that you can never move. So the idea was “What if we can still hear the same kind of sound, the power and concept, but we don’t have to see that visual weight in that place?” So that was kind of the beginning of experimentation of [placing the pit on the field].

Drill was written between the instruments, which required the marching members to interact spatially with the front ensemble, something that rarely occurs when the front ensemble is at the standard front sideline. A standard, straight-line set up would have never fit the 2017 show *Jagged Line* (pictured below). Accordingly, the pit was set up at “jagged,” zig-zagged, intervals. As a result, the role of the front ensemble changed to something impacting the large-scale visual design.

On a musical level, the unusual distances between players made the layering in Rarick’s writing even more interesting. When players perform these interlocking rhythms in far distance

---

129 Moyer, interview.

130 Jordan, interview.
from each other, it causes the sound to be perceived like it is travelling across the field as the phrase moves from player to player: their music is as much in motion as the forms on the field, such as a split melodic run between the keyboards that opened the 2016 show, *Down Side Up*. Though careful amplification design ensures that this effect is not overdone, it allows the pit to contribute to the whole picture of the corps from both spatial and musical aspects. Since 2016, there have been more frequent experiments with pit setups in all classes of drum corps and in indoor percussion.

However, the non-traditional setup of the front ensemble also created challenges both musically and visually, even beyond the basic geography of discovering what is achievable for one player performing on multiple instruments. Rarick noticed the impact on his writing:

> [When using the pod setup], my writing changed, because there were less possibilities in a lot of ways, just because you're creating kind of a one-keyboard message rather than the ability to layer things or have a primary and secondary line...I mean, I wrote those [lines]! But in most cases I would change them, just for a sense of presence. It can sound one

**Figure 7. Image of the Bluecoats field setup for *Jagged Line* (2017)**
way, but if it doesn't look like it sounds it is kind of diminished, especially from an audience member perspective.”

The “sense of presence” Rarick mentions is the powerful collective energy that a traditionally-placed front ensemble offers when performing together. “One of the coolest things about watching a front ensemble doing a big fast run is that you can see them doing it in unison,” Jordan noted, “But when you split them apart, you can never see more than two people at one time, so you lose that energy that a front ensemble brings to the table.” With the pod set up and the spatial experimentation that occurred in 2016, 2017, and 2018, the pit’s role was changed. Though it contributed to the visual design in different ways, it lacked the coherent visual power found in the standard design.

However, these issues were carefully considered by the design team on a show-by-show basis, always considering the benefits for the overall ensemble. In reference to negotiating the pros and cons of these non-traditional pit setups, Jordan summarized:

You gain some things musically and lose some things visually, so it’s just kind of a trade-off. With the way that we write shows, we’re not writing any shows to win percussion, we’re writing to win the whole corps...It’s better to gain those advantages for the bigger picture than anything else. So a lot of times, we know that we’re giving up something from a music standpoint to gain something on the [General Effect] side.

That big-picture focus is the thread that ties all elements of the Bluecoats’ front ensemble arrangements together. Through using a variety of carefully layered lines and instruments, often in a pod setup, the writing requires an appreciation of the larger picture to understand the unique

---

131 Rarick, interview.
132 Jordan, interview.
133 Jordan, interview.
timbres and grooves that the pit offers. Additionally, at a whole-corps level, the pit is fully integrated into all aspects of the complete show though their supportive comping roles, select feature passages, and in recent years, their contribution to the visual program through unique and innovative front ensemble setups.
Blue Devils

Founding Year: 1957

Hometown: Concord, California

Championship Titles: Nineteen (a DCI record), most recently in 2019. The percussion section has earned the Best Percussion award 13 times, the last time being in 2015.

Front Ensemble Arranger: Jim Wunderlich from 2005-2017, with Brian Dinkel taking over this role in 2018.

The Blue Devils’ staggering championship record precedes them. Their entrance on the field, usually seeded last in the night, is heavily anticipated and fans look forward to enjoying their artistry. The Blue Devils’ repertoire is varied, with pieces most often pulled from movie scores, jazz standards, and pop music. Their arrangements blend surprising combinations of ideas, interesting grooves, and an overall sense of virtuosity, leading to a high-caliber performance and sense of excellence throughout the shows. Striving for next-to-perfection performances has become a foundational value for the group. “When I think about what transcends from year to year with the Blue Devils organization, it’s the professionalism of the group,” noted current arranger Brian Dinkel. “If it’s going to be done, it’s got to be done at a high level, or it’s not worth doing at all. I think that carries through every aspect of the operation.”

Dinkel’s use of the word “professionalism” is not a singular use, but a key tenet into understanding how the Blue Devils ensemble operates. In a 2014 dissertation about the culture and pedagogy of drum corps, researcher Janie Leigh Vance noted that “professionalism...was the

---

134 Dinkel, interview.
concept chosen most often by the Blue Devils [staff and members] to define themselves and their teaching approach, performance style, and overall philosophy.”

Ethnographer Etienne Wenger argues that professionalism and competitive success can be the foundation of a group’s identity, stating that identity is more often the “experience and display of competence” rather than an “explicit self-image [or] self-identification.” In the Blue Devils’ case, the culture and “history of practice” created by rehearsals and the resulting numerous championship titles has shaped the Blue Devils’ self-claimed identity more thoroughly than any other factors.

That perfection-centered philosophy and approach has been shaped by a remarkably consistent core staff over their gilded history: music director Dave Glyde, percussion caption head Scott Johnson, and visual coordinator Scott Chandler have all been on the corps for nearly thirty years, while previous front ensemble arranger Jim Wunderlich spent twelve years with the Blue Devils pit. His tenure occurred during the “advent and implementation” of electronics in the first decade of the twenty-first century. He contributed significantly to the current sound of the front ensemble, as well as on the succeeding arranger, Brian Dinkel, who took over the arranging role in 2018. Dinkel previously worked with many of the Blue Devils ensembles, including the A corps, as an educator and arranger, giving him ten years of experience with the

---

135 Vance, "Findings From the Field," 293


138 Dinkel, interview.

139 The Blue Devils Performing Arts organization sponsors three corps: Blue Devils A (World Class, the subject of this paper), Blue Devils B (an Open Class corps) and Blue Devils C (a local corps for children ages 8-14) in addition to other arts ensembles, including a very successful indoor percussion program.
style and expectations of the larger Blue Devils Performing Arts organization. He was well accustomed to the style of Wunderlich’s writing:

> Jim Wunderlich has been one of my biggest mentors, so I think that there are lots of things in my writing and in my sound, (whether it’s intentional or unintentional) which are introduced by his style and his approach...But there’s also things that I do that are way different than what he does.\(^\text{140}\)

The role and style of the Blue Devils front ensemble as created by Wunderlich and Dinkel can be characterized by colorful use of hand percussion, electronics, and metallophones; densely written and sustained sixteenth-note runs, and brief cadenza-like passages that interact with soloists. All elements contribute to the extremely idiomatic sound of the corps.

**Drums & Hand Percussion**

The diverse color palette offered by the Blue Devils’ front ensemble begins with a foundation of drums, hand percussion, and electronic elements. Like the Bluecoats, the foundation of the Blue Devils’ front ensemble is created by their use of a drumset player, which has been a constant staple since 2008. Since then, the drumset player has maintained a constant groove for the ensemble, acting as a clear connection point between the drumline and the front ensemble while also having impressive command over flashy fills and difficult solos. Longevity in performers has also provided continuity. “We’ve had drumset regularly every year since 2008, and we’ve only had four or five different drumset players during that time.” said Dinkel. “We’ve been really lucky that when we get someone, we have continuity for a few years. When you know you have that [continuity], you know that it is a strength you can play to.” Using the drumset as a strength has led to difficult solos and fills for the performers, who have displayed

\(^{140}\)Dinkel, interview.
immense virtuosity in these moments while maintaining a rolling groove underneath the rest of the corps.

Complementing the drumset is the variety of auxiliary percussion instruments, which both Wunderlich and Dinkel have frequently used. Recently, this has included Middle Eastern drums like doumbeks, Brazilian instruments including the surdo (a type of bass drum) and the rocar (a metal shaker), and West African instruments like djembes or a shekere (gourd rattle). Using these instruments furthers Dinkel’s goal of “providing as much of a color palette as possible and creating different feels” within the pit. “Studying and playing hand percussion was a big part of my percussive upbringing, it's something that I’ve always gravitated towards,” he stated. “I also think it adds just a layer of depth in such a grandiose scale.” He also noted the flexibility of style that these instruments allow, opening up opportunities for new genres of source music or new interpretations of familiar tunes. “Ethnic percussion and hand percussion, whether it’s Middle Eastern, Afro-Cuban, or Brazilian...can be somewhat detached from their stylistic connotations to be used, but [can] also be used in contexts that are idiomatically appropriate for those instruments to be used.” The Bluecoats also use a wide variety of percussion instruments, but these tend to include less of the hand drums found in the Blue Devils productions year after year.

One example of this blend of styles is in the beginning of the 2019 percussion feature, an original piece entitled “Scene 5,” which uses timbales, swish knockers (a cymbal drilled with rivets), shekere, and surdo in addition to other metallophones and a solo djembe. The first notes of the djembe, accompanied by heavy bass thumps, immediately shifts the character of the show.

---

141 Dinkel, interview.
from the spacious ballad which preceded it into the percussion feature which takes inspiration from flamenco dances. Using auxiliary percussion to mark an immediate change in character is a common production transition for the Blue Devils, seen in their post-ballad transition in both 2017 and 2018.

In addition to the musical choices, Dinkel noted that the inclusion of ethnic percussion is “a big part of the education for the performers.”\textsuperscript{142} Extreme specialization on keyboard instruments is common in drum corps, especially for students who are not percussion majors. Because the Blue Devils do not have a rack player and instead orchestrate everything for keyboard and drumset performers, using auxiliary instruments gives the students “a little bit more of a well-rounded experience in percussion” rather than “just playing marimba all day.”\textsuperscript{143}

\textsuperscript{142} Dinkel, interview.

\textsuperscript{143} Dinkel, interview.
The vivid soundscape and characterization of the corps has only further developed with the increase of electronics, by choosing to create a variety of synth patches, samples, or voiceovers. One example of electronic instrumentation appeared in the 2019 show, curiously labelled “Spaghetti Piano” in the score. Dinkel explained that this sample (a twangy, slightly out-of-tune piano sound) was intended to create a “dramatic and cinematic flair” reminiscent of Ennio Morricone’s western soundtracks. This very specific auditory idea and other sound design ideas are decided in conjunction with other staff members in order to craft the exact and appropriate sound needed to express the story and emotion intended for the show. Similar consideration is given to other instruments. Vocal samples are common, such as sampled singing, narrated dramatic quotes, or often a guttural grunt or low whispers, which are usually paired with a range of hand drums as heard in As Dreams Are Made On (2016), Metamorph (2017), and Dreams and Nighthawks (2018).

**Keyboards**

As is true for all front ensembles, the Blue Devils’ keyboards are at the forefront of the ensemble, used with a similar attentiveness to the unique colors offered by these instruments. Crotales, glockenspiels, and other metallic textures provide a prominent voice that adds a clear sparkle to much of the Blue Devils’ pit arrangements, often solely handling transitional material with these instruments. These instruments are often used during full-corps impact points to shimmer over the brightly brilliant hornline moments. Dinkel explains the importance of using

---

144 Dinkel, interview.

145 Primarily Fred Smith, Sound Design and Geoff Schoeffel, Audio Manager.
these metallic instruments as the primary front ensemble voice during large ensemble sections of the show:

“There are massive, absolutely massive, moments of the show where the brass and the battery are going full out. I could write a lot of stuff there for the marimbas, and you’d see their hands moving, but you’ll never hear it...On the flip side, in some of those big moments the metallics can really soar above and add some color support that can complement or augment the brass sound in ways that are colorful and can penetrate that, but not be obtrusive.” 146

When the marimbas are featured, they are tasked with a huge range of techniques—glissandos, arpeggiated chords, ripple rolls, dead strokes, block chords, and Moeller-stroke accented chords.147 Taken together, these techniques can create a very vivid textural palette that is utilized to complement the differing styles of music, as well as provide a chance to show the players’ capabilities to perform these varying techniques with tact and excellence, as seen during the ballad sections.

**Runs**

That excellence and control further manifests itself in the front ensemble arranging, which challenges the extremely well-trained ensemble to deftly balance sharp contrasts between density and space. This density is seen most clearly through their virtuosic runs. These runs are commonly played by the full ensemble with two mallets at very high tempos. They seldom include complex metric modulations148 but instead rely on densely packed sixteenth notes, requiring intense precision, hand speed, and cohesion from the performers.

---

146 Dinkel, interview.

147 Moeller stroke refers to a percussion technical method which is used to achieve relaxation and control even in high-velocity situations. Passages with accents are common.

148See glossary for definition as used in this paper.
With Wunderlich, these runs often began with steady sixteenth notes on a central note. Drive and intrigue was created by briefly shifting a step away before returning to the home note. The tension created by this was further increased when the run expanded to standard scalar runs containing heavy chromaticism, often using variants of octatonic scales. Within all sections of these runs, there was often harmony between the players, who played the same scales in parallel motion at different intervals. Often this was thirds or sixths, but it could also be fourths or a changing mixture of intervals. The amount of harmony and layering in the midst of fast passages displayed the sheer excellence and laser-sharp accuracy of the performers.

A clear example of this type of run is near the beginning of their 2017 show *Metamorph.* Directly following a release from the brass line, the keyboards enter in layers on a passage of dense sixteenth notes. They trade repeated sixteenth note sustains—the xylophone player begins on Ebs while the vibraphone rises to an A natural, with the marimbas split on either pitch.

![Sheet music for Figure 9](image)

**Figure 9.** “Metamorph Part 1,” arr. Jim Wunderlich for *Metamorph* (2017), mvt I, (mm. 64-71).

---

149 Sheet music for Figure 9 is from a transcription on Musescore.
As the run develops, all the typical Blue Devils idiosyncrasies are observed: closely harmonized runs, repeated scalar phrases, parallel motion and chromatic inventiveness, spiralling madly until a finally unison (but still melodically complex) run delivers a triumphant finish back on the Eb.

Dinkel composes runs that are structured similarly to the ones Wunderlich introduced (with constant sixteenth notes, close harmonies, and increasing tension, and harmonized runs), but in general, his runs are based more in turnarounds and scalar patterns than the repeated one-pitch sixteenth notes that appear in many of Wunderlich’s runs.

Dinkel’s first writing as the Blue Devils front arranger is heard at the very beginning of the 2018 program *Dreams and Nighthawks*, which begins—like a jolt of electricity—with a forte, unison marimba run, voiced in thirds and at the high speed of 190bpm. It initially utilizes repeated turnarounds before quickly becoming more fervent and chaotic as the section divides further, with some players maintaining the turnarounds while others exploring the scalar runs. Starting in measure 2, players on marimba parts 1, 4, and 5 play a one beat descending run that contrasts with the continued turnarounds in the second and third marimba part. The layered lines continue in measures 3 and 4 as the same groups of players continue to contrast each other and as groups of vibraphones enter on descending runs. The vibraphone runs enter on the off-beat and are dissonant to the lines in the marimba part.

Taken together, the runs descend at syncopated times and add dissonance to the section, coordinating with the initial frenzied burst of motion by every visual performer on the field. The

See glossary for definition as used in this paper.
barrage of runs takes a brief quarter-note breath before entering in again, layering in the players one by one as the run continues. The run is difficult on its own, but even more so as it appears almost directly from silence into the aggressive opening of the show with only a pickup from the drumset. Stylistically, it reflects the types of harmonically complex, fast, and extended runs that Wunderlich used in his writing.

In the 2019 show *Ghostlight*, the most clear example of this technique in Dinkel’s writing is during the percussion feature which features the front ensemble. The keyboards perform a run which rapidly accelerates from 72bpm to 190bpm over the course of only ten measures.

---

151 Sheet music for Figures 11 and 13 reproduced from original scores.
acceleration feels nearly overwhelming, driven by a fiery sixteenth note run which is played by the full keyboard section throughout the entire acceleration, with no loss of cleanliness or control between players.

Figure 11. Score reduction: “Scene 5,” arr. Brian Dinkel for Ghostlight (2019), mvt V, (mm. 25-37).

Though Dinkel referred to this run as the “flamenco run”—one clearly inspired by the styles used in toque virtuoso flamenco guitar playing—its repeated turnarounds, unrelenting sixteenth note passages, and overall sheer virtuosity are all extremely characteristic of the Blue Devils’ front ensemble and display their ability to play complex and physically challenging runs cleanly.
Density & Space

However, these sustained runs are only part of the resources on which the front ensemble relies. Rather than play extended mallet passages that sustain through minutes of the show, the pit juxtaposes moments of this fast and dexterous playing with brief moments of rest. These spaces can be a quarter or eighth note’s breath within a run (such as this run from the opening of the 2018 show) or on a larger scale.

![Figure 12. “Gotham City,” arr. Brian Dinkel for Dreams and Nighthawks (2018), mvt I, (mm. 168-171).](image)

Often, the ensemble will play for 2-8 bars with noticeable space within the phrase, sometimes as short as an eighth note, but sometimes up to a full measure. At times, the ensemble does not play melodic content for extended measures while there is a focus on the brass ensemble behind, instead playing auxiliary percussion, cymbals, or passing the role over to the drumset player.

In times of more fluidity, such as ballads and small ensemble moments, the tendency for the front ensemble writing to include space helps blend the full ensemble together, creating a flowing and flexible listening experience for the audience that usually connects directly with the corps’ jazz-style arrangements. The front ensemble is featured for a few beats or measures; when they rest, the soloists enter, which creates a natural ‘conversation’ between the performers. In an activity where coordinating 150 performers requires a strict dictation of tempo markings and
interpretations, creating such a natural and believable improvisatory feel is a striking result that calls upon the extremely high level of professionalism and excellence integral in the ensemble.

This technique was particularly effective in the 2017 program *Metamorph*, which explored the historical development of the Blue Devils in honor of the corps’ 60th anniversary season. In a show that reflects on the transformation of the corps over their history, the front ensemble’s featured moments in the *Metamorph* ballad are effective in expressing the nostalgic thoughtfulness portrayed by the show theme and music choice. They performed an arrangement

![Figure 13. Score reduction: Benson, “Everything Must Change,” arr. Jim Wunderlich for Metamorph (2017), mvt III, (mm. 173-183, written as 1-11).](image)
of the song “Everything Must Change” as their ballad, featuring trumpet, flugelhorn, and trombone soloists who play with an improvisatory, jazzy feel. The front ensemble accompaniment uses juxtaposition of density and space to supplement the solo voices, supporting the lines and creating drive between the spacious phrases of the horn soloist. When the soloist holds out a note (such as in measure 174, 176, and 110), the front ensemble fills the space with bursts of writing. When the soloist enters (measures 175, 178) the pit rests, giving full attention to the soloists. There are parts where the two work together, but these contrasts are what stand out most clearly about the writing for the Blue Devils.

A similar moment is found in the 2019 ballad, an arrangement of the soundtrack piece “A True Passion” by Lorne Balfe, the front ensemble holds a similar role. A hauntingly beautiful live violin solo opens the piece, a phrase which then passes over to a solo euphonium player. During the euphonium’s yearning, lyrical solo, the front ensemble interjects with fast virtuosic phrases that fill in the space between the soloist’s phrases, “conversing” with them. The featurettes are dexterous and brief, only lasting one or two measures before a period of rest. In the small amount of space, there is a compact amount of virtuosity and notes, cramming in many texture changes and metric modulations within the few measures, like this example from the 2019 ballad. In the fifth measure of the excerpt, the players change between sixteenth note triplets to thirty-second notes, and a ninelet figure which uses thirty-second notes and dotted sixteenths. The quick shifts between these different rhythms, which often happens on a syncopated beat, assist in changing the sense of time to make it feel less steady and more free-flowing. The large amount of space between these densely written passages (mm. 6b, 8-10) also contribute to this feel.

152 Dinkel, interview.
Within both these ballads are moments (Figure 14, mm. 6, 8, 11) where the pit rushes to the top of a run and is suspended in air for a short period of rest—a thought almost left unfinished. The phrase is then fulfilled at the continuation of the horn soloist’s line. The effect is a gentle perpetual motion that encouages the material forward in a very different way than the driving sixteenth note runs discussed earlier. By including space within the runs as well as using metric modulation that complicates the sense of time, this energy is felt as opposed to intellectually understood as a groove—reflecting the comfortable yet intriguing ballad performance of a jazz combo, now inspired by Dinkel’s experience studying jazz vibes in college. Dinkel further explained:

The idea with that specific device [refering to Figure 14, mm 6-8] is making it feel like it’s just generating momentum. It should feel like it’s a little bit out of time, even though when you do it on the scale we do it, it has to be pretty controlled. Otherwise it’d be

Figure 14. Balfe, “A True Passion,” arr. Brian Dinkel for *Dreams and Nighthawks* (2018), mvt IV (mm. 6-13), marimba part.
impossible to play it together…But [that device]definitely serves the purpose of creating that tension or excitement that leads us into the next moment.153

The somewhat recent trend of “gravitating towards solo performers”154 during ballads creates productions which are “a little more lyrical, a little more spacious and legato”155. In those open moments such as the 2019 ballad, Dinkel stated that he “felt like there was a lot of room for obligato-cadenza type ideas that supported the soloist and created a really interesting momentum in how it progressed to the next idea.” The idea of an “obligato-cadenza” within the jazz-inspired solo repertory often used in their ballads shows how the front ensemble can be featured alongside the soloist while not overstepping their role as an accompanying partner. Their unique capacities and professional abilities are displayed throughout the passages, including through the ample use of metric modulation to change the rhythmic feel of a given passage—a sharp contrast from the solid sixteenth notes found in other featured pit moments. Moments like measure 11 in Figure 14 use metric modulation to complicate the sense of meter and time, imitating a fluid “conversation between the front ensemble and the soloists.”156 With the micro-virtuosic moments and conversationality in the front ensemble lines, the corps’ ability to perform free-flowing jazz charts with more of their natural idiom becomes more achievable.

The Blue Devils’ front ensemble holds an enormous presence in the shape of the corps as a whole. In the ten years which Dinkel has spent with the Blue Devils, he noted that the front ensemble has become much more involved in the overall picture of the corps. While in his first

153 Dinkel, interview.
154 Ibid.
155 Ibid.
156 Ibid.
years the front ensemble was merely a “component” of the corps, now “there’s something happening in the front ensemble 100% of the show, whether that’s scoring elements or underscore, or whether it’s percussion elements or color support, or just taking over the musical reins for large portions of the show.” he said. “I feel like we are involved 100% of the time. [The front ensemble] is not just another contributing voice, in more ways than one, it’s the through-line of the show.”

157 Ibid.
Boston Crusaders

Nickname/Abbreviations: Boston, Crusaders, BAC

Founding Year: 1940

Hometown: Boston, Massachusetts

Championship Titles: None since DCI was formed, but three in the previous circuit.

Front Ensemble Arranger: Iain Moyer, who arranged for the Cadets from 2007-2016 before
moving to the Boston Crusaders in 2017.

As the only World Class corps in New England and one of the oldest corps in the activity,
the Boston Crusaders have a decided performance history of entertaining shows that ring with
dramatic storylines and exciting source music—not to mention a hearty dose of tough Bostonian
grit—all which pleases audiences and especially their vocal alumni fanbase.

Though the corps has undergone significant staff changes in 2017, which brought on new
designers in nearly every caption, there still remains a distinct identity to the corps created by the
show themes and design. A “Boston show” is one with an easy-to-follow storyline that comes
alive with engaging musical and narrative twists. Surprise visual endings are frequent and novel
—the whole corps rising from the ashes, the burning of an accused witch, or the beheading of a
nine-foot Goliath by classic underdog David.158 Such visual storytelling avoids the often abstract
concept shows that can leave audience members questioning if they really got the show. Four-
year pit member Nina Smith was present in the corps through this transition and noted that this
was one of the defining factors of the corps’ identity:

I think the way that our shows are designed (very clear storyline, digestible by non-band people, underdog-type stories) has remained pretty consistent and that allows for the whole corps to present something that is more characteristic of “Boston”159.

These unquestionably clear and “digestible” narratives driven by the visual program are consistent with the focus on musical clarity within the front ensemble. While the visual program on the field uses props, dance, and costumes to embody the narrative of each year’s show, the front ensemble is responsible for contributing through the use of sharp rhythmic content, careful part exposure, performative expression, and characteristic instruments. The writing displays the performers’ energy, skill and precision, but nothing is subtle and every passage is directly connected to visual aspects happening on the field. The complete results are wholly entertaining and enjoyable programs for audiences: accessible and engaging storylines supported by exciting, loud, and clear writing which solidifies the Boston Crusaders identity.

**Percussive Approach**

Iain Moyer’s writing for the Boston Crusaders front ensemble’s keyboards is fully percussive, introducing aggressive double-vertical strokes, major seconds, and dissonant rhythmic patterns from the outset of programs. His writing, which has been compared to “a multi-percussion solo that happens to be on marimba”160 by a prior member, consistently emphasizes the importance of rhythmic complexity and timbre over tonality that is found in solo multi-percussion music and marching drumlines. In full-percussion moments, this often manifests as unison rhythms with the battery. An excerpt from the 2019 percussion feature highlights this through the woods playing

159 Nina Smith, written communication with author, September 6, 2019.

160 Sean O’Rourke, personal communication with author, 2019.
runs with nearly the exact rhythms as the snareline—including sixteenth note ninelets at 180 beats per minute. These runs have melodic content, but that content is dissonant and is a secondary feature behind the rhythmic elements.


A similar passage is found at the end of the same movement. Here, the front ensemble plays different rhythms from the battery, but the notes are still dissonant, include frequent “Moyer seconds,” and are intended to be played at top volume with all notes labeled marcato. In

---

161 Sheet music for Figures 15-19 are reproduced from public videos on the Vic Firth Marching Youtube channel.

162 O’Rourke, personal communication.
addition to the keyboard sound, Moyer writes for a large auxiliary percussion section. There are often over ten types of cymbals on the racks alone, in addition to multiple cymbals on the keyboards and numerous other metallic instruments, such as anvils, ribbon crashers, and sound plates. All contribute to the percussion-heavy (and loud!) pit ensemble.

![Musical notation image](image)

**Figure 15.2. Graham, “On the Shoulders of Giants,” arr. Iain Moyer for *Goliath* (2018), mvt II (mm. 102-108), xylophone score.**

The 2018 percussion feature (“Marimba Spiritual” by Minoru Miki) is one culmination of all of Moyer’s techniques. The original piece is a marimba solo with a percussion ensemble utilizing various auxiliary sounds such as bongos, toms, vocalizations, and a number of other drums. The driving, energetic parts of the original makes the piece easily adapted for the percussion ensemble, whose visual presence on the field adds to the intensity of the original. In the version by Boston, the marimba part is a characteristic rendering of Miki’s piece—aggressive, filled with *double vertical* strokes, glissandos, and post-tonal passages. The numerous auxiliary instruments, including pounding taiko drums, are utilized alongside the battery’s presence to imitate the drums of the original piece.
As the movement develops, each section of the ensemble (pit, basses, snares, tenors) has a few measures of tutti material. During the front ensemble’s featured moments, the marimbas each play one beat of a four-mallet sixteenth note phrase. When strung together, the phrase is split between the multiple instruments to sound like a single player. Moyer uses these ‘splits’ sparingly but at key moments (the end of the 2017 ballad, during, and twice during “Marimba
“Spiritual”) as an effective way of showing the abilities of the individual players. These splits are again an example of how clear the writing is: only one or two players at a time sharing a difficult passage between them. The pure exposure leaves very little space for mistakes from players, making it obvious whether a passage is clean or not.

Moyer also occasionally specifies mallet selection during the writing process, showing his vision for the ensemble’s sound. In “Marimba Spiritual,” he notes M184s and M277s, both synthetic-core mallets that are the hardest gradation of their respective mallet series. The M277s are advertised as vibraphone mallets, but the ensemble uses them on the lowest end of the marimbas. Using such an extreme gradation ensures that the sound coming out of the keyboards is as attack-based and aggressive as possible, matching the intent of the writing.

Figure 17. Minoru Miki, “Marimba Spiritual,” arr. Iain Moyer for S.O.S. (2018), (mm. 32-39).

Figure 18. Minoru Miki, “Marimba Spiritual,” arr. Iain Moyer for S.O.S. (2018), (mm. 51-52).
Technique

The approach in percussion writing and technique can be traced back to Iain Moyer’s education at University of Massachusetts Amherst (UMass), where he was part of the marching band and instructed by director Thom Hannum, also the creator of the UMass percussion technique program. This program uses the same ideas that are found in Moyer’s writing, much of it stemming from the physical technique. UMass percussion students (battery and front combined) spend a large portion of their marching band education playing unison check patterns on literal planks of wood before moving these same patterns to the instruments. They use a form of piston stroke, which emphasizes a high velocity stroke from the wrist that results in a loud, clear attack. In the Boston Crusaders percussion section, whose membership includes many UMass students, this philosophy and writing style is directly emulated but adjusted for the more intense and higher-level drum corps experience.

Clear playing earns points and recognition—it is essential to all drum corps. What is unique to Boston are the steps inherent within the writing and training process to achieve this. Voicing of percussion instruments is generally done with little layering so that at any given moment, audiences know without question where the listening focus of the ensemble is. Sometimes in the rehearsal process, this results in cutting parts further to simplify the listening environment as described by two-year member Sean O’Rourke:

There’s a lot of times that we cut pit parts or quad parts to make it so obvious what we’re playing….For example, “Snares are what we want to hear here, so we’re going to cut other parts that are good, but we know we wouldn’t get noticed by a judge for.” That’s what I like about [Boston], it’s very cut and dry whether or not we have a good show.163

163 O’Rourke, personal communication.
Other corps certainly employ a similar approach of careful writing and trimming of parts when needed, but this “cut-and-dry” approach in writing assures that much of this is done in the writing process and that nothing is left up to interpretation during performances. The important moments are exposed, guiding the judges to notice and comment on the things the designers want them to focus on rather than getting caught up in complex layering or extraneous parts. Everything is out in the open and with little question if it is technically clean or not. Similarly, the pure volume and sound output of Boston’s pit is markedly different from other corps and is one reason why members choose to join. “That’s something I’ve always liked about our playing style,” member Nina Smith stated, “We don’t hide. We’re taught to HIT the keyboards and then we clean it, or change the mallets or amplification if it’s too much for that moment.” With pianistic writing and subtleties being the focus of most concert music, some drum corps (and specifically Boston) can be one place where there is a no-holds-barred approach to percussion performance. Moyer’s writing certainly engenders this approach.

**Ballads**

However, the frequency of “loud drumming on a keyboard” moments does not mean that the Crusader pits are incapable of playing gracefully and softly; Moyer’s ballads are vivid and emotionally expressive, making use of vast dynamic and rhythmic changes with difficult permutations.

The wistful, simple melody of their 2018 ballad (“End Credits,” from Castaway) is carried by the vibes, glockenspiel, synthesizer, and handbells. The marimba part fills out the

---

164 Smith, written communication.
Figure 19.1. Silvestri, “End Credits,” arr. Iain Moyer for *S.O.S.* (2018), mvt III, (Rehearsal C), marimba score.

Figure 19.2. Silvestri, “End Credits,” arr. Iain Moyer for *S.O.S.* (2018), mvt III, (Rehearsal C), vibraphone score.
Figure 20. Beethoven, “Moonlight Sonata,” arr. Iain Moyer for *Wicked Games* (2017), mvt I, (mm. 1-9)
main melody with arpeggiated permutations that sweep the keyboard with rhythmic crescendos and decrescendos, using metric modulations to increase the rhythmic content. Beginning at a piano dynamic in the low end of the keyboard, the runs crescendo as they reach the top of the keyboard before falling back down the keyboard to settle on low, heavy quarter notes at the resolution of each phrase. All attempts within the writing are made to clarify to the listener the focus of the ensemble: from writing unison and exposed lines for the marimbas, to Moyer notating which keys should be muted in order to avoid a muddied sound within the vibraphone voice. The result is a beautiful and vulnerable ballad that relies on its inherent shining clarity to express a different range of musicality than is present in other sections of the show.

The ensemble’s control in exposed moments such as ballads is also applicable to other featured moments like the 2017 opener, an arrangement of “Moonlight Sonata” which is performed by the front ensemble alone. Similar features are found: the vibraphones, glockenspiel, synthesizers, and other metallic instrumentalists play the melody as the marimbas fill in the space with runs that gradually increase in intensity as the melody approaches a new chord. There is little layering and an acute openness of the parts, consistent with their ballads and percussion features. In Boston’s interpretation, the familiar melody of Beethoven’s famous sonata movement takes on a much more eerie tint with the addition of a pulsing bass drone and samples playing echoing girls’ laughter. Most significantly, Moyer orchestrates the main melody on a kalimba, whose childlike yet haunting music box sound anticipates the show’s developing depiction of the Salem Witch trials.
Featured Instruments & Storytelling

The kalimba is one example of the final central aspect of the Boston pit: experimentation with melodic percussion instruments. Each year during Moyer’s tenure, the pit has utilized a speciality acoustic instrument generally not found in marching ensembles: a kalimba (2017), conch shell and handbells/chimes (2018), and hammered dulcimer (2019). These acoustic instruments provide novelty, offer performers a chance to show mastery with non-traditional percussion instruments, and most significantly, they enhance the storyline and sound of the program. Character-based writing reminiscent of leitmotifs was behind the choice to include a dulcimer in the 2019 program, Goliath:

In our production, we have two characters: Goliath and David. We wanted to pair those characters with particular instruments…[The hammered dulcimer] is very nimble, it’s very small, it’s delicate, and it matches the David character. During the David sections of the show, that’s where you’ll hear it most often in our arrangements.165

The communicative clarity of the front ensemble arranging appears to directly correlate with the large-scale show design. Boston Crusaders has consistently fielded “storyline shows” with a clear narrative, often evident in the title. (For example: Revolution (2011), Animal Farm, (2014), S.O.S. (2018), and Goliath (2019). These titles can be compared to ‘concept-based’ shows from other corps, such as i, Experiment X, Juxtaposition, or even simply ‘!’.)166 The instrumentation and overall role of the Boston pit is to represent that “theatrical nature”167 required by the visual part of the shows.

167 Moyer, interview.
A clear use of the Boston front ensemble in this role occurs during the outro to their 2018 program. Though many drum corps shows end on a culminating moment of intense volume and excitement with the intention of getting the crowd on their feet, there has also been the use of “outro” tag endings, a softer, quieter ending usually performed by the front ensemble with the brass and color guard leaving the field. This has been most prominently used by Santa Clara Vanguard, whose peaceful pit outros usually end on a delicately ringing glockenspiel note as the rest of the corps exits the field.\textsuperscript{168}

Though early season performances of Boston’s S.O.S. ended with a traditionally bombastic drum corps ending, the corps later added an outro played by the front ensemble. Their playing fully supports a stunning visual on the field: as the music fades away, the corps of castaways begins to exit off the right endzone, which is covered in a tarp depicting sand and the ocean. The music is reflective of this visual as it echoes parts of the rest of the show, including “Salvation is Created,” “Amazing Grace,” and the Castaway ballad. The parts echo the style performed in the show earlier, now blended together in a moving conclusion to the show. As the corps members—or the castaways on the island—disappear into the waves, the marimbas split beats of arpeggiated sixteenth notes and triplets between them, the rise and fall of the openly exposed line reflecting the rippling waves heard through a sample. When the sound of the marimbas and the waves finally fades away, only delicate handbell chords remain, ringing the shining notes of “Amazing Grace” as a massive, silky blue wave crests over the castaways. When the wave clears, the membership has entirely disappeared—one of the most powerful and deeply emotional endings of a show.

\textsuperscript{168} In recent years, this has been seen in SCV’s 2009, 2012, 2014, and 2016 shows
The excerpt not only shows elements typical of Boston’s design and storytelling, but also the front ensemble’s role within the corps: to express these visual elements through parts written with unmistakable clarity and purpose. Whether the pit plays parts that are loud, intense, and dissonant, or parts that have lyrical soaring lines, all are crafted with explicit intentions to vividly express the dramatic storylines of Boston Crusaders’ shows.
The Cadets

Founding Year: 1934

Hometown: Allentown, Pennsylvania

Championship Titles: 10, most recently in 2011. Their percussion section has won the Best Percussion Trophy five times, most recently in 2013.


Long recognized for their classic maroon and gold uniforms, their commitment to traditions, and their “honor and grit,”¹⁶⁹ the Cadets hold a rich history in DCI. Yet while they hold tradition dear as the oldest continually active corps in the country, they have also been pioneers in numerous aspects of the activity, being among the first to utilize electronics, live vocals, show-specific uniforms, and asymmetrical drill. They were also innovators in the early front ensembles, creating the first “orchestral front ensemble” in 1983 by using concert percussion instruments, also considered the year that the Cadets front ensemble “found its own identity.”¹⁷⁰

More recently and more significantly than any other organization researched in this project, the Cadets are undergoing a transition of their staff members, structure - and arguably of their identity. 2017 marked a large shift in the Cadets organization as a number of staff members transferred to work with the Boston Crusaders, including Iain Moyer and percussion arranger Colin McNutt, who had built up the Cadets percussion program together since 2007.

¹⁶⁹ Vance, "Findings from the Field," 330.

¹⁷⁰ As quoted in Summerlin, "The History and Development of the Front Ensemble," 57.
However, the most significant staff change occurred partway through the early 2018 season with the removal of long-time corps director and organization CEO George Hopkins, following an investigation by the *Philadelphia Inquirer* where nine women accused Hopkins of sexual assault during his forty years at the organization. The following weeks led to the termination of his position, revocation of his DCI Hall of Fame status, and a complete restructuring of the Cadets’ parent organization and its board of directors.  

The two seasons since then have sought to affirm the corps’ values and success as independent from Hopkins’ prominent influence, one which seemed “a part of the corps' very DNA.” In 2018 they fielded *The Unity Project*, which used the traditional corps’ song and referenced their historic maroon-and-gold uniform to express “an evolution from disjunction to cohesion.” 2019’s *Behold* celebrated 50 years of co-ed membership at the Cadets and intended to “honor the remarkable story of resilience, strength, unity, and healing for The Cadets and for all women in our activity.” Both shows articulated a strength and sense of rebirth for the organization as they look to the future. While some traditions remain (such as their motto, corps song, their signature marching style and drill design) there have been significant changes, including changes to their uniform and their selections of source music. 

The Cadets’ shows often center around the classical or orchestral canon and have commonly been built around the works of one composer, such as Samuel Barber (2013, *Side X*

---


Side), or Leonard Bernstein (2017, *Faithful, Fallen, Forgiven*). While the thematic content of the shows may not directly connect to the composer, the musical content is generally the driving force behind the shows, continuing the precedent set when they initiated that first “orchestral” front ensemble in 1983. Former arranger Iain Moyer noted that during his time at the Cadets, “the design was a little bit music-centric…[the music] was the focal point, the driving point of the design.” He compared this to his time at Boston Crusaders where the “visual [elements] have driven what the music needed to be at times.” While this music-centered approach certainly still led to narrative elements in some shows, this process creates a “different frame of mind” for the design team and arrangers, helpful for understanding how Moyer’s current writing at Boston was shaped and modified by his time at the Cadets. As his general arranging style was discussed in detail in the previous section, this section will briefly discuss a few characteristics of his arranging during the years with the Cadets.

**Cadets 2009-2016: Iain Moyer**

As a long-term writer for the Cadets, Moyer’s personal style is evident in the years of his tenure, especially when connected with drumline arranger Colin McNutt to create the sound of the classic Cadets percussion section well known throughout the 2000s. One unique moment for the front ensemble is in the 2015 ballad, a solemn, string-based soundtrack piece (“Diane and Camille,” from the film *Mulholland Drive*) by Angelo Badalamenti among a show that was mostly drawn from Shostakovich’s Symphony No. 10. Moyer compared the piece to Barber’s

---

174 Moyer, interview.

Adagio for Strings: beautifully lyrical and “completely non-percussive.” He explained how he approached writing for this piece: “[I questioned], ‘What are we going to do for two-and-a-half minutes with the pit?’ We had voiced our pit so all the woods were on the right side and all the metallics were on the left side. So we moved all the pit players over to the marimba side. Everyone started on the marimba side and as the ballad evolved, everybody migrated over to the metallic side.”

With all players beginning on the marimbas, he wrote unison lines with falling seconds (an earlier example of the “Moyer seconds” discussed with Boston), notating them in the first entrance as “Flam taps,” usually a type of snare rudiment.

![Figure 22. Badalamenti, “Dianne and Camille,” arr. Iain Moyer for Power of Ten, (2015), mvt. III, (mm. 5-7).](image)

The effect is a richly falling dissonant line that opens the ballad in a heavy and mysterious way and introduces the low brass playing the main theme, continuing the dark feel created by the use of Shostakovich’s Tenth Symphony in the rest of the show. As the ballad evolves, the players all move to the metallic side of the pit, playing vibraphones, aluphones, pedal glockenspiels, triangles, and crotales, now bringing a brilliantly shining timbre to a full brass hit which is a stark contrast to the darker opening. “That was one of my favorite things to write, because it was so challenging.” said Moyer. “It was a little bit out of the ordinary, but it was also hyper-musical as far as the journey of what they were trying to play, how they were

---

176 Moyer, interview.
trying to move the soundscape from woods to metals. It’s kind of like if you had two faders, if you were bringing the marimba slider down and the metallic slider up.”

While the physical movement of the players from one side of the pit to the others does create a visual element for the front ensemble, it is only a side effect and not the main intention behind the choice to voice instruments that way. The primary goal is that “hyper-musical” effect of the unique textural shift from woods to metals. Writing this way was a “different frame of mind” than what Moyer later used at the Boston Crusaders. If a similar woods-to-metals moment were to appear in Boston, it would be likely that it would directly connect with some visual or storytelling element on the field, such as characters moving from darkness to light or from right to left on the field. In this way, the instrumentation would be used like Wagner’s leitmotifs to elicit a narrative impact. For the Cadets, this choice was driven by its musical effects, using the difference in timbre to create contrast and a unique moment.

**Instrumentation and Sound Palette**

Musical effects are also created by the types of instruments included in the ensemble. In a 2014 interview in the magazine *Percussive Notes*, Moyer spoke about his process behind writing for the Cadets: “I strongly believe in making each show the Cadets Front Ensemble performs a unique aesthetic experience for listeners and judges each season….I believe that our instrumentation and sound palette should change with every show we play. Whatever the theme of the show, we need to try and maximize the unique percussive qualities available to that show

---

177 Moyer, interview.
concept.”178 With this goal in mind, he included sleigh bells, slapsticks, bells for a Christmas-themed show and Japanese drums like o-daiko and shimi-daiko for a show with Asian music influences. The awareness and use of a wide array of percussion instruments is a Cadets staple and one that Moyer especially took advantage of during his time with the corps. Since transitioning to Boston, he continues to include many instruments, but they are often chosen for the visual or storytelling elements (such as the hammered dulcimer that was used in the 2019 show to emulate the David character.) The knowledge of the wide array of percussion instruments is needed for both corps, but at the Cadets, these sounds were selected primarily for the musical outcome rather than supporting a specific storyline or visual element. His style is evident in his recent years with the Boston Crusaders, now made distinct through the source music and show design.

**Cadets 2017-2019: Omar Carmenates**

Omar Carmenates is a professor at Furman University known for leading and building their concert percussion ensemble program. He began writing for the Cadets in 2017 after previously working with Phantom Regiment and Spirit of Atlanta. His first season was *Faithful, Fallen, Forgiven*, a show based on the music of Berstein’s *MASS*, which had been used in a championship-winning show 34 years earlier.179 In a show that emphasized the history and tradition of the Cadets, Carmenates’ writing for the front ensemble brought aspects of a new sound to the corps. Despite the different approaches, some similarities appear in the structure

---


179 (The timing made it an anniversary-like show for the Cadets, whose ‘lucky number’ is 34 due to their 1934 founding year.)
and corps, so that Moyer noted that he can “still tell that they’re the Cadets.” Carmentantes is only the third pit arranger at the Cadets in 25 years, and the only one who had not previously marched or taught with the organization, offering him a unique perspective and chance to create a different front ensemble sound than had been heard previously:

I came into [the Cadets] in a time of rapid change and rapid turnover and culture change. That was tricky walking into, because I grew up with the Cadets that we’ve all seen - the maroon and gold [uniforms], the straight leg, the right foot step off...with Neil Larivee’s\(^{181}\) sound in my ear and after that, Iain Moyer’s sound in my ear...There was a long struggle, for me, before I even put down a note—like do I write like me or do I try and fit in the mold? So a lot of that first year was trying to figure that out. I wanted to be me, I wanted to do what I knew how to do, but I still felt this, I don’t know, kinship, with the way the Cadets have sounded for years.\(^{182}\)

**Instrumentation**

An immediate hint of the new voice Carmenates brought to the Cadets was the addition of a drumset player in 2017 and 2018, something that had never been used in the corps before. He attributed this decision (and later, the choice to not include drumset) to the selection of source music. The 2017 program used “Agnus Dei” from Bernstein’s *MASS* while the 2018 show used John Psathas’ contemporary jazz piece “Demonic Thesis,” both pieces Carmenates said the drumset was essential for. “The trick for us was that there was only that one point in the show where we absolutely needed it,” he said. “So it’s like, ‘How do you treat the drumset the rest of the time?’ Luckily, both years I had really sensitive players [...] who were able to make it almost like a rack part and not just play ‘boom, chick’ [the whole time].”\(^{183}\) 2019 saw a return to more

---

\(^{180}\) Moyer, interview.  

\(^{181}\) Prominent drum corps figure who arranged for the Cadets pit for 16 years.  

\(^{182}\) Carmenates, interview.  

\(^{183}\) Carmenates, interview.
classical selections including music from Libby Larsen, Caroline Shaw and David Maslanka. Accordingly, the drumset was not needed and the front ensemble instead used a limited rack configuration for a more appropriate texture.

**Electronics and Live Delay**

Another instrumentation adjustment was experimentation with electronics. As a corps, the Cadets have been pioneers in using live narration and singing in their productions. However, other than a few specialty samples or effects, electronics have been used at a level equivalent with the rest of the activity. Most electronics used by the Cadets pittance support to the bass end or subtly replicate acoustic instruments.

In 2018 and 2019, Carmenates introduced the technique of live delay in the keyboards. Sound designers programmed a brief delay onto the playback of the acoustic keyboards to create an echo effect. The effect is used on passages with a lot of open space and a front ensemble focus where the brief runs or sharp, cold attacks reverberate throughout the performance space. The resulting texture flows and echoes with a blend of acoustic and electronics that was not previously heard on the drum corps field. The effectiveness of live delay is clear in the 2018 transitory movement “Misterioso.” Here, a quartet of live vocalists sing the lyrics “Could you

---

184 An electronic “static” is used in the opener of 2015, atmospheric wind and thunder in 2016.

185 Using live delay in 2018 and 2019 tested the boundaries of a rule that stated that all sounds had to be created live by performers. At the 2020 DCI Rules Congress, Bluecoats staff member Matthew Jordan proposed to officially allow these effects, citing the Cadets’ 2018 use. He noted that allowing these effects would help “educate our students more accurately than the current time-consuming system of having an electronics designer ‘approximate’ those effects.” It passed unanimously.
ever try to hear my heart? Would you ever try to see my soul? Can you see me now? Can you hear me now?” as the brass layers to a dissonant, unsettled chord.

Figure 23. Shanefield, “Misterioso,” arr. Omar Carmenates for *The Unity Project* (2018), mvt. III,

The front ensemble supports the vocalists through rippling runs driven by the pulsing “heart” of a constant high D in the metallics and a polyrhythmic pulse in the marimbas. As the singers’ lyrics express the difficulty of finding true understanding, the delay effect similarly reflects this by distorting the original notes of the performers into disorienting echoes, reflected like an image in a maze of mirrors.

**Keyboards**

Carmenates’ writing for keyboards is densely orchestrated, making ample use of the range and timbres achievable on all instruments. The results are richly detailed keyboard scores that balance the unique qualities of the marimbas and vibraphones. The density of his writing, added to the inclusion of the drumset in 2017 and 2018, also leads to a natural tendency to layer voices in order to create a groove-based ensemble led by the keyboards. This approach blends the orchestral origins of the Cadets and Carmenates’ own concert percussion background with a new through-line of groove. He explained this, saying “Drum corps is an extension of what I do
on a day-to-day basis, I don’t consider myself a ‘drum corps person’...I come from a much more percussion ensemble and chamber music background, so I try to write with that in mind. Maybe what that results in is some more counterpoint, some more harmonization, maybe not as much straight unison writing...a stress on harmony and a thicker scoring style.”

The use of range and varied timbre can especially be seen in the marimba writing, which often spans the entire keyboard in a single phrase and makes use of multiple textures in the instrument. A passage from the 2019 ballad (an arrangement of “Bridge Over Troubled Water”) shows the extent of the range permitted in the board as it literally bridges the passage from the lowest and highest notes on the keyboard throughout the phrase. It also creates variety and elegance through attention to ornamentation, articulations, and frequent metric mixture.


The passage carefully differentiates between tenuto and accented notes, dead strokes, rolls, and ornamental runs, creating a constant variety and interest through the span of range and techniques used by the players. In a ballad that was influenced by jazz improvisation, these small details help express that character as well as allow the performers to display a great deal of control and mastery over these techniques. Similar writing was seen in the Blue Devils ballads, but those scores generally did not make as much use of the wide range of the instrument.

---

186 Carmenates, interview.
Similar idiomatic writing is seen in the vibraphone writing, a conscious focus for Carmenates: “Vibraphones are really important to me. They’re not the second string players...They have a lot of their own moments, to me, they’re their own voice, and not just an extension of the marimba voice.”\textsuperscript{187} In this excerpt from the same ballad, the vibraphones use dampening and deadstrokes to emulate the techniques and styles of jazz vibraphone players, a genre emphasized further with chromatic runs and ornamentations which reinterprets the character of the original song.

![Figure 25. Simon, “Bridge Over Troubled Water,” arr. Omar Carmenates for Behold (2019), mvt. IV](image)

Like the marimbas, the vibraphone players are also responsible for multiple voices within their parts. The third measure of the phrase picks up the classic melody (”.[..[over] troubled water…”) in octaves in the right hand line while an accompanying counterline adds in the left hand. Such writing could have been split between the five vibe players, but instead they are tasked with a more full and textured orchestration which is idiomatic to the instrument.

Carmenates points to this type of writing in the vibraphones as the key to understanding his style and the focus on harmony in his scores. By writing for vibraphone in this way, he attempts to combat the “culture” of drum corps which is “so marimba-heavy”\textsuperscript{188} in its writing and adjudication focus.

\textsuperscript{187} Carmenates, interview.

\textsuperscript{188} Carmenates, interview.
In non-ballad moments, the section is often responsible for creating and maintaining a groove through counterlines of rhythm, exaggerated by the difference in range between the hands. One example is found in the 2019 percussion feature, “Do Better,” where the marimba players use the distance within their hands to play syncopated rhythms that drive the groove underneath the vibraphone melody.

![Figure 26. “Do Better” arr. Omar Carmenates for Behold, (2019), mvt V, (mm 20-23).](image)

The density of the lines and the layered approach was introduced to the extreme in 2017. In that show, the front ensemble had ten full-time keyboard players, each equipped with a marimba, vibraphone, and numerous auxiliary instruments within a small pod. With the large (orchestral) instrumentation, essentially every combination of instruments was used in the show. In the ballad (“Almighty Father” from Bernstein’s MASS), Carmenates orchestrates all ten of the keyboard players on the marimbas. Subtly accompanying a vocal quartet, the pit incorporates gentle rolls (mm. 1-3) and purling lateral strokes and runs (mm 6, 9-11), with no entirely unison lines between the ten players, using a huge amount of harmony and counterpoint for a drum corps book. Balancing out the wooden timbre of the marimbas, he moves the synth and drumset players to vibraphone for the phrase as well. The enormity and density of the score is easily seen

---

189 This instrumentation was designed as part of an idea for an initial show design that later changed.
in the pictured excerpt, which does not even include the tenth marimba, the vibraphones, or the timpani and other auxiliary percussion.

Two seasons later, the 2017 show still remains an important milestone for him as his first writing for the Cadets: “The deepest book I wrote was ‘17… the amount of score study, the amount of depth, harmonies we wrote, who played what and where…that’s one [show] I always
look back on. It ended up being a hard book to clean...It was a risk, but I was just trying to be true to myself and to the [original] concept. I’d rather have that [risk] than a sterile book.”

Carmenates also details his music from an expressive point of view, including expressive text throughout the scores. He notates passages as “Gracefully,” “Intimate and nostalgic” “Becoming more insistent,” and “Gliding,” showing his foundation in composition for concert percussion ensembles. It is not unheard of for drum corps writing to have these types of emotional instructions, but because the activity centers around a uniform sense of expression rather than individual interpretation, it is more rare than found in other genres. This shows the arranger’s background in concert work and his writing approach, which fits in with the music-centered history of the Cadets.

Throughout their transition between arrangers, the Cadets pit has remained connected to its roots as an ‘orchestral’ front ensemble, through the focus on classical source music and a music-focused design approach. In the 2020 season, the organization will have another new voice in the arranging role as Brandon Carrita steps into the position. He has worked as the Cadets’ Audio Designer since 2018, and will work closely with Front Ensemble Facilitator Neil Larivee, who preceded Moyer in arranging for the pit for sixteen years. The idiosyncrasies of Carrita’s writing and how it may change the face of the Cadets pit is yet to be seen, but given his previous role as Audio Designer, it could indicate a continued or increased integration of electronics.

---

190 Carmenates, interview.
Santa Clara Vanguard

**Nickname/Abbreviations:** Vanguard, SCV

**Founding Year:** 1967

**Hometown:** Santa Clara, California

**Championship Titles:** Seven, most recently in 2018. The percussion program has earned the Fred Sanford Best Percussion award fifteen times, including each year from 2016-2019.

**Front Ensemble Arranger:** Sandi Rennick has arranged for the front ensemble since 2011.

Santa Clara Vanguard’s focus on mallet instruments, nuance, and pianistic arrangements can be compared to a concert percussion ensemble adapted for the marching field, connecting with arranger Sandi Rennick’s background. An adjunct professor at University of North Texas, she is a marimba soloist in addition to an arranger. She performed as part of the original cast of “Blast!” and toured as a soloist before arranging for numerous high school groups and other drum corps.\(^{191}\) Rennick’s extensive and idiosyncratic knowledge of the instrument is a factor in creating scores that push boundaries in the field. Using her varied experiences, particularly as a performer, she is able to write with an intimate knowledge of the physicality of playing the marimba.

Vanguard’s percussion section as a whole is strongly cohesive and their drumline parts carry the same refinement seen in the front ensemble, a partnership that has achieved “some of the most nuanced percussion arrangements in DCI history”\(^{192}\). The compatibility within the

---

\(^{191}\) “Sandi Rennick,” *University of North Texas*, [https://music.unt.edu/faculty-and-staff/sandi-rennick](https://music.unt.edu/faculty-and-staff/sandi-rennick)

section is influenced by the relationship between the two arrangers: Sandi and percussion
arranger Paul Rennick are married and have written together for over twenty years with Carolina
Crown and Phantom Regiment. They have been with Santa Clara Vanguard since 2011, as well
as with the Troopers since 2013. Under their partnership, the Vanguard percussion section has
won numerous Sanford trophies for best percussion and have been lauded for arrangements that
have “seamlessly and purposely”\(^\text{193}\) included the percussion section within the brass scores. Their
writing process is often done conversationally, as Sandi described the process for an iconic pit
moment in the 2019 show, a lateral stroke, octave grip phrase after the ballad:

> I can remember the moment in the kitchen where I was like “I don’t know what to do!”
> and just trying to figure out how this will work. I’ll never forget Paul going, “You know
> what would be kind of cool? What if [the pit] did like, ‘dut diggut dut dut, dut diggut dut
> dut, biggitah biggitah biggitah...’” And I’m like, “Oh, so sixteenths into sixtuplets? Yeah,
> okay, so that’d be a triple lateral...what tempo are we going to be at?...Oh, let’s just see
> if they can do it.” That’s basically how it came to be. I walked over to the marimba and
> was like, “So kind of a huggitah-wuggitah..?” And this part was born.\(^\text{194}\)

**Percussion Foundation**

From the cohesive musicality inherent in the Rennicks’ writing, the percussion section
acts as the foundation and driving force within much of the shows. Partially because of this, the
section is known for their yearly run-through video of the show. No parts of the show need to be
cut out because they play so constantly with varied enough parts to allow for an interesting
percussion-only video. This video series offers a look at the percussion ensemble that seems to
prove their self-sufficiency but also marks them as the ingrained foundation of the corps, by

\(^\text{193}\) Ibid.

\(^\text{194}\) Sandi Rennick, “Santa Clara Vanguard Front Ensemble,” Clinic, Percussive Arts Society International
Convention, Indianapolis, Indiana, November 15, 2019.
which all other elements are supported. In an activity that so heavily relies on the integration of
the visual and the musical in order to tell the full story, the ability of the percussion section to tell
the full story of the shows without any visual elements supporting it is remarkable. It could be
compared to a movie with only the soundtrack, or an opera performed with only the orchestra.

As a full corps, Santa Clara Vanguard has long committed to a history of music selection
from the classical canon, opera, or musical theater pieces. With the exception of one year, every
Vanguard show from 1967 to 2017 included at least one piece within these genres. Often they
have performed full shows based on one work such as Ballet for Martha (2009, Appalachian
Spring by Aaron Copland), Bartók (2010), Les Miserables (2013), and music from Scherezade in
both 2004 and 2014. Yet since 2017, the corps has taken a markedly different approach to music
selection, now programming only contemporary orchestral composers (such as Pulitzer winner
Zhou Long), a few well-known pop songs (including songs by Peter Gabriel and Metallica), and
original compositions from the Rennicks. No classical works have been programmed in the past
three seasons.

The corps is certainly in a period of transformation as they balance their historical
approach to programming with modern musical choices. For the front ensemble, this manifests in
a continuation of the acoustic-based, densely orchestrated ensemble they are known for. Sandi
Rennick’s pianistic writing fit naturally with classical works but arguably even more so with the
modern pieces, considering the group’s repeated best percussion awards in recent years. Delving
into music outside the traditional canons has only allowed this front ensemble presence to grow,
leading them to experiment with more difficult runs, permutations, and creative writing that
continues to push the standards of pit writing and achievement.
Instrumentation

Rennick’s experience with marimba causes the acoustic keyboards to be the centerpiece of the front ensemble of Santa Clara Vanguard, evident immediately by the fact that they have no full-time rack or drum set players. Instead, Rennick chooses to utilize mallet keyboards, timpani, and one synthesizer. Concert bass drums, gongs, acoustic chimes, and various crash cymbals are played when needed by members of the ensemble. Smaller auxiliary instruments such as wind chimes, crotales, and tambourines are used sparingly. The singular synth player appears as a piano soloist in select moments (such as the openers of 2015 and 2018, *Spark of Invention*, and *Babylon*), but more often provides support within the full ensemble sound. Other electronic sounds are included when needed, such as choir patches and wind effects, and are produced by a DTX device, an electronic percussion pad used to store samples. Any use of the electronics is supported by the underlying texture of the front ensemble keyboard instruments. “It would be really easy with electronics to not bring timpani out,” said Rennick, “We could probably cover all the parts, we wouldn’t have to play, we could have everything sampled [...] But as long as Ivan [De La Cruz], our corps director, says it’s okay, we’ll drag chimes and timpani around every summer, forever and ever.”

As a result of this instrumentation, the responsibilities of the front ensemble rely almost entirely on the acoustic keyboard properties of the mallet instruments. Rennick extracts the musicality of these instruments through heavily ornamented and nuanced writing. Her approach takes advantage of the high ability levels of the players as well as the opportunities created through amplification to utilize wide ranges of dynamics and articulations throughout the program. In a book that is already constructed with careful counterpoint and dense layering,
these musical choices add extra level of nuance. Heavily detailed marimba parts flow underneath the vibraphones’ melody lines and chordal structure, yet the parts feel equally voiced due to the partnership between them. Attention is placed on the marimba players for the difficulty and longevity of their playing, and their parts act as a foundation for that melodic and metallic counterpoint offered by the vibraphones.

**Keyboards**

A prominent example is found in the introduction to SCV’s 2018 show *Babylon*, a section which is carried entirely by the front ensemble.¹ With the synth on a piano patch playing heavy chords, the marimba part layers underneath with a subtly driving texture of complex permutations. These lines intertwine sixteenth notes with triplets and thirty-second note flourishes for rhythmic drive and novelty, constantly growing and varying permutations that include small motives and patterns.

Measures 7-9 are a passage that demonstrate one of these pattern manipulations: left hand block chords supplemented by right hand laterals filling in the space. A repeated motivic pattern in the right hand (circled in red) helps create structure and catches the ear of listeners within the rippling texture of the rest of the permutations. As the piece continues, the playing responsibilities of the marimba players becomes more difficult as their parts expand to include more complex stroke variations and faster rhythms.

Meanwhile, the vibraphones play warm block chords to support the piano, sometimes adding in a brief glittering run while in transition to the next phrase. The glockenspiel offers a

¹Sheet music for Figures 28, 29, 31 and 32 from transcriptions on Musescore.
layer of sparkle in a unique counterpoint on the top of the ensemble. Through these parts layer on top of the marimba lines, the melodies and musical focus dovetail between instruments and become more layered and complex as the opener develops. The marimbas may hold the melody at the start of the phrase, but a run or high point is shared with the metallic texture of the vibraphones, similar to their use in large moments in the Blue Devils. The musical result is very
rich and expansive, a passage which swells with a variety of ranges and voices that complement each other well and lead to the entrance of the full brass ensemble.

Similarly orchestrated is their 2016 ballad (“Earth Song” by Frank Ticheli). During the horn soloists, the vibraphonists closely accompany the melody line while the marimba players perform sighing arpeggiated sixteenths. Sections where the brass line does not play, such as the excerpt below, are taken advantage of by Rennick (and all corps arrangers) to overtly display the skills of the performers. When the pit is solo these parts become drastically more complex by covering a wider range, including varied permutations and harmonized scale patterns. In the passage from “Earth Song,” the sweeping permutations fill in the structure of the melody line created by the vibraphones, fitting as many notes within this space as possible. Increasing the difficulty in these moments displays the talent level of the pit in a concise and unmissable burst of virtuosity.

Runs

The impressive command of the ensemble is also found in faster passages with the rest of the corps, particularly through their runs. These featured runs generally include at least one of three key qualities: motivic development, metric modulation, and use of the octave grip.
While the runs they play are often exposed and function as dexterous transitional material, they also require them to contribute to the greater musical ideas of the corps through runs that use motivic material. Many corps write newly composed runs for transitional sections that follow the harmonic structure of the original but not any of the original melodic aspects. With Vanguard, these runs usually begin with a brief but recognizable manipulation of a motivic theme before developing into a newly composed and textural run.

In 2016 (Force of Nature), Rennick directly pulls material from the source music, Vivaldi’s “Winter," movement 1.¹⁹⁶ The first solo virtuosic violin entrance begins with a passage of descending repeating notes in a C minor triad. Each new note is syncopated, causing the phrase to briefly misconstrue the sense of time before developing with material that uses scales and arpeggiation.

Rennick uses this same approach in a transitional run into a full-corps entrance after the ballad. Vivaldi’s same descending, syncopated line is found, here transposed to an F minor triad. It is repeated a few more times than Vivaldi’s (in order to draw out the development of the challenging metric run, discussed below), but it has the same properties as the original and seeks to add a recognizable melody to precede the full corps entrance. It is not only a filler transition,

¹⁹⁶ Score example from “Violin Concerto "Winter/L'Inverno" in F minor, Op. 8, No. 4 -Vivaldi (Score)”, Youtube video, 10:02, "Roc Vela”, https://www.youtube.com/watch?v=bYNDA0MT4Qk
but moves along the musical elements of the show in addition to displaying the command of the players.

The metric modulations found in these runs are the most distinct difference between the original source music and Rennick’s interpretation. Though she adheres to the violin’s doubled-notes motive in 2016, this is adjusted through a gradual modulation from heavy quarter notes to rushing fiveslets. The intensity built by this modulation gives the effect of an unbridled acceleration into the new ensemble moment, achieving the same purpose as the original violin melody, which hurtled forward into the orchestra entrance.

The motivic elements display the responsibility that the front ensemble holds as the central foundation for the corps. Though the runs with similar transitional properties could have been newly composed, the decision to reference the original source music solidifies the pit’s role as an integrated and essential part of the thematic musical aspects of the corps even in transitional moments such as these runs.
**Octave Grip**

A final prominent quality of SCV runs are passages that are played with octaves in both hands, sometimes spanning four octaves. Octave grip is extremely difficult on marimba as it requires players to stretch the interval between the mallets drastically, causing players to have a more difficult time retaining control over their stroke. In addition, the bars on a keyboard change in width across the range. When moving across the board (a phrase to describe playing a passage that moves between ranges of the keyboard), players must carefully adjust their hands note-to-note to maintain an octave across the changing distance. Add to that triplet or sixteenth note rhythms and tempos upwards of 200 bpm—which breaks down to just under fourteen notes *per second*—then multiply that by at least five marimba players and a xylophone player, all who must adjust each octave to play with exact rhythmic and pitch precision without hitting a seventh, ninth, or play a note even a hair early during the extended passages. There is no drumset player providing time in the pit, so all players must communicate back to the drumline which is halfway across the football field—assuming the drumline is even playing at all. On top of this, the parts must be cleanly executed consistently, during fourteen-hour rehearsal days and under the pressure of judges and audiences night after night. All factors considered, these runs become a seemingly insurmountable task. Yet this is arguably what the ensemble is best known for, and what they rely on during much of their shows. One of many octave-run passages appears during a middle movement of *Babylon*. Written at 206 bpm, the players use octaves on notes from the triad of F# major to play triplet and sixteenth note arpeggios, sometimes over the span of four octaves.
Figure 32. Zacarias M. de la Riva, “Apology,” arr. Sandi Rennick for *Babylon* (2018), mvt IV, marimba score.

While this particular run is another relatively exposed moment for the pit, these octave runs are frequent throughout the program, including during full-brass moments where the front ensemble is not the focus. This differs from full-brass moments at the Blue Devils, where arranger Brian Dinkel writes for the metallic instruments but not for the marimbas. Rennick’s octave runs could easily be adjusted for two mallets, but she decides to make the ensemble’s skill and stamina undeniable by including octave content more often than not. “Even if [playing with two mallets] is possible,” she said, “They like to challenge themselves and I like to challenge them.”
This stamina is even more evident when watching the front ensemble for the full show. In recent years, they have used four mallets for the entirety of the show and rarely spend time off the keyboard, only using cymbals to accentuate the ends of runs or just as color in the middle of a phrase. In the 2019 show *Vox Eversio*, there was only one four-bar phrase in the whole show that the front ensemble was not playing something.

With their focus on acoustic instruments and unrelenting virtuosity, (not to mention their four-peat best percussion award), the Santa Clara Vanguard front ensemble continues to strive to set the standard for excellence and artistry for pits in DCI.

---

197 This may be due to SCV’s marching cymbal line, one of the best-known lines in DCI. Because the marching cymbal players can play at any moment, the front ensemble usually only plays accessory crashes until the very end of movements. These accessory crashes are often played by the vibraphone performers who have a wider variety of different cymbals around their instruments than the marimbas.
CONCLUSION

By detailing the arranging styles of the select front ensembles in Section III, a few characteristic approaches to pit arranging have been identified. However, these also reveal how these characteristics found in the front ensemble support and are supported by the larger corps through the source music, show design, and consistency of staff members. For example, the Blue Devils and the Bluecoats are both inspired by jazz in their source music, which leads to a focus on groove and texture through the use of a drumset and auxiliary percussion instruments. Other ensembles have a history of using classical music through a focus on the acoustic musical properties of the keyboard instruments. In the case of the Cadets and Santa Clara Vanguard, recent years have seen a departure from this source music while still remaining committed to the music-focused approach. Conversely, Boston Crusaders and the Bluecoats often look for ways that the pit can musically support the visual aspects seen on the field. The combination of all these factors is what contributes to the corps artistic identity expressed each season. The design teams build on the historic past of the ensembles and weave that history through new innovations in the creation and performance of each season’s show.

Though drum corps has changed quite a bit from its origins, the successful inclusion of the front ensemble shows that the true defining factors of the activity lie outside of this limited instrumentation. The activity is still largely defined by its instrumentation as a brass and percussion based ensemble (now broadened to include keyed brass and amplified mallet instruments), but its use of show structure directly ties to the drum corps traditions and practices of the past. The shows center around an expected narrative structure with distinct climactic moments that aim to engender the powerful feelings of flow and communitas in audiences.
members. Shows which use the well-developed identity of the past combined with exciting innovations of the present day are often able to do this most successfully as they have combined the best of both worlds: the strengths and signatures of their history, and their eagerness to explore the future.
AREAS OF FUTURE RESEARCH

The limited amount of academic research about drum corps leaves ample opportunity for future studies. This research looks at only a small selection of the 45 currently competing corps in the country. Further research could include more corps, analyzing their similarities and differences, especially in the Open Class corps, which remain entirely untouched by current studies. The creation of identity and tradition in newer corps could also be an interesting topic of research. Research could also be carried out on the emerging number of corps in the International class and how their arranging styles and identities are shaped by the cultural history and influences of their country. Similar musical research could investigate the use of world percussion instruments in drum corps.

A World Class corps of current interest is Madison Scouts, which is beginning their first season as an all-gender corps, after more than 80 years as an all-male corps. Changing from the “Men of Madison” leaves only one other all-male corps in competition and is a clear example of a corps that is redefining its identity. It also brings into question issues of gender roles and gender performance in drum corps, an activity built in the masculine military traditions.

Other potential research topics could include the individual expressions of corps membership through symbols such as necklaces, mottos, tattoos, jackets, and how this expression changes for members who choose to march in multiple corps. Continued research on corps source music and corps songs and their impact on a corps’ history could also be enlightening.
SECTION IV. ARRANGING

The final section of my paper addresses one of my own arrangements which I completed during the research of this paper. Research does not make an arranger, but I am grateful for the experience I had in speaking with each of the arrangers I interviewed. The interviews and scores certainly showed me the wide range of techniques used by professionals in the field to craft their works and inspired me to commit to completing a larger-scale arrangement than I had done in the past. Though I kept many of these techniques in mind, I also reflected on the conversations I had with Omar Carmenates and James Ancona, who stressed the importance of looking to others for inspiration, yet finding and utilizing my own arranging voice.

I chose to arrange “Sky Above” by Jacob Collier. This song (originally released on his 2019 album *Djesse, vol 2*) is filled with the stylistic variety and harmonic creativity for which Collier is recognized for. In arranging this piece, I aimed to remain faithful to the original piece through preserving the rhythms, harmonies and overall character that initially drew me to the piece, while also introducing my own ideas through the use of the varied instruments offered in a drum corps ensemble.

I imagined this arrangement as a ballad-to-closer, meaning that it would have lyrical sections at the beginning but that it would soon switch to a faster tempo and drive towards a roaring drum corps ending. It is a little too short to be split into two sections and instead acts as one collective movement. Some of the arrangements I had in mind were the endings of the Boston Crusaders’ 2018, Blue Knights 2015, Madison Scouts 2013, Cadets 2018, and the character changes found throughout Santa Clara Vanguard 2013.  

---

198 *S.O.S.*, *Because*, *Corps of Brothers*, *The Unity Project*, and *Les Miserables*. 
arrangement, I used a transcription posted on YouTube by Jason Fielder which I found extremely helpful in visualizing the different parts of the piece.199

Without a real drum corps or ensemble to write for, all my work was intended to be merely hypothetical and experimental and did not need to address any of the identity or history issues I researched in Section III. I wrote for two marimba and two vibraphone parts, imagining these split with two players on each part, totaling four players for each instrument. I also wrote for a xylophone and glockenspiel part, which would be able to be covered by one player for most of the performance. The crotales only appear occasionally and would be played by a vibraphone player during those parts. An electric bass player and two keyboard synthesizer performers make the electronics section, while the drumset and rack players fill in the auxiliary. As I wanted to focus my efforts on writing for the parts of the ensemble that I know best, I chose not to include the drumline, admittedly missing a large portion of the drum corps ensemble. If this was to ever be performed, expanding the score to include the drumline would be essential, as well as making notation adjustments for ease of the performers, particularly the rack, drumset, and synth players.

I began the piece with a brass-focused chorale of the opening vocal lines in the piece. An electronic “drone” created by a cello synthesizer patch emulates the drone of the Northumbrian pipes which characterized the introduction to Collier’s song. The front ensemble enters with a shaker and vibraphone lines before more textured marimba lines (and ornamented mellophone lines) help bring the ensemble to a climactic (but unresolved) chord. In this section, I was inspired by sections of the Bluecoats 2014 ballad “Hymn of Acxiom” which also begins with a

brass choir which starts with the high brass, then is added to by the low brass and by moving lines in the vibraphone and marimba.

Rehearsal B marks the first major mood change. In the original piece, the tempo changes into a fast 12/8 feel marked by the guitar. In my arrangement, I use arpeggiated lines in the

---

Figure 36. Collier, “Sky Above,” arr. Dunbar, (mm. 21-24)

Figure 37. Collier, “Sky Above,” arr. Dunbar (mm. 32-33).
marimbas to emulate the guitar and add sparkle and color with the other instruments. These parts are inspired but not directly pulled from the original piece, using the same chord structure but with arpeggiated lines that are idiomatic to the keyboard instruments.

The pit gives way to the main brass melody at Rehearsal C, a steadily rising and falling line which ties the lyrical nature of the first part of the piece with the faster moving section of the second. A thickly orchestrated cluster chord with a frantic front ensemble run dramatizes and extends a sharp crescendo found in Collier’s original arrangement.

Rehearsal D introduces the second melodic theme used in the piece, a syncopated 12/8 melody which Collier complements with a lot of rhythmic variety in handclaps, drums, and the bass. I used some of his rhythms in the rack parts through the congas, but the accompanying content in the front ensemble was added by me, as Collier’s original arrangement mostly contains his many vocal lines and a thumping bassline. When deciding what to write here, I remembered one of the favorite parts I had played, a groovy, originally-composed movement in our 2017 show *Connected*. In that movement, our arranger Matthew McGuire orchestrated the marimbas to play big, open block chords to contribute to a fun half time shuffle groove.

![Figure 38. “ReConnected,” arr. McGuire for *Connected* (2017), mvt III, (mm. 55-62).](image)

Similar voicings also happen in the Blue Devils writing and are a respite from the densely orchestrated, *chops*-based material that much corps writing offers. I used this same idea in
orchestrating the passage beginning at Rehearsal D of “Sky Above,” writing block chord attacks
in the whole front ensemble to add emphasis to the brass melody. I imagine the performers using
all the vertical physical space during this section and making use of the texture changes offered
by dead strokes (staccato articulations) and glissandi.

![Figure 39. Collier, “Sky Above,” arr. Dunbar, (mm. 38–41).](image)

At Rehearsal E, I thicken the texture even further, creating a full ensemble moment by
blending both melodic themes (from Rehearsal C and D) through using a variation of the triplet
melody found at Rehearsal D in the front ensemble and bringing back the rising lyrical lines in
the brassline that were used in Rehearsal C.

![Figure 40. Collier, “Sky Above,” arr. Dunbar (mm. 44-47), trumpet and vibraphone](image)

The combination of these themes is not something that is found in Collier’s original
recording, but I wanted to find some way to combine these ideas in a new, possibly surprising
way, something that is found often in closers, including in the Boston Crusaders 2018, Spartans
2019, and Carolina Crown 2013. Because the piece is in the same key, I was able to use the legato theme from C exactly as it first appeared. I then used variations on the runs at Rehearsal D underneath to bring a different texture and feel than had appeared previously. Some of these runs also are inspired by a solo passage from the original piece, where the Northumbrian pipes play running triplets. Because I decided not to duplicate this section in full in my arrangement, I felt I still wanted to include it somehow and found this combination passage the best way to do so.

In the original, the material at Rehearsal F is drawn out twice (“and the world goes round [x3]/The sky falls down”) with a slowly layered approach, growing gradually more complex. I felt that an identical length and orchestration would prove to be too long and stagnant for the pace of drum corps.

I decided to instead take the first repetition of the phrase and play with the contrast of the ensemble, using brass hits interspersed with softer front ensemble featurettes. Each of the

![Figure 41.1. Collier, “Sky Above” (mm. 110-111).](image)

---

200 S.O.S., Experiment X, and $e=mc^2$. 
featurettes has inspiration from Collier’s original, such as the bass line in the marimba block chords and the counter melody in measures 54-55 that I pulled from the vocal line.

![Figure 41.2. Collier, “Sky Above” arr. Dunbar, (mm. 54-55).](image)

The second iteration is an entire front ensemble feature, where the “world goes round” melody is ornamented and orchestrated so it is more flowing and not as staccato as in the original or in the first repetition. This is a repetitive passage as it is layering and leading to the final hit, but the writing uses two of the most common ways of ornamenting the melody for pit: lateral arpeggio permutations and fast runs. I especially thought of passages played by Carolina Crown and Santa Clara Vanguard, though the layering effect is very similar to that of the Bluecoats. This was to intentionally show a different side of the front ensemble and to add variety to the arrangement. In these bars I exaggerated a rising bassline found in Collier’s electric bass and made it into a full-blown pitch bend (clearly inspired by the Bluecoats 2014) which brings the ensemble into the final hit. I wanted the pitch bend to subtly add chaos into that final hit, where I imagined the marching ensemble rushing around the field only to arrive in a solidified set around measure 66.
The final sections, Rehearsal H and Rehearsal I, differ most drastically from the original. The original arrangement fades off as gently as it arrives, returning to a simply orchestrated guitar and voice duet after a downwards pitch bend. Because I imagined this as a show ending, I felt that it needed to end on a typical “Drum Corps 101” ending, with loud horns and fast runs. Some shows have quieter tag outros, but I thought the pitch bend and the build up to it would be too exciting to pull back energy from for an effective outro. A high trumpet solo emerges in Rehearsal H to add variety, (partially inspired by solos such as Blue Knights 2015, Blue Devils 2017, Bluecoats 2019, and Spartans 2019), while a final front ensemble run gives an extra push and momentum into the final measures. These last few measures use changing meter to change the feel of the piece before ending on a huge ensemble impact chord, changing from 12/8 to 5/4 and returning through use of syncopation. The example below shows the synth part (first two

Figure 42. Collier, “Sky Above,” arr. Dunbar (mm 60-65).
lines, grand staff) which supports the melodies in the hornline. The percussion staff is the drumset.

![Figure 43. Collier, “Sky Above” arr. Dunbar, (mm. 71-75).](image)

There are many shows that use this technique in their ending, but I was definitely thinking of the last few bars of the Spartans’ 2019 program *Experiment X*, which disrupted the sense of time through syncopation and shifts from 3/4 to 4/4, when I arranged this section.

Though this piece remains as a hypothetical last movement of a larger show, I feel that it captures the qualities of drum corps and especially the front ensemble through my use of orchestration, pacing, and overall style.
GLOSSARY

Battery/Drumline: Interchangeable terms for the marching percussion section consisting of snare drums, tenor drums, bass drums, and sometimes cymbals.

Color Guard: Marching members who perform visually through dance and/or spinning flags, sabres, and rifles.

Hornline/Brass line: Marching members who perform on marching brass instruments, commonly trumpets, mellophones, baritones, euphoniums, and tubas. Trombones, flugelhorns, and french horns have been used. (The different spacing of “hornline” and “brass line” is correct.)

Design: Term for the overall layout of a show, encompassing music, theme, storytelling, costumes, and props.

Design Team: Group of staff members who work on the show from a big-picture perspective and plan the show from the outset. Can consist of the corps director, music designer or coordinator, visual designer or choreographer, and drill writer.

Drill: The forms created by the marching members on the field.

Drum corps/Drum and bugle corps: Interchangeable terms for the marching music activity that consists of hornline, drumline, color guard, and front ensemble members.

Drum Corps International: Founded in 1972, the largest official organization of competing corps.

Finals Week: The last week of competition where all competing corps come together in Indianapolis to compete. Following prelims and semi-finals competitions, there is:

Finals Night: The last competition of the season, where the top twelve corps compete for a championship.

Hit/Brass hit/Horn hit: climactic moment where the full brass ensemble plays at a loud volume, “hitting” the audience with an overwhelming wall of sound.

Indoor Percussion: Percussion ensembles which compete in the winter months, performing inside gymnasiums. Many compete as part of Winter Guard International (WGI).

Lot: Warmup area in the parking lot of the competition stadium, where ensembles warm up and spectators are permitted to mill around.

Marching Arts/Pageantry Arts: Encapsulates the wide realm of artistic organizations which includes high school marching band, drum corps, winter guard and winter percussion (WGI).
Moment: Describes a point in a show intended to make an impact with the audience, either through a climactic ensemble hit, storytelling twist, or an emotional passage.

Production: Movement of a show, less commonly a term for the show as whole.

Program: *(noun)* Synonymous with a show. *(“The Cadets’ 2015 program...”)*
*(verb)* To choose music for the show.

**Percussion Technique & Stroke Styles**

Mallet Numbering: Used for unifying stickings between players. When holding four mallets, they are numbered 1-2-3-4 from left to right.

Inner mallets: Mallets 2 and 3, often used for fast runs.

Outer mallets: Mallets 1 and 4, used in double stops and permutations.

Stickings: System for identifying which mallet to play passages with (percussion equivalent of piano fingerings)

**Four Mallet Strokes & Grips**

Alternating Stroke: Uses a single independent stroke to alternate between mallets in a hand (1-2 or 3-4.) Faster tempos and a slightly different approach results in a lateral stroke.

Burton Grip: A technique often used on vibraphone (specifically jazz vibraphone) which was created by Gary Burton. It uses a modification of cross grip to have strong outer mallets

Double vertical stroke: two mallets from the same hand hitting the keyboard at the same time. (ex. Mallets 1 and 2 or 3 and 4)

Lateral stroke: An advanced stroke that involves playing two mallets in fast succession (ex. 1-2 or 3-4.) Difficulty arises in achieving an even sound out of each mallets

Permutation: A combination order of how a keyboard percussionist uses their mallets in a given passage. This is commonly using a combination of all four mallets.

Quad stops: all four mallets hitting the keys at the same time. (Also grouped as a double vertical stroke)

Single Independent: A stroke that is played by one mallet without moving the other mallet in the hand.
Stevens Method/Grip: A technique for holding four mallets that was created by Leigh Howard Stevens and detailed in his book *Methods of Movement*. It is the most popular grip for front ensembles for its ability to play fast and strong lateral strokes and to adjust intervals.

**Front Ensemble Terms**

**Amplification:** The use of microphones to amplify acoustic instruments or the human voice.

**Auxiliary equipment:** Instruments that are not the keyboards or drumset, such as tambourines, triangles, toms, congas, gongs, bass drum. These instruments are often attached to a metal contraption called a “rack,” and the players are therefore called “rack players.”

**Board:** Short for mallet keyboard instrument. Phrases like “across the board” “up the board” “down the board” “top/bottom of the board” describe a player’s location or physical approach to the instrument with “top” or “up” being the higher range of the board.

**Body pulse:** Front ensemble performers are taught to body pulse, moving their bodies in time with the music (usually on beats 1 & 3 of a common-time section) in order to communicate visual clues to the rest of the ensemble and to express an energetic expression to the audience. While the exact style of body pulsing can range from group to group, it usually entails a gentle bend in the waist and a nod with the head to indicate time.

**Chops:** a player’s physical ability to play fast and/or dexterous passages accurately for long periods of time.

**Clean:** *adjective* describes the quality of music performance. Players or passages are clean when they are unified in notes, rhythm, articulation, approach, and volume. The intent is to look and sound like a singular player across the full ensemble. Cleanliness is the central focus of nearly all front ensembles.

**Verb:** “to clean”: to rehearse with the goal of making a passage clean, usually by breaking down passages into small, digestible segments.

**Dirt/Dirty:** any phrase in the music that is performed with inconsistency in any of the aforementioned aspects, but particularly in timing and note accuracy.

**DTX:** Short for DTX-Multi 12, a popular electronic percussion pad that can be programmed to play various percussion effects or general samples.

**Electronics:** Any use of electronics, such as synthesizers, microphones, samplers, or programmed acoustic effects.

**Metallics:** Umbrella term used to categorize metallophones, such as the glockenspiels, vibraphones, and crotales.
Metric Modulation: A passage (often a run) that transitions between metric figures such as duple rhythms and triple rhythms in fast succession, requiring players to “modulate” between rhythmic feels. These runs often follow an increasing pattern such as moving from quarter notes through triplet quarters, eighths, sixteenths, fivelets, and sixlets. Used in this paper, this term differs from its use in the works of Eliot Carter.

An example of a metric modulation run:

Run: A fast, usually scalar passage. Often used as a transition to climactic moments.

Samples: Electronic clips of pre-recorded music or ambient sound included in a program. (Per DCI rules, all music must be played live. If corps want to sample a singer, for example, they would need to create 1-second chunks of the music and program them into individual buttons played on a synthesizer or other electronic device to be legal.)

Split: A passage, often a run, that is split between multiple players but sounds like one performer. For example, in a run that is four beats long, one player may have the first and third beats, another the second and fourth beats. Composers include these splits as a way for players to execute extremely fast runs that are difficult to maintain the hand speed throughout. They also include them to display to judges the ensemble’s ability to blend as an ensemble and to navigate space.

Turnaround: a part of a run where players quickly shift directions (where the direction of the line “turns around”), sometimes repeated around one note. Adds variety and shape to the line. (This
term differs from its use in jazz theory and does not describe any sort of chordal motion or function) Two examples of runs with turnarounds from the Blue Devils 2018 show:

**Drum Corps Adjudication Terms**

**Achievement/Achievement Level:** a judging standard used to determine the level to which the performers are able to accurately perform. A group could have a high content level but a poor achievement level, meaning a show is more difficult than they can currently handle. Conversely, if a group performs an easier show perfectly, they have a high achievement level but a low content level. The goal, of course, is to perform a difficult program at the highest level.

*Caption:* Synonym to a section (i.e. ‘the percussion caption’). Also can describe adjudication categories.

**Content/Content Level:** a judging standard used to determine the musicality and difficulty of the music composition for the ensemble.

**General Effect (GE):** One category of adjudication that focuses on the ensemble’s complete effectiveness at expressing their show or looking at visual and musical elements combined. This category is worth 40% of the overall score, the highest percentage out of the three captions.

**Music Analysis (MA):** An adjudication category that analyzes an ensemble’s musical program: composition difficulty, technical execution, effectiveness of music design, and the players’ overall level of achievement. Music Analysis includes judges who focus on percussion and brass separately, as well as the full music product.

*Performance Quality:* the ability for performers to express the message or emotions of their show through facial expressions, body movements, and connection with the audience.

**Visual Analysis:** (“Visual proficiency” “Visual design”) 1. The third adjudication category describes all aspects of visible elements of a corps, primarily looking at coordination of movement/marching, use of props and other materials, performance quality, uniforms, or flag design. 2. **Visuals:** movements or actions by performers to accompany the music, such as a coordinated mallet movement or dance move.

**Show Structure Terms**

**Intro/Pre-show:** An optional short section which precedes the official corps announcement, used to set the scene usually with ambient effects or electronics.

**Opener:** the first movement of a show, thematically intended to lay out the mood or introduce a narrative.

**Percussion feature:** A movement that centers around the percussion section. Often this is with particular focus on the drumline, and may have limited melodic front ensemble parts.
Ballad: Usually the middle movement, the ballad is the contrast to the bombastic drum corps style in other movements. Lyrical horn soloists and/or front ensemble features are common.

Closer: the final movement of a show, designed to come to a satisfying and wholly electrifying conclusion both from a musical, visual, and narrative standpoint.

Outro: Optional ending of a show that is a “tag ending." Follows a loud, ‘typical’ drum corps ending, often with a softer and quieter mood.
BIBLIOGRAPHY


@Edgysmedgy Twitter post, August 11, 2019, 11:29 A.M. https://twitter.com/edgysmedgy


Heisler, Cole. Comment on “The Pit on the Field” Facebook, July 1, 2019.


Kneuer, Donald. Comment on “The Boston Crusaders” Facebook, July 21, 2019


Liebermann Evans, Linda. Comment on "Three Thoughts," Facebook, August 16, 2019


“Violin Concerto "Winter/L’Inverno" in F minor, Op. 8, No. 4 -Vivaldi (Score)”, Youtube video, 10:02, "Roc Vela", https://www.youtube.com/watch?v=bYNDA0MT4Qk


Volkman, Dave. “I am leaving this group…” Facebook, June 3, 2019


INTERVIEWS

Ancona, James. Phone Interview with author. October 14, 2019.


Dinkel, Brian. Phone Interview with author. December 6, 2019.

Jordan, Matthew. Phone Interview with author. September 27, 2019.


Smith, Nina. Written communication with author. September 6, 2019.
