The Amplification Controversy in Drum Corps International: Technological Change and the Meaning of Tradition

Erin K. Maher

A thesis submitted to the faculty of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Master of Arts in the Department of Music.

Chapel Hill 2011

Approved by:

Mark Katz

David García

Phil Vandermeer

ABSTRACT

ERIN K. MAHER: The Amplification Controversy in Drum Corps International:
Technological Change and the Meaning of Tradition
(Under the direction of Mark Katz)

Drum Corps International (DCI), the principal organization for competitive drum and bugle corps in the United States, caused controversy in 2003 when the Board of Directors voted to legalize amplification of voices and certain instruments. Before this ruling, DCI had not allowed any electronic technology in competitive performance. Supporters of amplification viewed it as a way to expand creative possibilities and make drum corps more viable in the twenty-first century, while many opponents considered it a threat to the future of drum corps as a unique activity with a strong connection to its history and traditions. In this thesis, I situate the recent controversy in the history of technological change and resistance in drum corps, examine the ideology and values behind the amplification ruling and the varied responses to it, and consider intersections between ideological and practical issues in the way this technology has been implemented.

ACKNOWLEDGEMENTS

I would like to thank my advisor, Mark Katz, for his guidance, patience, and interest in this project. I also thank the other members of my committee, David García and Phil Vandermeer. I am extremely grateful to George Hopkins, Jeff Fiedler, and Ken Mason for taking the time to share their special insight with me. My brother Brian was also an invaluable source of insider information. Above all, I thank my father, the biggest drum corps fan I know. I could not have done this project without his generous help (or his incredibly useful website).

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INTRODUCTION

In the summer of 2004, spectators attending Drum Corps International competitions may have noticed something different. The groups marching in formations on the football field were still playing the familiar brass and percussion instruments of drum and bugle corps, but for the first time, some of them used electronic speakers to amplify the front ensemble, the stationary part of the percussion section. Two corps also amplified the voices of individual members to add singing and speech to their shows. This was the first time any kind of electronic equipment had been sanctioned for DCI competition, and for many in the drum corps community, it was not just a technological or aesthetic change, but one with fundamental ideological implications about what drum corps is and should be.²

Even before the 2004 competition season, the prospect of amplification in DCI was a subject of heated debate. The rule legalizing it was passed in January 2003 after more than a decade of unsuccessful proposals by George Hopkins, the director of a highly successful DCI corps called the Cadets. Both supporters and opponents of the rule justified their positions in terms of aesthetics, economic realities, and the traditions, identity, and purpose of drum corps. This was hardly the first time a change in drum corps competition rules had sparked controversy; in fact, it came after decades of tension between traditionalists and innovators, which made drum corps what it is today. In this study, I situate the recent controversy over

¹ "Drum and bugle corps" and "drum corps" are essentially equivalent terms; the latter is much more common in everyday usage.

² By "drum corps community," I include participants, alumni, staff, fans, and anyone else with an involvement in the activity. Dennis E. Cole uses this term in the same way in his dissertation (see below).

amplification in the context of this history of tension, then consider relationships between the practical and ideological aspects of the amplification debate.

The existing scholarly work on drum corps is very limited, but Dennis E. Cole's recent dissertation, titled "What Is a Drum Corps? Reinterpreting Traditions Inside the Musical Community," provides a valuable examination of the ideological polarization within DCI.³ Cole combines a historical view of the activity with observation of one DCI corps to show the roots and current state of this polarization. He includes the amplification debate as a recent manifestation of conflict, but places more of a focus on previous changes. As in Cole's work, my main source of information about the history of drum corps is a two-volume publication, *A History of Drum and Bugle Corps*, edited by Steve Vickers of *Drum Corps World* Magazine and published in 2002 and 2003. Written for a specialized audience of drum corps fans, it contains a wealth of information about drum corps in the twentieth century.

By the time of the amplification decision, drum corps was already far removed from its origins in many respects. Modern drum and bugle corps developed out of military traditions in the early twentieth century. These outdoor performing ensembles originally consisted of valveless bugles and battery percussion (snare drums, tenor drums, bass drums, and cymbals). They marched and played in a military-influenced style, and the repertoire was made up of marches and well-known songs in straightforward arrangements. Over decades of incremental changes, each one controversial at the time, the instrumentation evolved without extending beyond brass and percussion. Today's corps use fully chromatic brass instruments and an expanded percussion section that includes a range of orchestral percussion (in the non-marching front ensemble) in addition to the battery. The emphasis on professionalism

³ Dennis E. Cole, "What is a Drum and Bugle Corps? Reinterpreting Traditions Inside the Musical Community" (Ph.D. diss, Kent State University, 2009).

and technical proficiency has vastly increased, transforming what was once an activity for amateurs. Higher expectations for performance, developments in instrumentation, and a move away from some of the more restrictive military-derived traditions have contributed to a significant shift in how drum corps looks and sounds. The musical repertoire has broadened, the arrangements have become more complex, and the possibilities for visual design have expanded.

The technical and musical demands on the performers are much higher now than they were decades ago, but the type of person who typically joins a junior drum corps has also changed. In the beginning, it was a strictly amateur activity; most members did not read music, and many joined before learning to play their instruments. The purpose of junior corps was to give young people something positive to participate in, not to achieve a high level of performance. Now, potential members have to go through an audition process, and even in small local corps, they are expected to be proficient on their instruments when they enter.

Drum corps still has an educational purpose, but on a different level; many members today are or will be college music majors, and a number of them go on to be music educators.

The institutions of drum corps have also changed significantly. From the 1920s to the 1960s, most corps were sponsored by veterans' organizations, churches, schools, and other community groups, with the veterans' organizations having the most power to hold competitions and make decisions about rules. Many of today's competitive corps can trace their origins to this period. At its peak in the 1960s, there were around a thousand active drum corps in the United States; this number has declined significantly since then as the activity has become less connected to local communities and more focused on national competition, making it increasingly difficult for smaller corps to continue to operate. Drum

Corps International was founded in 1972 as an organizing body for junior corps, groups which only allow members under the age of 22.⁴ Created as an alternative to the tight control of the veterans' organizations, DCI is now by far the most prominent drum corps organization in the world.⁵ DCI corps compete over an eight-week touring season which ends with the "World Championships" in August.⁶ Each corps presents an eleven-minute show which is evaluated by a panel of judges, each one scoring a different aspect of the performance.

The uniqueness of drum corps as a type of musical and visual performance is, for many, a large part of its appeal. This explains the high level of anxiety in some sectors of the drum corps community about its increasing similarity to its closest analogue in American culture: high school and college marching band. While a casual observer may see little difference between the two, aside from the lack of woodwinds in drum corps, the distinctions are very important to many in the community, even those who enjoy marching band as well. 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. Particularly for former participants, the idea that drum corps is losing its connection to its own history can be troubling. Amplification, which was used in marching bands long before drum corps, is seen as a step toward the day when the two will be completely indistinguishable.

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⁴ Drum Corps Associates, founded in 1963, is DCI's counterpart for senior corps, which have no age restrictions. Despite the word "international," almost all of the corps in DCI's history have been based in the United States.

⁵ The activity does have some presence outside the United States with organizations such as Drum Corps Europe, but is primarily an American phenomenon.

⁶ There are multiple competition levels within the organization. Currently, DCI is divided into "World Class" and "Open Class," replacing the three-division system that was previously in place. Because my research is focused on the period before the "World Class"/"Open Class" system, I will refer to Divisions I, II, and III. Division I/World Class receives much more attention than the lower-ranked competition classes; accordingly, this study is primarily concerned with the top-ranked corps.

I come to this subject as both an insider and an outsider. I never marched in a drum corps myself; as a flute player, I would have had to learn a new instrument, and the idea of sleeping on buses and school gym floors for a whole summer did not appeal to me in the least. However, I am, quite literally, a life-long fan. I attended my first DCI show in August 1986, when I was only three months old, and I went to at least one competition every summer through 2009. My family is closely connected to the activity. My father, Christopher Maher, marched in a small corps in New York in the early 1970s and continues to follow drum corps closely. In the 1990s, he started an online database of drum corps repertoires and scores, and he also photographs drum corps and marching band competitions. 8 My brother Brian, a percussionist like our father, started in the Lehigh Valley Knights, a now-defunct Division III corps from eastern Pennsylvania, in the 2002 season; after three years there, he joined the Crossmen, a Division I corps. He marched with the first-place corps in both 2008 and 2009, Phantom Regiment (Rockford, IL) and the Blue Devils (Concord, CA). 10 As a front ensemble performer during these years, he experienced the introduction of amplification first-hand. In 2006, his voice was even amplified as part of the Crossmen's radio-themed show. As I have worked on this project, my family has been an invaluable source of information, opinions, and contacts.

The amplification controversy cannot be understood without viewing it in the context of drum corps history. Far from being an isolated incident, it is a manifestation of tensions

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⁷ I did participate in marching band for eight years, though.

⁸ Christopher Maher, et al., CorpsReps.com: The Drum Corps Repertoire Database, http://www.corpsreps.com.

⁹ The Crossmen were based in Allentown, PA, but moved to San Antonio, TX after the 2006 season.

¹⁰ Although the front ensemble members do not march, per se, the term is commonly used to refer to participation in a drum corps.

that have existed in some form for decades. Today's drum corps is very different in many ways from its beginnings in the early twentieth century, and every step away from the status quo has been met with resistance from some members of the community.

In Chapter I, I present a history of drum corps centered on these points of change and resistance. Drum corps is an activity strongly rooted in the idea of tradition, but there is no single consensus as to what that means or how important it should be relative to other goals. Dennis Cole sees the formation of DCI in 1972 as a turning point for the identity of drum corps and its relationship to its own history. DCI was an intentional break from tradition at the time of its founding, and it has facilitated other changes. Chapter II covers the circumstances of and responses to the rules allowing amplification and electronic instruments, illuminating the conflicts of interest that generate tension between different segments of the drum corps community. In Chapter III, "Sound, Performance, and Values," I examine some of the ways in which amplification has changed drum corps, considering both practical and ideological factors. Introducing electronic technology to this formerly all-acoustic medium did much more than make the music louder.

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¹¹ Cole, "Reinterpreting Traditions," 3.

CHAPTER I A Century of Change

The recent debates over amplification and electronics are best understood in the context of the history of drum corps. The gradual change in brass and percussion instruments was met with resistance at every step, establishing a pattern that continues to this day. Resistance to amplification is fundamentally tied to anxieties about the direction in which drum corps is progressing, both as an art form and as an institution. Shows have changed significantly in terms of repertoire selection, arranging techniques, thematic content, and visual design; amplification and electronics have reinforced existing trends in these areas and facilitated further changes. As for institutions, one key point of contention is the increasing reliance of DCI corps on corporate sponsorship by manufacturers of instruments and equipment. Corporations have influenced drum corps since the beginning, but it now happens on a much larger scale. While this has allowed corps to get higher-quality equipment at reduced costs, it raises suspicions about the degree to which this funding model controls what is used. Another issue is the perception that drum corps is on its way to becoming virtually indistinguishable from marching band. Many drum corps fans, even those who also have connections to marching bands, value the distinct identity of drum corps and see the perceived blurring of the difference between the two as a threat to that.

Central to all of these arguments is the question of the identity of drum corps. This issue, the focus of Dennis Cole's recent dissertation, is not a simple one. Cole suggests that "it is the inability of the [drum corps] community to properly define itself and its traditions, a

problem perpetuated through the ongoing reinterpretation of cultural elements (i.e., values, beliefs, and ideologies, etc.), that is contributing to the fundamental divide among its participants." The multifaceted conflict behind the amplification debate does seem like an insurmountable obstacle to a unified drum corps identity, if such a thing is even conceivable, but its roots go back to the beginning of drum corps. In this chapter, I present an overview of the history of changes to the instrumentation and institutions of drum corps leading up to the introduction of amplification in 2003-2004. In so doing, I will introduce some of the primary aesthetic and ideological issues that drive conflicting concepts of drum corps tradition and identity.

Origins

Today's drum and bugle corps traces its origins to the years after World War I, when local branches of the veterans' organizations Veterans of Foreign Wars (VFW) and the newly-founded American Legion (AL) began to sponsor corps. These veterans sought ways of engaging with their communities while maintaining a connection to military traditions and values. Drum corps served this dual purpose, adapting a military performance tradition to civilian life. Drums and bugles had long been used for both functional and ceremonial purposes in the military, but by the early twentieth century, technological advancements in communication such as telephones and radio had made the functional use of instruments for signaling essentially obsolete. These instruments continued to be used for ceremonial functions such as parades, and early civilian drum and bugle corps developed directly out of

¹² Cole, "Reinterpreting Traditions," 3-4.

this tradition.¹³ With the decline of field music within the military, instrument companies turned their marketing attention to the veterans' groups, selling both instruments and instructional manuals. Although the modern corporate sponsorship model would not develop for some time, instrument companies had a significant influence on drum corps from the beginning.

There had been amateur performing ensembles called "drum corps" before this, also driven by veterans. Music for drum corps was being written as early as 1896, when A. Austin Harding—a friend of John Philip Sousa—published "Bugle Rag," and instrument companies marketed to these ensembles. However, the national system of competition that developed in the 1920s and 1930s brought it to a new level and can accurately be considered the beginning of modern drum corps.

When the AL and VFW began to organize competitions as part of their annual national conventions, they had separate systems of rules. While the details differed, both were concerned with regulating the types of instruments that could be used, the appearance and behavior of the performers, and the structure of a performance. Some drum corps were sponsored by other civic organizations such as the Boy Scouts and the Catholic Church; this further complicated the situation. In 1932, the All-American Drum and Bugle Corps and Band Association was founded with the goals of developing a standardized rule system and ensuring consistency in judging. Anton Schlechta, one of the founders of the All-American, was a controversial figure, criticized for the broad scope of his power (particularly after he

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¹³ American marching bands and concert wind bands also have roots in military music, but to the more formal military band tradition rather than to field music.

¹⁴ Raphael Osheroff and Robert Zinko, "The Big Parade: The Veterans Organizations and the Drum and Bugle Corps Movement," in Steve Vickers, ed., *A History of Drum and Bugle Corps*, vol. 1 (Madison: Sights and Sounds, Inc., 2002), 31.

became the head of the VFW's contest committee in the 1940s) and his rigid control over the activity. Schlechta and the other All-American officials were decidedly reactionary in their vision for drum corps, resisting any attempts to move it farther away from its military origins.

Even with Schlechta as a perceived autocrat, the two veterans' organizations still were not unified in enforcement of the rules. Bob Brady, a harsh critic of Schlechta and his successor at the VFW, explained the difference:

The American Legion was more lenient than the VFW in terms of drill and cadences, but it was very, very adamant in terms of limiting the scope of the instruments available. On the other hand, the VFW was more concerned with the military aspects of the show and not so concerned about the expansion of the musicality.¹⁵

Over the years, opposition to Schlechta's restrictive approach grew. Many corps leaders and designers wanted the opportunity to leave behind some of the military formalities that limited their artistic freedom. The ultimate result of this discontent was the formation of Drum Corps Associates in 1963 and Drum Corps International in 1972. Before this, however, drum corps flourished in what is known as the "Golden Era." After a lull in competitions during World War II, a new generation of veterans returned to revitalize the activity. This period saw a proliferation of new corps and greater interest in competitions. Junior corps, which was still given less attention at the national competitions, was promoted as a way to "keep the kids off the street." Junior corps still has a strong ideology of self-improvement and personal growth alongside musical achievement. In the pre-DCI era, though, most members and even instructors had little or no formal training in music; this gradually changed as professional music educators began to get involved.

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¹⁵ Quoted in ibid., 47.

¹⁶ Lauren Vogel Weiss, "Development of Marching Percussion During the 20th Century," in Steve Vickers, ed., *A History of Drum and Bugle Corps*, vol. 1 (Madison: Sights and Sounds, Inc., 2002), 98.

Drum Corps International

Drum Corps International was founded in 1972 with the goal of allowing junior corps to operate autonomously, independent from the veterans' organizations. The founders were unhappy with the restrictions on performing style, the lack of consistency in the rules from one region to another, financial problems, and the difficulties of being governed by organizations whose primary purpose was not drum corps. The central leadership of DCI came, as it does today, from directors of participating corps rather than from an outside group.

For the first competition season, in the summer of 1972, DCI used the American Legion rules, but soon began to depart from them. The first meeting of the DCI Rules Congress "was attended by 325 people representing 75 drum and bugle corps, as well as several dozen drum and bugle corps associations and judges associations." While the primary task of DCI's leaders was to develop a viable organization, they obviously had musical concerns to address as well. The first decade of DCI saw important changes in both brass and percussion: the two-piston bugle and keyboard percussion instruments. DCI's independence from the American Legion, which had tried to restrict instrumentation, did not mean that these changes were made without opposition. Instrumental continuity is an important part of the identity of drum corps for many, and no change has been made without some measure of resistance.

Perhaps the biggest change of the DCI era is drum corps's transformation from a local to a national activity. ¹⁸ While there had been national championships for decades, individual

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¹⁷ William Howard, "Masters of Their Destiny—DCI is Established," in Steve Vickers, ed., *A History of Drum and Bugle Corps*, vol. 1 (Madison: Sights and Sounds, Inc., 2002), 323.

¹⁸ Or "international," technically.

corps had been closely tied to their communities. DCI's focus on national touring and competition changed this. The most significant effect of this shift of emphasis was a sharp reduction in the number of active corps, as it became much more difficult for a corps to sustain itself if it could not afford to tour nationally. DCI still includes corps which do not do a full national tour, in the Open Class, but there were once many more. Corps membership has also become less tied to geography; with the decrease in the number of corps and the increasingly competitive auditions, top DCI corps draw their membership from around the country. This has a considerable impact on the level of economic privilege required to participate in drum corps at the highest level.

Brass

Before 1929, the competition organizations had no official rules regulating the types of bugles that could be used. Whether or not an instrument was to be permitted in a competition was determined by the judges of that individual event, which sometimes led to corps arriving at a competition and not being allowed to perform. At this time, instrument companies such as Ludwig and Conn were attempting to market new types of bugles to drum corps, with small removable pieces of tubing called "crooks" to lower the pitch of the instrument and change its key. The VFW was quicker to accept this for competition than the American Legion. Dr. C. C. Hawke, a medical doctor who led the American Legion's contest supervisory committee, resisted most of the proposals, wanting to keep to a traditional definition of "bugle." However, he did allow the use of a "D" crook starting in the 1931 season, which would expand the range of available notes without changing the instrument too much. The cost of \$2.00 per crook was deemed reasonable, and Hawke felt that it would not

make the bugles too complicated for the untrained players who made up most of each brass section. He wrote, "Drum corps are not to be symphony orchestras. An untrained person is perfectly capable of using a crook." ¹⁹

At this time, most corps members did not read music and had little or no musical experience outside of drum corps. It was decidedly an amateur activity, and this had to be taken into account when making decisions about equipment. One fundamental change in drum corps from its beginnings to the present has been a complete reversal of the values placed on amateurism and professionalism. Early drum corps was not viewed as an activity for highly trained musicians, and its primary goals were community engagement and self-improvement rather than professional-level performance. Today, many corps members are college music majors with professional aspirations in the field, and the audition process requires high proficiency upon entrance. The gradual change from the basic valveless G bugle to today's B-flat trumpets can be seen as both a cause and a result of this move toward professional-quality performance, technical facility, and musical complexity.

Accepting the "D" crook did not mean that Hawke was open to other possibilities for change. He wrote: "There is a great fear from some that the introduction of the 'D' crook is merely a wedge for the future introduction of valve bugles and a wider variety of instrumentation. I can assure each one of you that *every member of the present committee* would vigorously oppose such action." This is a common refrain among those who have advocated or even reluctantly permitted changes to drum corps instrumentation—this far, but no further.

¹⁹ Osheroff and Zinko, "Big Parade," 37.

²⁰ ibid.

In the late 1950s, bugles with rotary (or "rotor") valves began to be used. This mechanism, like any type of valve on a brass instrument, allowed the performers to easily change the fundamental pitch of the instrument by a certain interval, making a fuller range of notes available. The American Legion legalized rotor valves for competition in response to the practice of using the tuning slides to change the pitch, lowering it by up to a whole step. This "slip-slide" technique had become increasingly popular over the course of the decade. This example shows that technological change in drum corps has not only come about as the result of official rules. Wanting to expand the range of possible pitches, performers used the existing equipment in ways not anticipated by either the manufacturers or the rule-makers. Once the effect of the "slip-slide" technique had become widespread and accepted, changing the construction of the bugles to make the effect easier to produce did not significantly alter the sound of drum corps. This phase of the gradual move toward full chromaticism was essentially user-driven.

Rotor valves were legalized without mandating a single standard configuration, and for most of the 1960s, a number of systems were in use simultaneously, some with rotors and some without. A "G-F" piston was devised especially for drum corps, in the hope that it would lead to standardization, but it took several years to be approved by the VFW and American Legion. This bugle used a whole-step piston valve and a half-step rotor valve, having the same effect on the pitch as the first two valves of an ordinary trumpet. The change, which Scooter Pirtle asserts was "arguably the most drastic change to ever occur to

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²¹ A brief explanation of piston and rotary valves: "In the modern piston valve, a piston moves up and down within a cylindrical casing. In a modern rotary valve, a rotor rotates on its own axis within a cylindrical casing. Both have exactly the same function. When the valve is at rest or in 'open' position, where it is held by a spring mechanism, the air column passes through one passage; but when the finger button or key controlling the valve is pressed, holes or depressions in the piston or rotor are aligned so as to bring another longer or sometimes shorter passage into play." *Harvard Dictionary of Music*, 4th ed., s.v. "Valve."

drum corps," was made by both organizations for implementation in the 1968 season.²² In the period of non-standardization, each configuration required a different fingering system; with the "G-F" bugle, the fingering was not only the same for everyone, but very similar to concert brass instruments. This changed not only the performance practice of drum corps brass players, but the relationship between drum corps and the "outside world" of music. Making it easier to move between drum corps and other performance contexts may attract more advanced musicians and improve the technical facility of a drum corps, but it takes away some of drum corps's connection to its origins and its claim to uniqueness.

The push for two-piston bugles began in 1975, several years after the formation of DCI. There was discussion of going straight to three-piston bugles; with the cost of replacing all of a corps's brass instruments, some felt that it would not be reasonable to adopt two-piston bugles, since it would only postpone the inevitable at additional cost to the corps. However, there was enough opposition to that idea that DCI rejected it, developing a proposal in 1977 that would introduce two-piston bugles gradually, starting with the soprano bugles and adding voices each year. The proposal, which succeeded, was accompanied by this message, ironic in retrospect: "Note: DCI would like to go on record as being permanently opposed to any three-valve instruments."

Despite that pronouncement, a proposal to allow three-piston bugles was first put forth at the December 1985 meeting of the DCI Rules Congress, but it was defeated "with applause from drum corps purists." In 1987, the proposal was defeated again, though it was

²² Scooter Pirtle, "The Evolution of the Bugle," in Steve Vickers, ed., *A History of Drum and Bugle Corps*, vol. 1 (Madison: Sights and Sounds, Inc., 2002), 77.

²³ ibid., 79.

²⁴ ibid., 80.

approved by the Brass Caucus this time. By the time it finally passed, in 1990, a sustained lobbying campaign by those in favor of the change—including DCI officials and instrument manufacturers—had softened opposition to it. The corps were given a three-year period to transition to the new instruments; during this time, some corps used both types in the same season as they gradually replaced the bugles according to available funds. Star of Indiana, which left DCI after the 1993 season, never competed with three-piston bugles.²⁵

Throughout this series of developments, the one constant was that, with the exception of some early experiments, the bugles were pitched in G. That changed in 2000 with the passage of the "any-key" rule. In practice, this meant a switch from G to B-flat, the type of horns used by marching bands and other ensembles. ²⁶ As with three-piston bugles, the move to B-flat horns took several years to be fully implemented, though each corps had to replace all of the instruments at once rather than doing it gradually. There was no official obligation to change; Pioneer, one of the smallest Division I corps, used G bugles through the 2007 season.

One reason for the change is that B-flat horns are said to allow better intonation and tone quality, in keeping with DCI's increasing emphasis on putting out refined, high-quality performances. Of course, some prefer the older sound; a common criticism is that B-flat horns do not allow as loud or full an ensemble sound as G bugles, and the aesthetic of polished performance is not universally valued. One contributor to the rec.arts.marching.drumcorps newsgroup posted this critique of a show in July 2001:

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²⁵ As an independent performing group later in the 1990s, Star of Indiana began using B-flat three-piston brass instruments before DCI did.

²⁶ As in marching band, mellophones in F are also used, but it is common to refer to the use of B-flat horns in DCI without mentioning this.

Cadets were the only multi-key horn line with any balance; surprisingly full, but only on sustained stuff. Mellos [mellophones] and lower voices disappeared when the notes got fast. I enjoyed their musical selections too. BD [Blue Devils] sounded to me like the worlds loudest transistor radio; all treble. No guts to the sound; loud, but thin. Ditto Cavaliers, and they lacked BD's definition and clarity of articulation. Polite, in tune, clean but boring. [...] The G's still have it, [in my opinion], and I am mystified that so few can hear the difference (or care).²⁷

More significant than any shift in timbre or technical possibilities, however, was the effect on DCI's place in the broader "marching music" community. The change eliminated the primary distinction between the brass instrumentation of drum corps and that of marching bands. Not long before the passage of the any-key rule, Pirtle wrote, "'G'-pitched instrumentation is considered by many to be the modern drum corps' very last tie with its heritage." While the three-valve instruments in use by the 1990s were already far removed from the idea of a "bugle" at the beginning of the century, they were often still referred to as such. Now, the regular names for the instruments in other performance contexts are more common. For example, some still call the highest brass instrument a "soprano bugle," but for many, it is a trumpet.

Jeff Fiedler, long-time director of the Cavaliers and current CEO of Santa Clara Vanguard, considers the any-key rule "the most profound change" in DCI's history. ²⁹ He originally opposed the proposal and worked to keep it from passing, but now sees it as an important step in the "evolution" of drum corps. Allowing members to use B-flat horns makes drum corps more accessible to people who play brass instruments in a marching band, facilitating a closer connection between the two activities. Dan Acheson, the executive

²⁷ Peter Bond <crbpcb@aol.com>, "Re.: B flat – G argument..." (2 July 2001), rec.arts.marching.drumcorps, http://groups.google.com/group/rec.arts.marching.drumcorps/msg/a4fc9055b2149fc1.

²⁸ Pirtle, "Evolution of the Bugle," 82.

²⁹ Interview with the author, 27 February 2011.

director of DCI, said in 2007: "The inclusion of B-flat instruments has made all the difference in the world in legitimizing our position in the world of music. [...] A young person can bring his own trumpet to a drum corps rehearsal. And while some real traditionalists may [shudder] at that, it was huge for the activity." Acheson's concept of "legitimacy" for drum corps is defined by its level of connection to the broader "world of music." As I will discuss in Chapter III, the conflict in the drum corps community can be viewed as tension between externally- and internally-focused concepts of legitimacy—is drum corps more "legitimate" when it is taken seriously by those outside the community, or when it stays true to its own traditions and values?

The "any-key" rule also changed the relationship between drum corps and instrument manufacturers, since DCI had been the primary market for G bugles. Pirtle made this prediction before the switch: "If abandoned, there's little doubt that the market for 'G' instruments would be negatively impacted. Corps would be faced with paying market prices for standard marching instruments (often twice as expensive as current 'G' pitched instruments)." In actuality, instrument companies have struck sponsorship deals with drum corps, allowing them to purchase instruments at lower prices in exchange for advertising. This arrangement is not ideal for all corps; the more successful corps, which already have bigger budgets, are able to secure better deals than smaller, less prominent corps. The same has occurred with amplification equipment, and this is one reason why opposition to amplification was stronger among directors of smaller corps.

³⁰ Quoted in Mike Ferlazzo, "Modern instrumentation defines the drum corps sound," *Drum Corps World* 36, no. 16 (December 2007), http://www.drumcorpsworld.com/articles.cfm?ID=681.

³¹ Pirtle, "Evolution of the Bugle," 82.

Percussion

Drum corps percussion sections are divided into two groups, the battery and the front ensemble, which fill different musical and visual roles. The battery consists of non-melodic drums—snare, tenor, bass, and occasionally cymbals—and the performers march in the drill along with the brass section. The front ensemble, also called the "pit," is stationed at the front of the field. Melodic keyboard percussion instruments make up the core of the pit, but it also includes timpani, other types of percussion, and now electronic instruments. The front ensemble is a relatively recent addition to drum corps; it originally developed for practical reasons, but has become a key element of drum corps arrangements and is the focus of the amplification issue.

Before the front ensemble, all instruments had to be carried by the performers, and until the late 1960s, drum corps percussion was restricted to traditional battery instruments. The American Legion began to allow timpani in 1968; each drum was carried by a different performer, since every instrument had to be played while marching. Carrying such large drums was physically difficult and known to have caused injury. Marching bells and xylophone were permitted beginning in 1974, followed by marimba and vibraphone in 1978. These were, by necessity, much smaller than concert instruments, since they also needed to be carried while marching. The size of the instruments and the awkwardness of having them harnessed to the players limited what could be written for them.

A trend toward more complex drill made it even more difficult for these percussionists to participate fully in marching; show designs tended to allow them to remain relatively stationary near the 50-yard line. The next step was to remove the requirement that these instruments be on the field during performance. Starting in 1982, timpani could be

"grounded" in front of the field; the following year, keyboard instruments were allowed to be grounded as well. This was the beginning of the front ensemble. Making these instruments stationary not only relieved the performers of the physical burden of carrying them, but fundamentally changed the role of non-battery percussion in the ensemble. Corps could use higher-quality instruments with a wider range of notes, and the performers could use more advanced playing techniques that are difficult or impossible to do while marching. This had a considerable impact on arranging; the pit effectively became a section of its own, alongside the brass and battery percussion. Front ensembles have increased in size, with a corresponding decrease in the size of the battery. The instrumentation has expanded to include auxiliary percussion instruments. If the pit had never developed into an independent section, it is likely that drum corps would remain unamplified today.

In loud brass passages before amplification, the members of the pit would usually only play loud, non-pitched instruments such as cymbals, because a marimba or vibraphone would simply not be heard above the brass. Now, arrangers can choose to give the pit a more prominent role regardless of the volume of the brass. Amplification has also opened up the option to use non-traditional percussion instruments or effects that cannot be heard unless they are amplified. For example, the Cavaliers incorporated whistling and finger-snapping into their James Bond-themed show in 2004, and Capital Regiment used a typewriter in the opening section of their 2006 show, "Life Rhythms: Work, Rest, Play."

Since 2009, electronic instruments such as synthesizers have been allowed in the pit.

DCI arrangers who also work for marching bands, as many of them do, brought an established repertory of techniques for incorporating electronic instruments into an arrangement. One widely-adopted—but controversial—technique is to use the synthesizer to

reinforce the low end of the brass sound. It has also been used to add the sound of instruments that are not permitted in competition or would not be practical. Piano sounds have become relatively common, as in the Blue Devils' 2009 show, where it was used for Aaron Copland's *Piano Variations*. Sampled sounds are also allowed, as long as each sound is triggered by a separate attack on the instrument. A distinction is made between musical and non-musical sounds; for example, a recording of someone speaking a sentence is considered one "sound" and would be permitted, but a recording of someone singing would not be allowed unless each individual note was triggered by a separate attack.³²

Electronic instruments had been used in DCI before 2009, though not legally. In the DCI championship semifinals of 1985, several years before the first unsuccessful amplification proposal, the Boston Crusaders intentionally transgressed the ban on electronics by using a synthesizer in one section of their show. Knowing that this could lead to a penalty of up to four points if used in competition, the corps had decided to wait until the very end of the season to introduce the synthesizer. The two-point penalty they received at the semifinals caused the corps to place 20th instead of 19th; since only the top twelve corps go on to the finals, this did not affect their standing in any significant way. DCI corps also experimented with the voice, though unamplified. In 1977, at a time when no vocalizing of any kind was permitted in DCI competition, the Cadets (then known as the Garfield Cadets) received a one-point penalty for ending their performance of "I Don't Know How to Love"

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 $^{^{32}}$ See the "Electronic Instruments" section in Chapter II for more on this.

³³ Mike Ferlazzo, "Part 1: Evaluating Electronics – Directors, designers see creative options, expense with electronics," *Drum Corps World* (December 2009), http://www.drumcorpsworld.com/articles.cfm?ID=790.

³⁴ Christopher Maher et al., CorpsReps.com, http://www.corpsreps.com/scores.cfm?view=scoreshow&showid=1985137.

Him" from *Jesus Christ Superstar* with the corps singing "Amen." Like earlier experiments with banned types of bugles, these examples show that the official competition rules do not always completely control what can happen in a performance.

Performance Style

Until the 1950s, parades were the most common type of drum corps performance. While they would often take place in a stadium, corps would usually march in straight lines rather than doing drill on the field.³⁶ In the "Golden Era," field shows with patterned drill became the norm. The move away from the parade-focused mentality facilitated musical changes as well as visual ones. On the visual side, drill has grown increasingly complex, with the introduction of asymmetrical drill in the early 1980s opening up new possibilities. This has also allowed for more integration of the musical and visual elements in a show. The color guard, a relic of drum corps's roots in military parades, has developed into an important part of the visual presentation, with movements heavily influenced by ballet and modern dance. To a lesser extent, dance techniques have also become part of the movement of the brass and percussion players. Today's color guards use multiple sets of flags and other equipment in the course of a performance, often with thematic relationships to the music and the concept behind the show. One important musical development that can be credited to the field show is the front ensemble. Making the field—rather than the parade route—the site for performance allowed for different conceptions of how that space could be used.

³⁵ Rosalie Sward, "How Musical and Visual Design has Evolved," in Steve Vickers, ed., *A History of Drum and Bugle Corps*, vol. 1 (Madison: Sights and Sounds, Inc., 2002), 128.

³⁶ Dennis Cole speculates that the use of stadiums may have been a solution to the traffic problems caused by holding a parade with a large crowd on city streets. Cole, "Reinterpreting Traditions," 61.

In the past forty years, drum corps has changed significantly in the aesthetics of show design and performance. DCI was founded in part due to the desire to break away from the constraints the veterans' organizations placed on drum corps, which included restrictions on repertoire and performing style. In the early years of DCI, a typical drum corps performance would involve a series of well-known songs, marches, and classical or jazz pieces without any overt connection between them. The 1980s saw a move away from this "variety show" approach and toward shows in which all of the music was connected by a theme. In the 1990s, show designers aimed to integrate music and visuals to a greater degree, continuing the trend toward conceptual unity. Today, some corps commission original music instead of or in addition to using arrangements, and the common style of arranging tends to obscure even well-known material. ³⁷ The use of fully chromatic brass instruments allowed this increase in musical complexity to occur. Modern show design aligns with DCI's goal of highlighting advanced technical ability and artistic sophistication, but for those who preferred straightforward shows with recognizable music, today's DCI shows are esoteric and fail as entertainment. The idea that drum corps is alienating its audience is not a new one; a 1974 article by Clarence Bozell proclaimed:

For the Spectator, the 1974 drum and bugle corps field competition season must surely represent the summer of his discontent. Never before has the mass of spectator reaction been so universally negative; at best, the dedicated corps watcher's response is one of disappointment and lacking in the enthusiasm that once was so much a part of witnessing the ultimate reality that fired his imagination, his emotions, his passionate fervor.³⁸

³⁷ For detailed explanations of these "stylistic periods," including those from before the founding of DCI, see Cole, "Reinterpreting Traditions," 128-142.

³⁸ Clarence A. Bozell, "On the Role of the Spectator" (1974). Source unknown; copied to rec.arts.marching.drumcorps by Ron Allard (26 July 2003), http://groups.google.com/group/rec.arts.marching.drumcorps/msg/56b5c1cff025f390.

Drum Corps and Marching Band

As previously stated, a common source of worry among today's traditionalists is the perception that drum corps is becoming indistinguishable from high school and college marching bands. While some of them attend band competitions or even teach bands, they value the distinctions between the two types of ensemble. Instrumentation is a significant part of this—marching bands include woodwinds and other instruments that are not permitted in drum corps. Marching band has also been much quicker to introduce new technologies; with no one central competition organization, there is more freedom to experiment. By the time amplification was introduced to drum corps, bands had been using it for several decades.

Modern drum corps is also seen by its proponents as a more elite activity with higher standards for performance. This was not always the case; before DCI, band directors generally ignored drum corps or considered it to be inferior. Rosalie Sward credits the live broadcasts of the DCI World Championships on PBS with bringing drum corps to a wider audience that included marching band members and directors.³⁹ These broadcasts began in 1975; around this time, some band directors began to see drum corps as something to emulate, and "corps-style" marching band developed. Rather than presenting a new show every week for the football crowd at halftime, corps-style bands spend the whole season refining a single show, performing it not only at football games, but at organized competitions against other marching bands. While some band directors resisted this, feeling that the increased focus on competition ran contrary to appropriate educational goals, DCI

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³⁹ In 2005, the championships broadcast moved to ESPN, where it was shown several weeks after the event rather than live. This lasted for only three years before being discontinued for financial reasons.

became a consciously-adopted model for many bands across the country. ⁴⁰ Drum corps instructors and arrangers began to be hired by marching bands, and some bands even recreated specific drum corps shows.

No matter how close drum corps and marching band become in terms of style and performance practice, a fundamental distinction between the two remains: marching bands are part of school music programs, while DCI corps almost never have direct connections to a school. Whereas a marching band must operate within the limits of the school calendar and the students' other responsibilities, participating in a high-level drum corps is a full-time commitment. After monthly weekend camps in the winter, participants move in for "spring training"—full-day rehearsals—in May, with the competition tour beginning in late June and running through mid-August. A marching band simply cannot require this level of commitment from its members.

It is clear that drum corps has not simply been "corrupted" by marching band, although it is true that the two have developed a close connection. Sward summarizes this mutually influential relationship: "Today the sophistication level of the marching band is high because of the influence of drum and bugle corps in the 1970s and the quality of drum and bugle corps performances is high because of the influx of students from marching bands, with the top instructors and designers contributing to both."⁴¹

In recent years, only one of the top DCI corps has been directly sponsored by a university, a temporary arrangement that has now ended.⁴² However, the fact that drum corps

Sward, "Musical and Visual Design," 9

⁴⁰ For an example of the argument against "corps style" marching band, see Paul K. Garrison, "The Value of Marching Band," *Music Educators Journal* 72, no. 5 (1986): 48-52.

⁴¹ Sward, "Musical and Visual Design," 99.

⁴² Spirit of Atlanta, which took the name "Spirit from Jacksonville State University" during its years of formal association with the Alabama school (2001-2008).

and marching band now involve many of the same people has led to other types of associations between the two, both official and unofficial. DCI's recent official promotional materials have downplayed the difference; the organization's new slogan, "Marching Music's Major League," seems to suggest that while drum corps may still be superior to marching band, it is not a fundamentally different activity. Youth Education in the Arts (YEA!) is an organization which runs both one of the top drum corps (The Cadets) and one of the primary marching band competition circuits (the US Scholastic Band Association, or USSBA). George Hopkins, the director of both YEA! and The Cadets, has been a high-profile advocate for increased connections between all "marching music" activities, and for the "modernization" of drum corps in general. He submitted proposals for amplification in DCI for over a decade before it was approved, and he continues to push for other changes. Hopkins's approach is controversial, and distaste for his vision for DCI drives some of the resistance to amplification. While he is hardly the only person working to move DCI closer to marching band in this way, he is often singled out for blame due to his outspokenness and level of influence.

By the time the amplification rule passed in 2003, many aspects of drum corps bore little resemblance to anything that was done seventy or eighty years earlier. This record of change is important not only as part of the story of how drum corps came to be what it is today, but as evidence of competing ideological strands of traditionalism and progressivism in this community that far predate recent debates. It also shows that changes in drum corps rules and performance practice involve many different agents, not just those who vote on the competition rules, and are shaped by ideological, artistic, and practical concerns. The long,

drawn-out move from valveless bugles to standard modern brass instruments, for instance, was directed by the actions of organization officials, performers and instructors, arrangers, and instrument manufacturers and marketers, among others. Stadium performances, without which drum corps would be very different, likely developed as a result of practical considerations in an urban environment. The front ensemble began as a solution to the logistical problem of marching with large percussion instruments, but quickly became an integral part of the drum corps sound. The uneasy relationship between drum corps and marching band directly involves drum corps "outsiders," as well as the many with one foot in each world. Amplification in DCI also involves complex intersections of agents and motivations, both in the rule's initial implementation and in the way it has changed drum corps since then. The following two chapters examine the rules and their effects, focusing on the competing value systems that made them so controversial.

CHAPTER II The Amplification Rule

The passage of the amplification rule in 2003 came as no surprise to anyone who had been following the activities of the DCI administration. George Hopkins submitted his first proposal for amplification and electronic instruments in 1989, in the midst of the push for three-valve bugles. Over the next decade, he tried again every year, but the proposal never even made it to a vote by the Board of Directors, the final step in passing an alteration to the rule book. The "any-key brass" rule passed in 2000, but amplification and electronics were still rejected year after year. From the beginning, the amplification issue was tied to the introduction of electronic instruments, which would need to be amplified to be heard. It was only when the two were separated that amplification received enough support to be approved by the DCI Board of Directors in 2003. It would take another five years for electronic instruments to be approved.

2002: Amplification and Electronics Nearly Pass

In 2002, Hopkins's proposal was passed by the DCI Rules Congress for the first time. Though it ultimately failed in the Board of Directors vote, this was the closest it had ever come to passing. The text of this version of the proposal includes extended commentary explaining Hopkins's point of view and how he believed amplification and electronics would improve drum corps. While it did not pass in this form, it provides an illuminating look at

Hopkins's vision for drum corps and shows the degree to which amplification and electronics were connected before the successful amplification-only proposal a year later.

The title reflects Hopkins's long history of making amplification proposals that were rejected: "An Annual Exercise: The 2002 Version --- Effort #12 (I do believe)." Hopkins, an outspoken advocate for increased connections between all "marching music" activities, signals his position by placing this heading under the title: "The Presentation for Proposals Allowing the use of Electronic Instruments and Amplification within the Marching Music Idiom Fondly called, 'Drum and Bugle Corps." Identifying drum corps first as a "marching music idiom" and only then as "drum and bugle corps" indicates that he places importance on the generic category, which also includes marching band, and does not think of drum corps as something fundamentally different.

This proposal would have legalized electronic instruments as well as the amplification of acoustic pit instruments and voice. Sampling—using an electronic instrument to trigger a previously recorded sound—would be permitted. However, the "one stroke equals one response" rule would prohibit sequencing, in which a series of sounds is activated with one attack on the instrument. Hopkins does not give a precise indication of the types of electronic instruments that would be allowed, though he explicitly excludes guitars and wind instruments. He writes: "What can be used would include, but not be limited to electronic keyboards and electronic drum machines. The intention of the rule is to allow for the inclusion of those instruments within the percussion field that have risen with the growth

⁴³ George Hopkins, "Full text of DCI rules change proposal," *Drum Corps World* (January 2002), http://www.drumcorpsworld.com/2002/0118_rule.cfm.

⁴⁴ Guitars are now allowed, as of the 2009 season. Spirit's rock-theme show in that year included an electric bass in the pit.

of electronic music." He describes these changes as "the basics" and expresses an interest in expanding the options in the future.

Hopkins rejects the idea, expressed by those who want to maintain drum corps's limited range of instruments and technology, that limitations lead to greater creativity. Instead, he believes that drum corps will be better as an art form if show creators have a wider range of options. He describes his frustration with the existing limits on sound and expression:

I have tried to tell stories without words, I have worked to balance acoustic sounds that are not meant to be balanced, and yes I have lived a life without the inclusion of percussion accessories. I have pretended to hear the Latin Percussion on the front sideline, I have watched in admiration as keyboard players perfect the art of overhead slams, I have prayed in vain for the sound of a saxophone in a grand jazz ballad, and I have wished to be able to direct the audience to the intention of a magnificent idea.⁴⁵

In this paragraph, Hopkins describes, from the point of view of a corps director and a spectator, some perceived shortcomings of drum corps that he feels could be improved by removing some of the limits on instrumentation and technology. Amplification changes the balance of the ensemble, making the pit—naturally the quietest section—more audible. By "overhead slams," he is describing the exaggerated playing technique keyboard percussionists used to achieve higher dynamic levels. He even looks ahead to the introduction of woodwind instruments such as saxophones. This idea is still very unpopular, even among people who have accepted amplification, but for him, it would further expand creative options, allow more people to participate in drum corps, and support his goal of a united "marching music." While he recognizes that continuity of instrumentation is a fundamental part of drum corps tradition and identity for many, his artistic and institutional aims for DCI would lead it down a different path.

⁴⁵ Hopkins, "Rules change proposal."

Aside from issues of balance and timbre, one of Hopkins's primary concerns is the transmission of meaning to the audience. Amplified voice and sampling allow for language and "real-world" sounds, which enable show designers to communicate ideas in a more direct and literal way. In a list of potential benefits of amplification and electronics, Hopkins envisions "a show about America, where the words and quotes of great men and women are included within the production" and writes, "I would like to hear a show about water, and be able to hear the crash of the waves interspersed with music."46 For him, drum corps would be enhanced by a greater sonic connection to extramusical concepts. Before amplification and electronics, it was certainly possible to create references to specific sounds, but it had to be done with the existing instrumentation. For example, when Santa Clara Vanguard did a show based on the musical *Miss Saigon* in 1991, they created a "helicopter" effect using the drums. Aside from these cases, though, the visual elements of a drum corps show—particularly the color guard—were the primary means of making explicit extramusical associations. Amplification allowed some expansion of this, particularly with spoken narration, but sampled sound made a bigger difference in the ways a drum corps show can communicate with an audience.

Reactions

Recognizing that the Board of Directors only included representatives from Division I corps, but that the amplification/electronics decision would affect Division II/III corps as well, the magazine Drum Corps World polled directors of Division II/III corps before the 2002 board meeting to find out how they would vote if they could:

⁴⁶ ibid.

Pit amplification: 8 yes, 13 no.

Electronic instruments: 6 yes, 15 no.⁴⁷

While this was presented as a solid rejection of the proposal, the proportion of "yes" to "no" votes for pit amplification in this poll was actually higher than the results of the Board of Directors vote, where only five of the nineteen members present voted yes. Pat Seidling, then the director of Phantom Regiment, described the ambivalence that led to some of the "no" votes: "It was like, '50-50, leaning toward no.' I had a feeling that a good number of the board members had mixed feelings. We wanted to be sensitive to our fan base but still have an open mind." 48

Seidling correctly perceived that the "fan base" would be resistant to this change. A lengthy discussion on the rec.arts.marching.drumcorps news group (RAMD) developed in the days between the Rules Congress and Board of Directors votes, and the participants took an almost exclusively negative view of the decision by the Rules Congress. 49 Many of these comments reflect the perception that this change was inevitable, forced on a reluctant fan base by an organization that was concerned only with its own power and had lost touch with—or was intentionally destroying—drum corps tradition. One of the first responses read: "Knew it was coming; they told us it was coming. Obviously, there was nothing that could be done; they'll do what they want." 50

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⁴⁷ Ken Mason, "Division II/III directors would vote no," *Drum Corps World* (January 2002), http://www.drumcorpsworld.com/2002/0124 vote.cfm.

⁴⁸ Quoted in "DCI Board votes no on amplification, shelves electronics," *Drum Corps World* (January 2002), http://www.drumcorpsworld.com/2002/0127_dci.cfm.

⁴⁹ "Amplification and Electronics PASSES," rec.arts.marching.drumcorps, 14 January 2002, http://groups.google.com/group/rec.arts.marching.drumcorps/browse_thread/thread/cfdb8034d462e657/297646 5170387398.

^{50 &}lt;dbriggs@rochester.rr.com>, "Re: Amplification and Electronics PASSES" (14 January 2002), rec.arts.marching.drumcorps, http://groups.google.com/group/rec.arts.marching.drumcorps/msg/e7bb393140e1e2bb.

Drum corps alumni make up a large proportion of the active audience base, and this has a significant effect on the relationship of drum corps's present to its past, as well as the relationship between participants and spectators. In a survey of drum corps fans conducted in 2001 for *Drum Corps World*, 54.6% of respondents described themselves as former drum corps members, with another 25.4% identifying as current members.⁵¹ The survey did not ask specifically about membership in DCI corps, so the numbers include those who participated only in DCA as well.⁵² Survey participation was self-selected, so the results cannot be taken as a representation of the drum corps audience as a whole. However, the survey does indicate that among those whose interest in drum corps extends beyond attending shows to participating in Internet discussion communities and subscribing to *Drum Corps World*, alumni are heavily represented.

The tendency of drum corps participants to continue to attend shows and support the organizations is a significant factor in the tension between tradition and change. Many alumni are resistant to change, not wanting to see the activity become too different from what they first experienced. The same can be true of long-time fans who never marched, but nostalgia is likely to be stronger among those who did. Alumni are also more likely to have a defined concept of the identity and values of drum corps, based on their experiences. As time goes by, they may feel that drum corps is moving away from the values and traditions that they first came to know.

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⁵¹ Christopher Atkinson and Allison Close, "Part One: Methodology and Findings: 2001 *Drum Corps World* Fan and Reader Survey results," *Drum Corps World* (January 2002), http://www.drumcorpsworld.com/2002/0107_survey.cfm.

⁵² Most of the questions in the survey either ask about drum and bugle corps in general or about junior corps and senior corps (i.e. DCI and DCA) separately.

Because so much of DCI's money comes from private donations and sales of tickets and merchandise, maintaining a devoted audience is essential to its continued existence.

Older fans are both more likely to be resistant to change and to have more disposable income. They sometimes signal their displeasure by threatening to withhold support or stop attending shows. In one strongly-worded letter sent to DCI before the 2002 vote, four long-time fans threatened to rewrite their wills to keep any corps using amplification or electronic instruments from receiving any part of their estates.⁵³

Concerns about declining attendance at shows span the ideological spectrum. Hopkins and others supportive of technological change have made the argument that drum corps needs to reach a new audience if it is to survive; traditionalists would prefer to maintain and strengthen the existing audience. Hopkins's 2002 proposal explains his view that making drum corps more appealing to the members and fans of the future is a more important concern than the possibility of losing some of its established audience.

The Classic Audience of 1975 that continues to dominate some of today's conversation will not like this. These people want drum corps the way they remember it and I am very appreciative of this thought process. I too like drum corps as it was and is, but I am also aware that something needs to change.

This addition would change that product. The problem in catering to these people -they are a diminishing group in terms of numbers. Personally, I love them, I want to
make them leap from their seats, but for the sake of tomorrow, [...] we cannot use
this class of people only as the opinion makers for our performing groups.

RAMD [rec.arts.marching.drumcorps] will not care for this idea. Some Alumni will not care for this idea. Some fans will threaten their support and curse any action.

We need to move on in the face of vocal disagreement. It is our responsibility to create a tomorrow for the kids who want to be a part of this activity.⁵⁴

⁵³ "Letters to the Editor: Electronics and amplification," *Drum Corps World* (21 January 2002), http://drumcorpsworld.com/2002/0121 letter.cfm.

⁵⁴ Hopkins, "Rules change proposal."

Though there is certainly a generational element to the amplification controversy and other drum corps debates, a person's age and the year of his or her first involvement with drum corps are not the only factors. Observing a photograph of two younger men wearing "Keep Drum Corps Unplugged" t-shirts at the 2008 DCI championships, Dennis Cole notes that "the conflict between traditionalists and innovators is not necessarily based on a participant's age but rather [...] a specific ideology." One of Hopkins's stated goals is to draw young people to the activity, but it is easy to find young participants and fans who use the same arguments against amplification as older traditionalists, though without the first-hand experience of an earlier era.

Hopkins himself first marched in 1968 and continued through the 1970s, then began his long career as a staff member and director of the Cadets. ⁵⁶ If generation determined one's stance on this issue, he would be working against change rather than for it. His contemporaries in the DCI administration and outside of it cover a broad ideological spectrum. Before the 2002 Board of Directors meeting, Drum Corps World printed a letter to the editor from Mike Davis, an alumnus who marched from 1964 to 1972. In expressing his support for amplification and electronics, Davis complicates the "tradition versus change, past versus future" dichotomy. He contextualizes amplification in relation to the changes in drum corps percussion instrumentation that occurred during his years of participation—new drum harnesses, marching timpani, and a wide range of auxiliary percussion. He writes: "In my humble opinion, [amplification/electronics] fits in just fine with the changes that have

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⁵⁵ Cole, 153.

⁵⁶ E-mail to the author, 26 February 2011.

gone on the past 35-plus years that I've been around corps." For Davis, change is part of the tradition of drum corps, not a threat to it.

The other side of the issue also includes individuals with a variety of drum corps experiences, not just alumni from decades ago. Ken Mason, a writer for *Drum Corps World* who is strongly opposed to amplification and electronics, marched in the late 1980s and now creates and collects audio recordings of drum corps shows. He takes issue with the tactics used by proponents of the technology, feeling that they continually redefined their stated goals in response to criticism. He also opposes Hopkins's view that introducing new sound technology would lead to greater creative possibilities:

Limiting ourselves to brass and percussion does not stifle creativity. Quite the opposite! Creativity in music is the process of making new sounds, and it requires more creativity to make new sounds with the same instruments. [...] Sure, we could produce these sounds electronically, but where's the challenge in that? Adding amplification and electronics cheapens the creative process by providing all-too-easy substitutes for the unique sounds of drum & bugle corps that we have worked so hard to create up until now. ⁵⁸

For Mason, the sound of drum corps is one of its essential qualities. It has been altered and refined over the decades through changes in instrument construction and musical arranging, but to him, adding anything other than acoustic percussion and brass crosses a line.

⁵⁸ Ken Mason, "Rule Changes Need More Research," unpublished article sent in e-mail to the author, 8 March 2011.

⁵⁷ "Letters to the Editor: Electronics and amplification," *Drum Corps World* (25 January 2002), http://drumcorpsworld.com/2002/0125_letter.cfm.

2003: Amplification Passes

In 2003, the amplification proposal—now separated from electronic instruments was passed by the Board of Directors in a 12-8 vote. It permitted amplification of the front ensemble and human vocals, but not the brass or drum line. A prominent "no" vote came from Jeff Fiedler, the director of the Cavaliers, which won the DCI championships in each of the three previous years (2000-2002). All of the other votes against the proposal came from directors of corps which placed below the top six in the 2002 championships. The only "yes" vote from a director whose corps did not make it to semifinals (the top seventeen corps) in 2002 was Doug Darwin of the Kiwanis Kavaliers, the only Division I corps from Canada.⁵⁹ Financial issues were a concern for smaller corps; Greg Orwell, the director of the Colts, which placed fifteenth in 2002, feared that amplification would "become a money Armageddon." Fiedler simply considered amplification unnecessary and undesirable, saying, "I think it goes against the basic nature of our activity. We don't need it in our pit. The members are taught how to project." Despite this, the Cavaliers used amplification in 2004. 61 Since then, Fiedler—currently the CEO of Santa Clara Vanguard—has come to accept amplification, feeling that it has been implemented successfully and with good judgment.⁶²

The reaction to the rule's passage on RAMD was overwhelmingly negative, though some tried to discourage overreaction. Some of the messages raised the issue of the identity

⁵⁹ The Kiwanis Kavaliers moved to Florida in 2006 and disbanded in 2008.

⁶⁰ This article was written for dci.org, but is no longer available on that site. It was reposted on RAMD. Ron Allard <ron@diceman.com>, "Re: Amplification Passes," (26 January 2003), rec.arts.marching.drumcorps, http://groups.google.com/group/rec.arts.marching.drumcorps/msg/26273b723856411f.

⁶¹ See Appendix A for a list of corps using amplification between 2004-2007.

⁶² Interview with the author, 27 February 2011.

of drum corps and its relationship to marching band. One person wrote, "Amplification, especially with human voice, IS NOT DRUM CORPS. Amplification is for those who don't know how to play..." Alluding to the possibilities for amplified voice, another wrote that "drum corps will now become bands meet Broadway."

Commenters also voiced their dissatisfaction with DCI for moving drum corps in this direction against the will of the fans. George Hopkins was frequently singled out, not only because he proposed the rule change, but because of the perception that he held too much power in DCI and was using it to carry out the destruction of drum corps. This post from RAMD also shows a concern with the role of equipment manufacturers and a prediction that woodwinds would be next:

Hopkins got his "Multi-Key", now his "Amps." Saxophones, reeds, woodwinds and all [the] rest of the marching band equipment (and their manufacturer's, Hopkins friends and sponsors..how do you think he gets all that stuff for FREE, year after year) are waiting their turn in the endzone, as one bit at a time, King George destroys whats left of junior drum corps and turns it into the USSBA's summer program. 65

While the message quoted above is certainly hyperbolic, the role of equipment manufacturers is a legitimate concern not just for anti-amplification spectators, but for smaller corps. Drum corps are funded through a combination of member dues, donations, merchandise sales, and outside grants. Each of these sources naturally generates more money for larger, better-performing corps, creating a system in which the top corps tend to stay at

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 $^{^{63}}$ Dennis Doherty <dots 27@attbi.com>, "Re: Amplification Passes" (26 January 2003), rec.arts.marching.drum corps,

http://groups.google.com/group/rec.arts.marching.drumcorps/msg/d4bb767736c75f0d.

⁶⁴ Gary Peterson <pictkr@earthlink.net>, "Re: Amplification Passes" (26 January 2003), rec.arts.marching.drumcorps, http://groups.google.com/group/rec.arts.marching.drumcorps/msg/d955c6ffbcfcecfb.

 $^{^{65}}$ Cliff Richmond , "Re: Here's a poll: Amplification" (27 January 2003), rec.arts.marching.drumcorps,

http://groups.google.com/group/rec.arts.marching.drumcorps/msg/961195da009b46e1.

the top. Corporate sponsorship functions in the same way. A company such as Yamaha can make more money by using a first-place corps in its advertising than a nineteenth-place corps, so the top corps—which are already comparatively well-funded—are much more likely to get free or discounted instruments and electronic equipment in exchange for an endorsement.

The legalization of amplification did not require corps to use it, but the official claim that amplification would be optional recalls the introduction of B-flat horns in 2000, the previous controversial rule change. The "any key" rule allowed corps to decide whether to change to B-flat or continue using horns in G, but within a few years, every top-level corps had made the switch, making it effectively mandatory for any corps that wanted to be competitive. With that in recent memory, amplification opponents understandably predicted that this new technology would also be universally adopted before long, and they were correct.

Ten of the twenty-four corps in Division I used amplification in the 2004 season, of which two used it to amplify voices as well as the pit instruments. ⁶⁶ There was a clear correlation between the ranking of a corps at the end of the season and the use of amplification, with nine of the top twelve corps using it. This could be read as a sign of a judging conspiracy to reward amplification, but a more likely explanation is the established correlation between performance ability and financial resources. Better-funded corps tend to perform better, and corps that were already struggling financially were less likely to make the decision to purchase this new equipment right away (or to secure an endorsement deal). Even so, amplification caught on quickly; by 2007, the only unamplified corps in Division I was

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⁶⁶ See Appendix A for lists of corps using amplification in the 2004 through 2007 seasons.

Southwind, which folded after that season. Today, every World Class corps uses amplification.⁶⁷

Electronic Instruments

Amplification passed only when it was voted on separately from electronic instruments, but Hopkins was not content to let the latter issue go. His unsuccessful 2006 proposal used much of the same language as the one from 2002, including the section quoted above about "The Classic Audience of 1975" versus the audience of the future. The 2008 proposal, which did pass, is considerably more concise, but makes the same basic points about wanting to broaden the sound possibilities and attract a new audience. Unlike earlier versions, this proposal does not place limits on the types of electronic instruments that would be permitted, only on how they could be used. Hopkins wrote: "Music from instruments such as electronic keyboards, synthesizers, electronic drum sets, and all other electronic instruments [will be] allowed given that the instrument's performer(s) are present and performing live and in real time." The "live and in real time" stipulation allows him to alleviate worries about the "automation" of drum corps.

In the January 2009 Board of Directors meeting, a new section was added to the DCI rule book to attempt to clarify what would and would not be permitted:

4.8 Use of Electronic Equipment

- 4.8.1 Terminology:
- "Music" (or "Musical") shall be defined as the organization of melodic, harmonic and/or rhythmic sound through time.

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⁶⁷ Division I was renamed "World Class" in 2008.

⁶⁸ George Hopkins, "Use of Electronic Instruments (2009 Implementation)," DCI.org (2008), http://www.dci.org/rules/pdf/2008/06_electronics.pdf.

- An "Electronic Instrument" shall be defined as any pieces of electronic equipment that produces "Musical" sound.
- A "Sequence" or "Loop" shall be defined as "Music" that is pre-recorded or programmed during a performance.
- "Human Voice" shall be defined as spoken word.
- 4.8.2 Music from Electronic Instruments is allowed given that the Music is being performed live, in real time during the performance.
- 4.8.3 Sequenced Music will not be allowed.
- 4.8.4 Musical Loops will not be allowed.
- 4.8.5 Pre-recorded Sound Effects and Human Voice can be used without penalty.

 Permission must be obtained for all copyrighted material. 69

The rule book, following Hopkins's proposal, draws a dividing line between the sampling of singing and speech—singing is "music" and therefore not allowed; spoken word is "human voice," which is permissible. Sampling is not the primary use for electronic instruments in drum corps; more often, electronic keyboards are used to reinforce the brass sound or to add a new tone color to the ensemble. In 2009, corps directors who planned to use electronics took care to explain that they did not see it as a radical change, but just a way to introduce some new effects. They emphasized the taste and restraint of show designers, implicitly or overtly drawing a contrast with how electronic instruments have sometimes been used in marching band, which is perceived as over-the-top and poorly executed. As of this writing, DCI is entering its third competition season with electronic instruments. It is difficult to predict what the future of this technology in drum corps will be, since corps are

⁶⁹ Quoted in "Rules up, down, overturned and clarified during annual vote," DCI.org, 24 January 2009, http://www.dci.org/news/view.cfm?news_id=222ba8af-d8e6-44cd-9952-77c2575edf73.

⁷⁰ Mike Ferlazzo, "Part 1: Evaluating Electronics – Directors, designers see creative options, expense with electronics," *Drum Corps World* (December 2009), http://www.drumcorpsworld.com/articles.cfm?ID=790. Jeff Fiedler also expressed this in my interview with him (27 February 2011).

still experimenting with the possibilities and working out the details of what should and should not be allowed.⁷¹

⁷¹ Chapter III will address some of the techniques that have been used.

CHAPTER III Sound, Performance, and Values

On the surface, amplification changes drum corps in only one way: it makes certain instruments louder. Why, then, has it provoked such strong reactions? In Chapter II, I quoted several messages from the rec.arts.marching.drumcorps newsgroup in which people expressed their opposition to the new rule in terms of the identity of drum corps, feeling that adding electronic elements to this formerly-acoustic type of performance changed it in a fundamental way. The drum corps community collectively values and respects its history and traditions, but conflict can arise out of differing views on what it means to respect tradition. Does respecting tradition necessarily mean minimizing change, or can drum corps explore new possibilities without losing its essence? The question is complicated by the practical issues involved in maintaining a financially viable product that will continue to attract an audience. George Hopkins's belief that new technology will bring a much-needed younger audience to DCI does not sit well with traditionalist fans who may not even like the idea of giving DCI more mainstream appeal, especially if it comes at the expense of their own enjoyment of the music and identification with the activity.

The initial reactions to the amplification rule, filling dozens of Internet discussion threads within weeks of the decision, were based on people's preconceived notions and ideas about what drum corps should be. Now that DCI has been through seven seasons with amplification and two with electronics, opinions are shaped by how this technology has actually been implemented. In 2008, a fan named Timothy Kviz submitted three rule change

proposals, sponsored by the director of the Blue Stars, that sought to restrict or eliminate the use of amplification. One would ban amplification entirely, one would restrict it to the pit instruments only (banning amplified voice), and one would reverse the decision to allow the sound board to be operated by a staff member. While none of them passed, this was the first time a proposal had ever been brought forth that would repeal an existing rule. In the text of the proposals, Kviz presents practical arguments in addition to stressing fan discontent, and I will refer to these texts throughout this chapter as an example of how the case against amplification developed in response to the first years of its use.

This chapter addresses the effects of amplification on creating, performing, and watching a DCI show. The DCI community's basic ideological conflicts are still present in how these effects are thought about, managed, and experienced. However, the experience of amplification adds concrete practical issues, which intersect with the ideological concerns. I will focus on how the effects of amplification in the areas of acoustics, performing technique, judging, amplified voice, and electronic instruments illuminate conflicting approaches to the following three broad questions:

- 1. Should DCI be primarily outward- or inward-focused? Does drum corps derive legitimacy from acceptance by the broader music world, or from adherence to its own distinct identity and practices?
- 2. How should a drum corps show communicate with its audience? What is the role of technology in the relationship between the performance and the audience?
- 3. How can the interests of the different segments of the DCI community—including participants, instructors, judges, the DCI administration, and the audience—be balanced?

Acoustics

George Hopkins's proposal for amplification stressed the sound balance problems he perceived in unamplified drum corps. After some twenty years of writing for the front ensemble, arrangers had begun to give it more prominent parts, but the sound was easily covered up by the brass, effectively limiting certain instruments to quieter sections of the music. An amplified pit can participate fully regardless of how loud the brass section is playing. Amplification also allows the pit arrangements to include instruments and accessories that, while not banned under the previous rules, could not have been heard unamplified.

However, amplifying the pit creates its own balance problems. Is the pit now simply too loud? Ken Mason, whose years of experience with recording drum corps shows make him particularly attentive to sound levels, told me that while amplification proponents insisted that the technology would not be used to make the front ensemble significantly louder, this is exactly what has happened. "After trying to preserve the prevailing ensemble balance for the first three years of amplification use (2004-2006), suddenly they all cranked the volume up in June of 2007." In my own experience as a spectator, I recall being more bothered by the increased volume in the first years of amplification than I am now, but I attribute this to having become more accustomed to it.

When the amplification rule was first passed, it stipulated that the sound board had to be operated by a regular member of the corps during the show. For example, in 2005, the sound board operator for the Crossmen also played auxiliary percussion.⁷³ The rule was then

⁷² E-mail to the author, 8 March 2011.

⁷³ Brian Maher, interview with the author, 20 October 2010.

revised to allow a staff member to perform this function, and as of 2011, the sound levels may be adjusted remotely by a staff member sitting in the stands. Transferring this responsibility away from the field gives more control over the output as perceived by the spectators and judges. However, this control is not in the hands of the corps members, unlike every other element of the performance. The least drastic of Timothy Kviz's three antiamplification proposals sought to reverse the decision to allow staff members to operate the sound board; he argues that because staff involvement during a competitive DCI performance is prohibited in all other cases, the board should also be controlled by the corps members. Perhaps in an attempt to appeal to non-traditionalists, he points out that competitive marching band usually requires this to be done by members rather than staff.⁷⁴

Regardless of who operates the sound board, the amount of actual control over the output is limited. Achieving satisfactory balance between sections is complicated by the fact that no two stadiums have the same acoustic properties. Over the course of a competition season, each corps will play in high school, college, and professional football stadiums, each one unique. While the acoustic differences between stadiums affect the entire ensemble and have always been an issue, amplification adds another complication. In a DCI competition, each corps has only a seventeen-minute time slot in which to use the field, which includes the eleven-minute performance. This does not leave time for even basic sound checks, let alone the opportunity to adequately customize the setup for each location.

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⁷⁴ Timothy Kviz, "An eligible marching member must operate the sound board (2009 Implementation)," DCI.org (2008), http://www.dci.org/rules/pdf/2008/08 soundboard implementation.pdf.

⁷⁵ The current location for the championships is Lucas Oil Stadium in Indianapolis, which has a retractable roof. I attended the 2009 championships, the first to be held in this stadium, and found the acoustics very disappointing.

The short amount of time allotted for setup also means that the equipment configuration cannot be too complicated. There was more variation in equipment at first than there is now, as most corps have settled into an arrangement that is relatively efficient and can be set up quickly. A microphone is mounted onto each of the large instruments, either from above or below. Additional free-standing microphones pick up the sound from auxiliary percussion instruments. The corps member who brings an instrument onto the field is responsible for connecting the microphone cord to another cord that leads to the sound board.

The most common speaker configuration is to have one on each side of the pit. While easy to set up, having only two speakers makes it more difficult for the performers in the front ensemble to coordinate their playing, and it creates a noticeable discrepancy between the location of each player and the origin of the sound heard by the audience. This discrepancy, more than the volume levels, was what made amplification seem "unnatural" to me when I first experienced it as a spectator. I was not accustomed to hearing the sound of the pit instruments, which are spread out across up to 30 yards of the front sideline, spatially compressed into just two locations.

A few well-funded corps did initially experiment with other possibilities for speaker placement. In 2004 and 2005, the Blue Devils, consistently among the top-ranked corps, attached a small speaker to the front of each of the keyboard percussion instruments; Phantom Regiment used a similar configuration for three years after beginning to use amplification in 2005. This method of amplifying reduces the problem of the spatial arrangement of the performers being different from that of the sound the audience hears, but it is more complicated and involves more equipment. Both of those corps now use the standard two-speaker arrangement.

The change in sound direction caused by amplification means that spectators sitting in different sections of the stadium can have significantly different experiences. Chris Maher, the creator of the drum corps repertoire database CorpsReps.com, believes that amplification has accelerated a major shift in how drum corps shows are designed and presented. Several decades ago, it was not uncommon for some of the spectators to sit in the back bleachers, behind the corps, and the drill was designed to be interesting from multiple angles. As shows became more "front-focused" to appeal to the judges, spectators lost interest in sitting behind the corps. The focus then narrowed further, with shows directed primarily at those sitting not only in the front, but in the center. Again, this was—at least in part—due to the positioning of the judges, most of whom usually sit in the press box. Amplification has led to an even narrower focus, with only those in the upper part of the center section—usually the most expensive seats—getting the optimal sound.

In recent experiences sitting low in the center section, Maher noticed two problems that were not apparent from the higher seats. First, the output from the speakers was simply too loud and sometimes even sounded distorted. Second, the discrepancy between the location of the performers and the location of the sound source was much more apparent and distracting. Those who sit far to one side often have the opposite problem: the speakers have little or no effect. Therefore, shows which depend on amplified speech or singing cannot communicate effectively with the entire audience.

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⁷⁶ Phone conversation with the author, 12 December 2010.

⁷⁷ There are also several on-field judges, who evaluate elements of the performance from close up. For more information on the DCI judging system, see "A DCI Judging Primer," DCI.org (8 July 2004), http://www.dci.org/news/view.cfm?news_id=d2244104-9bcf-486d-b4ac-24b3dd384d25.

Performing Technique

One common justification for amplification is that it allows the members of the front ensemble to use better technique, since they do not have to play with as much force in order to be audible. Improving technique not only makes playing easier and safer for the performers, it allows arrangers to write more demanding parts—which, thanks to amplification, can be heard. The new possibilities for front ensemble arrangements affect both the experience of the performers and the resulting product.

Dennis DeLucia, a DCI percussion arranger, stated in a 2007 interview that amplification "allows legitimate percussion instruments such as vibes, marimbas, timpani, etc. to be played legitimately," so that students do not "return to school in the fall playing like unmusical monsters." Since so many of today's drum corps members are or will be college music majors, technique is an important consideration even beyond the context of the drum corps show. If the techniques they learn in drum corps are deemed "unmusical" by their other instructors, it will be harder for them to be successful performers outside of drum corps. The implications for the educational ideology of drum corps are clear: if music education is as important a goal as personal growth, it is more beneficial if the musical experience is transferable to other situations. The technique issue also affects DCI's standing as a respected musical activity. If students learn non-standard technique in drum corps, their outside instructors may not value it as a worthwhile experience for those who want to be professional musicians.

Brian Maher, who played in amplified front ensembles between 2005 and 2009 and is now studying music in college and teaching percussion lessons, considers himself generally

⁷⁸ Harry Heidelmark, "Part 2: An interview with percussion arranger Dennis DeLucia," *Drum Corps World* 36, no. 3 (June 2007), http://www.drumcorpsworld.com/articles.cfm?ID=686.

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anti-amplification on principle, but concedes that he values the change in technique that it has allowed. He described the playing technique of DCI pits in the 1990s as "playing with sticks with rocks on them, just smashing them into keys." To achieve a loud enough sound, they had to use much harder mallets than they would in a concert setting and play with force that would be excessive indoors and can lead to injury. Now, since the sound is amplified, he says that performers can use techniques that are safer and transfer better to concert performance.

Not everyone accepts that amplification has had a positive effect on performing technique, or even a significant effect at all. Ken Mason takes issue with the idea that concert technique should be considered superior to traditional drum corps technique, and he notes that pit performance is still stylized: "corps still teach their pit performers to use exaggerated arm motions and do other things visually that the concert marimbist would not do on stage." Others have made the point that *no* instrument is played the same way in drum corps as it is in other performance contexts. John Weidman, the director of an all-age non-DCI corps in New Orleans, posted on the Drum Corps Planet forums in 2009:

Brass players and drummers have to carry [instruments] in invented ways, play very loudly, and point their instruments to the press box while running. Ways that ARE NOT USED in the orchestral setting. If instruments must be played "as if they were [truly] in a concert hall," then play them in a concert hall. In case it has escaped some folks, drum corps shows aren't performed in a "hall."⁸¹

Front ensemble instruments are not played while marching, however, which takes away the most obvious difference between drum corps and concert performance and makes

⁷⁹ Interview with the author, 20 October 2010.

⁸⁰ E-mail to the author, 8 March 2011.

⁸¹ John Weidman, "Re: Question for critics of the synths/electronics," Drum Corps Planet forums (17 August 2009), http://www.drumcorpsplanet.com/forums/index.php/topic/129399-question-for-critics-of-the-synthselectronics/page__view__findpost__p__2642569.

the idea of using concert technique more appealing. Opinions are divided about whether or not a significant change in technique has actually occurred; despite participants' insistence that they are now taught to play with better technique, some spectators do not see or hear any difference.

Opinions also differ as to whether or not "concert technique" is an appropriate goal for drum corps. At stake here is the legitimacy of drum corps as a form of musical performance, a concept which can be configured in opposing ways. For those who agree with Hopkins and DeLucia, legitimacy is achieved by bringing drum corps closer to symphonic music and ensuring that the musical skills the members learn are transferable to other "serious" types of performance. They want drum corps to be respected by band directors and private instructors, not viewed as something that makes students into worse musicians. For traditionalists such as Mason, the legitimacy of drum corps comes from its unique traditions and performance practices, from the things that *set it apart* from other types of musical performance. While few people would argue that today's drum corps would be better if the musicians were less proficient on their instruments, they may resist the idea that quality should be measured by external standards. On this side of the argument, drum corps is devalued if its traditional methods are seen as inferior and in need of upgrading.

Judging

Before the amplification rule was implemented, some in the community expressed concern about how it would affect the way drum corps shows were judged. Would judges, perhaps under secret orders from the top ranks of the DCI administration, reward the use of amplification in order to effectively force corps to use it? In 2004, all but one of the

amplified Division I corps had placed in the top twelve at the previous year's championships; corps with the financial resources to purchase the new equipment were already more likely to achieve high scores. 82 Would the judges' handling of amplification make it even more difficult for smaller corps to compete? How would poorly utilized or malfunctioning electronic equipment affect a corps's score?

The complete judges' guidelines are not publicly available, and judges are much less likely than directors and administrators to speak in detail about what they do. This makes it difficult to arrive at a concrete answer about how amplification is treated as a factor in judging. There is a common belief that the judges have no way to penalize a corps for using amplification badly, effectively meaning that using it can never hurt a corps's score. Timothy Kviz's proposal for a full ban on amplification describes the judging situation from this perspective:

It was not clear how amplification was incorporated into the existing judging sheets. Equipment malfunctions did not appear to have any impact whatsoever on a corps scores. There are numerous instances where amplification equipment has failed to work properly, severely marring the member's performance, yet there is [no] tangible effect on scores. There have also been numerous instances where amplification equipment has created severe imbalance issues between the front ensemble percussion that is amplified and the field percussion and brass section; yet there is no apparent impact on the ensemble music or general effect music caption scores.⁸³

Kviz also writes that the regulations on amplification are "unenforceable," suggesting that corps could use the equipment in a non-sanctioned way without the knowledge of the judges.

⁸² The Blue Knights were the only corps which scored below the top 12 in 2003 and used amplification in 2004. They received 13th place in the 2003 semifinals.

⁸³ Timothy Kviz, "Amplification equipment of any kind may not be used (2009 Implementation)," DCI.org (2008), http://www.dci.org/rules/pdf/2008/10_amplification_implementation.pdf.

When I interviewed Jeff Fiedler, I brought up this perception that amplification is not taken into account in the judging system. He immediately rejected the idea, telling me that the judges do consider amplification when evaluating criteria such as "balance" and that they regularly comment on it in their remarks. While it may be the case that nothing in the judges' guidelines indicates specific penalties for a malfunctioning speaker or poorly adjusted volume levels, Fiedler was clear that they treat it as they do any other aspect of the sound.

Anxiety over judging among certain fans is one aspect of a general distrust of the motivations of the DCI organization. While DCI began in 1972 as a response to the excessive power held by the veterans' organizations, it now essentially has a monopoly over competitive junior drum corps, meaning that those who take issue with its decisions and priorities have nowhere else to go. In the online discussions at the time of the amplification decision, posters expressed their feeling that DCI no longer cared about the opinions of devoted fans, having abandoned that concern in order to focus on making money. If amplification equipment was to be obtained through deals with manufacturers, they reasoned, DCI would have a financial interest in making more corps use it, and rewarding it with higher scores in competition would be one way of making it seem necessary for all corps.

Amplified Voice

While amplification of the pit did allow a wider variety of instruments to be used, the introduction of amplified voice is a more significant change in terms of show design and sound. It introduces a new timbre, neither brass nor percussion, and perhaps more significantly, it allows drum corps shows to include text, which creates new possibilities for

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⁸⁴ Interview with the author, 27 February 2011.

conceiving and presenting the concept of a show. Text can make the intended meaning of a show clearer to the audience, which is not always appreciated; many fans accustomed to all-instrumental drum corps feel, as Brian Maher expressed, that it "takes the subtle things out of conveying the message." Those who feel that drum corps has become too hard to understand might feel differently, if they do not reject amplified voice on principle.

Amplified voice is seen by some as a distraction from or even a violation of the primacy of the ensemble. Instrumental solos have always been a part of drum corps, but vocal solos, sung or spoken, seem to draw more attention to the individual. A person's voice has a distinct timbre, much more so than one brass instrument among many. The presence of a text draws the listener's focus farther away from the instrumental ensemble sound. If the vocal soloist is dressed in something other than the standard corps uniform, as may be the case in a show depicting some type of story, an additional visual distinction is drawn between the soloist and the ensemble. ⁸⁶ Ensemble performance is a central part of the ideology of drum corps, and singling individuals out for attention can be viewed as a threat to the ensemble's unity.

The increased focus on individuals in these shows also complicates how fans who disapprove can respond. On the Drum Corps Planet forums, there is a general consensus that criticism of a show should not extend to criticism of "the kids," i.e., the performers. Corps members do not design the shows, so they are not responsible for the decisions about whether to implement amplified voice and how to do it. Many forum participants are parents of current or former corps members, and they feel strongly that the educational experience of

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⁸⁵ Interview with the author, 20 October 2010.

⁸⁶ In some narrative shows, such as the Cadets' "The Pursuit of Happiness" (2008), the people visually portraying the characters are not the ones doing the voice acting, but the audience is not meant to be aware of this

drum corps is more important than the artistic product. When a show has a featured soloist, using controversial technology, it can be difficult to separate judgment of the show from judgment of the soloist.

Drum corps participants can have positive experiences with amplification even if they disapprove of its use in the abstract, which lends weight to the view that the experience of the performers should take priority over aesthetic arguments. Though Brian Maher prefers drum corps without voice, he was excited when he was selected as the main vocal performer in the Crossmen's radio-themed show in 2006. Reflecting on the experience in a recent discussion with me, he characterized his initial mixed reaction: "Oh no, this is exactly what I don't want in drum corps, but I'm kind of excited because it's me, and it's me who gets to speak, and I get more camera time." He values the acting experience and feels that it helped him become more confident, even though he confesses, "I enjoyed doing it, but I don't enjoy hearing it." "87"

One early example of a show featuring amplified voice is the Blue Devils' 2005 program, based around the idea of a 1920s "dance marathon." The enthusiastic announcer, played by a member of the pit, did not appeal to those who had concerns about amplified voice taking over a show and distracting from the music and visuals. Others liked it, though this was certainly the minority opinion on the Drum Corps Planet forums. One poster there wrote that he found it more "accessible and entertaining" than the corps which "were just out there playing a lot of big chords and marching from random form to random form." Valuing accessibility and directness of meaning is usually associated with drum corps traditionalists who disapprove of modern repertoire and arranging styles. This viewpoint

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⁸⁷ Interview with the author, 20 October 2010.

⁸⁸ Lukeheart, "BD Show," Drum Corps Planet forums (12 August 2005), http://www.drumcorpsplanet.com/forums/index.php?showtopic=68736.

tends to go along with a strong anti-amplification stance, but someone who values comprehensibility while being open to technological change might be likely to approve of this use of the spoken word.

No corps is more associated with amplified voice than the Cadets, directed by George Hopkins. If an article on the DCI website from early 2004 is to be believed, Hopkins did not originally intend for this to be the case. He is quoted as saying that while he planned to use amplification, he found it "a bit frightening" due to all the questions that had to be addressed. "We will use it, but in moderation. We will not use voice, we will not work for effects but rather, what we have in mind is simply the support of current percussive sounds that are more or less lost within the live performance." Considering that Hopkins had been pushing for amplification for years and wrote the proposal that passed, his moderate stance here is surprising—even more so in retrospect, as several of the Cadets' shows since the ruling have made extensive use of amplified voice.

In 2007, the Cadets integrated spoken voice into their show to an unprecedented degree, and the show received particularly intense reactions from fans. Titled "This I Believe: Truth, Value and the Personal Experience Called Drum Corps," this meta-show used amplified voice to introduce the sections of the corps, depict a typical rehearsal, and repeatedly extol the values of teamwork and community. A poll on Drum Corps Planet at the beginning of the summer showed a disapproval rate of nearly 80%. ⁹⁰ Most of the complaints in the discussion, even from those who claimed not to be anti-amplification in general, were about the narration ruining what they would otherwise have considered a good, well-

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⁸⁹ "Amplification—who's using?" DCI.org (28 January 2004), http://www.dci.org/news/view.cfm?news_id=a869a6d8-78e4-42b1-bdd8-eea6f9686b93.

⁹⁰ drumcat, "Cadets 2007 – Love it or Hate it?" Drum Corps Planet forums (16 June 2007), http://www.drumcorpsplanet.com/forums/index.php/topic/98655-cadets-2007-love-it-or-hate-it/.

performed show. People who already had problems with George Hopkins saw it as propaganda for his views. By the end of the season, some of the narration had been revised in response to the heavy criticism, but many fans never warmed to it. ⁹¹ Despite the negative reactions, the corps returned the following year with a show constructed around an NPR-style interview. ⁹²

For all the attention amplified voice has gotten, it has remained relatively uncommon, only featuring in a few shows per year. Shows that use it tend to do so in isolated moments rather than making it the focus of the show as the Cadets did in 2007 and 2008. Because of this limited usage, amplified voice still stands out as a new effect—and therefore a controversial one—whereas amplification of the pit has essentially become normalized, even for those who still disapprove of it.

Electronic Instruments

Hopkins and other corps directors argued that electronic instruments would not change drum corps in any significant way because their use would be limited. Regardless of how they are used, however, the decision adds a new category of instruments to drum corps, something which has occurred very rarely in its history. Therefore, even if the new technology is not used to its fullest extent, the change is very significant, especially if the identity of drum corps is to be defined primarily by its instrumentation.

Plate in the season, the corps added the line "let's do something with no voice" to the end of the segment depicting a color guard rehearsal, as a deliberate reference to the controversy over their show. The crowd cheered.

⁹² In 2009, the Cadets commemorated their 75th year by returning to their original name, the "Holy Name Cadets," and performing a more traditional show.

⁹³ In Division I, there were two amplified-voice shows in 2004, three in 2005, five in 2006, and three in 2007.

Electronic instruments do not only add something to drum corps; in some cases, they change the function of the other parts of the ensemble. Keyboards are now used by some corps to reinforce the low end of the brass sound. This is a common technique in marching bands, where the low brass section may not be very strong; does using it in drum corps imply that the brass, the foundation of the ensemble sound, needs assistance? The "one stroke equals one response" rule prevents corps from using recordings of music, but the loophole that allows extended segments of recorded speech has the potential to significantly affect the balance between drum corps's goals of entertaining an audience and providing an educational performing experience for the participants. A recording of a great orator will probably sound better than a seventeen-year-old marimba player reciting the same words, but should audience enjoyment have priority over the experience of the performers?

After the 2009 competition season, Mike Ferlazzo wrote a three-part article on electronic instruments for *Drum Corps World*, featuring quotations from directors and designers, participants and young fans, and older alumni and spectators. The directors, as I have stated, attempted to define it as a modest expansion of creative possibilities rather than a major change. Ferlazzo characterized the second group, younger members of the drum corps community, as having "mixed" opinions on the issue. In general, they were open to it, especially those who had already experienced it in marching band, and some felt that adding something new to drum corps made it more interesting. Even among those who responded positively, though, there was a concern that it could get out of control. For example, one young drum corps fan, a member of a very successful high school marching band, said: "I think it's interesting, but they can't lose focus on the music, because if they focus completely

on electronics, they'll just have a computer play it—and not like a band."⁹⁴ Ferlazzo's third article showed that the older generation also spanned a range of opinions, with the same caveat that it should be used in moderation. Mike Green, an alumnus who marched in the 1980s, said that he liked the way one corps used sampled sound, but felt that electronics took something away from what drum corps should be. "We are in the digital age, but there's something about the heart and soul of drum corps that doesn't have that. [...] I come to see drum corps because it's not like all the other things in the digital age."⁹⁵

⁹⁴ Quoted in Mike Ferlazzo, "Part 2: Evaluating electronics -- Members, other young people give electronics mixed reviews," *Drum Corps World* (December 2009), http://www.drumcorpsworld.com/articles.cfm?ID=791.

⁹⁵ Quoted in Mike Ferlazzo, "Part 3: Evaluating Electronics -- Older fans, corps vets run range of reactions to new electronics," *Drum Corps World* (December 2009), http://www.drumcorpsworld.com/articles.cfm?ID=792.

CONCLUSION

Examining the amplification controversy reveals much about the current state of the ideological polarization within the drum corps community. Preferences for how drum corps should sound intersect with basic beliefs about what drum corps is, what it should be, and how it should position itself with respect to its past and future. Both sides ultimately want to ensure the continued existence and vitality of drum corps, but the visions for its future are incompatible. Should its traditions and ideals be preserved at any cost, or should it be transformed to better fit into a changing culture?

The May 1997 meeting of DCI's executive committee featured two presentations on the state of the organization, with suggestions for how to address the challenges facing it. ⁹⁶ One presentation was by George Hopkins and Mark Herzing; the other was by Scott Stewart, then the director of the Madison Scouts. While the two presentations identified many of the same problems, the ideas for how to solve them were very different, exemplifying the two extremes of the polarization I have discussed throughout this study.

In Stewart's critique of what DCI had become, he encouraged a return to the idea of drum corps as an exclusive community with its own traditions and values, saying: "Drum corps cannot operate on the same value system that the rest of our society does. It must aspire to a higher, more altruistic set of standards and values if it is to continue." Unsurprisingly,

⁹⁶ Vince Lamb, "Contrasting solutions for junior corps: Stewart vs. Hopkins," *Drum Corps World* (January 2003), http://www.drumcorpsworld.com/articles.cfm?ID=213. This is a revised version of an article that was originally posted on RAMD in 2001.

⁹⁷ The text of Stewart's presentation was first printed in *Drum Corps World* magazine in 1997; it was re-posted on RAMD in 2000. <flatlandpress@my-deja.com>, "SCOTT STEWART SPEAKS!!!!! (sort of)" (8 September

he did not suggest the use of more technology. Hopkins's presentation, on the other hand, advocated an intentional move away from tradition and a focus on solving the organization's problems through changing, rather than preserving, its identity. His proposals were focused on broadening both the participant and audience base by giving the activity more mainstream, commercial appeal. He even suggested renaming DCI to "Music on the Move," wanting to "provide an identity that is easier to understand" for those unfamiliar with drum corps. Since these presentations, Hopkins has achieved significant steps toward his vision, including electronics, but Stewart's inward-focused viewpoint is still strongly represented in the drum corps community, ensuring that future proposals for change will be met with ideologically-driven resistance.

In the realm of instrumentation, the prospect of introducing woodwinds is likely to be one focus of intense debate at some point in DCI's future. Hopkins advocated expanding the instrumentation to include woodwinds in his 1997 presentation and alluded to it in his amplification proposals. He still sees it as a necessary step toward ensuring a viable future for DCI, one in which it would be an elite part of a unified "marching music" community. The primary advantage of adding woodwinds, for Hopkins, would be an increased potential participant base, but he is also interested in the new sounds it would bring to drum corps. For anyone who dreads the thought of drum corps becoming just like marching band, however, woodwinds would be the final nail in the coffin.

Amplification has only been legal in DCI for eight competition seasons as of this writing, but because the maximum age of DCI members is 21, there has been a near-

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2000), rec.arts.marching.drumcorps,

http://groups.google.com/group/rec.arts.marching.drumcorps/msg/ba8264cefb4734f4.

⁹⁸ Lamb, "Contrasting solutions."

complete turnover in corps membership since the decision. The vast majority of today's DCI participants began in 2004 or later; for them, and for their peers in the audience, amplification is a normal part of drum corps, though they do not all approve of it. Dennis Cole's recent survey of members of the Bluecoats showed that a plurality—about 40%—supported electronic technology in drum corps, with the rest evenly split between neutrality and disapproval. A question about speaking and singing got similar results. ⁹⁹ The idea of adding woodwinds, however, remains very unpopular, with only 3% approving and more than 75% strongly disapproving. ¹⁰⁰ If this survey accurately represents the attitudes of today's drum corps members, it may be a long time before a proposal for woodwinds could be seriously considered, but opposition to amplification will begin to become less vocal, just as few still complain about the three-valve bugle or grounded timpani.

A given technology never has only one effect, since each user or group of users may interact with it differently. While electronic amplification was well-established in other musical contexts before it came to drum corps, it would have been impossible to predict its precise role in this new context. Amplification in drum corps made the front ensemble louder, but as a factor in the complex and unique drum corps community, its effects moved far beyond the purely sonic.

⁹⁹ Cole, "Reinterpreting Traditions," 191.

¹⁰⁰ ibid., 190.

Appendix A: Use of Amplification in Division I DCI Corps, 2004-2007

The following tables are sorted by the final rankings from each year's championships. In the tables for 2005 through 2007, bold type indicates a corps's first year using amplification. ¹⁰¹

2004

Rank	Yes	No
1	The Cavaliers	
2	Blue Devils	
3	Santa Clara Vanguard	
4	The Cadets	
5		Phantom Regiment
6		The Bluecoats
7	Carolina Crown	
8	Madison Scouts	
9	Boston Crusaders	
10	Blue Knights	
11	The Crossmen	
12		The Glassmen
13	Spirit from JSU	
14		Capital Regiment
15		Seattle Cascades
16		The Colts
17		Magic of Orlando
18		Southwind
19		Pacific Crest
20		The Mandarins
21		Esperanza
22		Kiwanis Kavaliers
23		The Troopers
24		Pioneer

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¹⁰¹ This information is based on my visual inspection of the championship DVDs.

<u>2005</u>

Rank	Yes	No
1	The Cadets	
2	The Cavaliers	
3	Phantom Regiment	
4	Blue Devils	
5	The Bluecoats	
6	Madison Scouts	
7	Carolina Crown	
8	Santa Clara Vanguard	
9	Boston Crusaders	
10	Blue Knights	
11		The Glassmen
12	Spirit from JSU	
13	The Colts	
14	The Crossmen	
15		Capital Regiment
16		Southwind
17	The Mandarins	
18	Seattle Cascades	
19		
20	Esperanza	
21	The Magic ¹⁰²	
22		The Troopers
23		Pioneer
24		Kiwanis Kavaliers

¹⁰² Formerly Magic of Orlando.

<u>2006</u>

Rank	Yes	No
1	The Cavaliers	
2	Phantom Regiment	
3	Blue Devils	
4	The Bluecoats	
5	The Cadets	
6	Santa Clara Vanguard	
7	Blue Knights	
8	Carolina Crown	
9	Madison Scouts	
10	Boston Crusaders	
11	The Glassmen	
12	Spirit from JSU	
13	The Colts	
14	Blue Stars ¹⁰³	
15	The Crossmen	
16	Capital Regiment	
17	The Mandarins	
18		Southwind
19	Seattle Cascades	
20	The Magic ¹⁰⁴	
21		Pacific Crest
22		Kiwanis Kavaliers ¹⁰⁵
23		Pioneer

First year in Division I; I do not know whether they used amplification in previous years.

 $^{^{104}}$ Last year as an active corps.

¹⁰⁵ Last year as an active corps.

<u>2007</u>

Rank	Yes	No
1	Blue Devils	
2	The Cadets	
3	The Cavaliers	
4	Phantom Regiment	
5	Santa Clara Vanguard	
6	Carolina Crown	
7	The Bluecoats	
8	Blue Knights	
9	Boston Crusaders	
10	The Colts	
11	The Glassmen	
12	Spirit from JSU	
13	The Academy ¹⁰⁶	
14	Blue Stars	
15	Madison Scouts	
16	The Crossmen	
17	Pacific Crest	
18	Seattle Cascades	
19		Southwind ¹⁰⁷
20	The Troopers ¹⁰⁸	
21	The Mandarins	
22	Pioneer ¹⁰⁹	

 $^{^{106}}$ First year in Division I; I do not know whether they used amplification in previous years.

¹⁰⁷ Last year as an active corps.

 $^{^{108}}$ The Troopers did not compete in the 2006 season.

¹⁰⁹ Incidentally, this was the last Division I show to use G bugles.

Bibliography

- 2004 Drum Corps International World Championships, vols. 1-2. DVD. Directed by Tom Blair. 2004.
- 2005 Drum Corps International World Championships, vols. 1-2. DVD. Directed by Tom Blair and Jeff Clark. 2005.
- 2006 Drum Corps International World Championships, vols. 1-2. DVD. Directed by Tom Blair and Jeff Clark. 2006.
- 2007 Drum Corps International World Championships, vols. 1-2. DVD. Directed by Tom Blair, Jeff Clark, and Mike Mabbott. 2007.
- 2008 Drum Corps International World Championships, vols. 1-2. DVD. Directed by Jeff Clark and Mike Mabbott. 2008.
- "Amplification—who's using?" DCI.org, 28 January 2004. http://www.dci.org/news/view.cfm?news_id=a869a6d8-78e4-42b1-bdd8-eea6f9686b93.
- Atkinson, Christopher and Allison Close. "Part One: Methodology and Findings: 2001 *Drum Corps World* Fan and Reader Survey results." *Drum Corps World*, January 2002. http://www.drumcorpsworld.com/2002/0107_survey.cfm.
- Bitter, Kelly. "Electronics and amplification return among proposed changes to DCI." *Drum Corps World*, 19 December 2002. http://www.drumcorpsworld.com/articles.cfm?ID=200.
- Boo, Michael. "Inside the '08 DCI rules change proposals: no amplification of any kind." DCI.org, 21 January 2008. http://www.dci.org/news/view.cfm?news_id=c8853b69-f584-4b1c-a4a3-d45705390e23.
- Cole, Dennis E. "What is a Drum and Bugle Corps? Reinterpreting Traditions Inside the Musical Community." Ph.D. diss, Kent State University, 2009.
- "DCI Board votes no on amplification, shelves electronics." *Drum Corps World*, January 2002. http://www.drumcorpsworld.com/2002/0127_dci.cfm.
- "A DCI Judging Primer." DCI.org, 8 July 2004. http://www.dci.org/news/view.cfm?news_id=d2244104-9bcf-486d-b4ac-24b3dd384d25.
- Ferlazzo, Mike. "Fine-tuning the volume on amplification for drum corps." *Drum Corps World* 36, no. 14 (November 2007), http://www.drumcorpsworld.com/articles.cfm?ID=662.

- ----. "Modern instrumentation refines the drum corps sound." *Drum Corps World* 36, no. 16 (December 2007), http://www.drumcorpsworld.com/articles.cfm?ID=680.
- ----. "Part 1: Evaluating Electronics Directors, designers see creative options, expense with electronics." *Drum Corps World*, December 2009. http://www.drumcorpsworld.com/articles.cfm?ID=790.
- ----. "Part 2: Evaluating Electronics Members, other young people give electronics mixed reviews." *Drum Corps World*, December 2009. http://www.drumcorpsworld.com/articles.cfm?ID=791.
- -----. "Part 3: Evaluating Electronics -- Older fans, corps vets run range of reactions to new electronics." *Drum Corps World*, December 2009. http://www.drumcorpsworld.com/articles.cfm?ID=792.
- Garrison, Paul K. "The Value of Marching Band." *Music Educators Journal* 72, no. 5 (1986): 48-52.
- Heidelmark, Harry. "Part 2: An interview with percussion arranger Dennis DeLucia." *Drum Corps World* 36, no. 3 (June 2007). http://www.drumcorpsworld.com/articles.cfm?ID=686.
- Hopkins, George. "Full text of DCI rules change proposal." *Drum Corps World* (January 2002). http://www.drumcorpsworld.com/2002/0118_rule.cfm.
- ----. "Use of Electronic Instruments (2009 Implementation)." DCI.org, 2008. http://www.dci.org/rules/pdf/2008/06_electronics.pdf.
- Howard, William. "Masters of Their Destiny—DCI is Established." In *A History of Drum and Bugle Corps*, vol. 1, edited by Steve Vickers, 319-330. Madison: Sights and Sounds, Inc., 2002.
- "It's All Natural...the vote is in." DCI.org, 27 January 2002. http://www.dci.org/news/view.cfm?news_id=8c461858-29e3-4fc4-aef2-83e01557b78a.
- Kviz, Timothy. "Amplification equipment of any kind may not be used (2009 Implementation)." DCI.org, 2008. http://www.dci.org/rules/pdf/2008/10_amplification_implementation.pdf.
- ----. "Amplification is limited to front ensemble percussion instruments (2009 Implementation)." DCI.org, 2008. http://www.dci.org/rules/pdf/2008/09_narration.pdf.

- ----. "An eligible marching member must operate the sound board (2009 Implementation)." DCI.org, 2008. http://www.dci.org/rules/pdf/2008/08_soundboard_implementation.pdf.
- Lamb, Vince. "Contrasting solutions for junior corps: Stewart vs. Hopkins." *Drum Corps World*, January 2003. http://www.drumcorpsworld.com/articles.cfm?ID=213.
- "Letters to the Editor: Electronics and amplification." *Drum Corps World*, 21 January 2002. http://drumcorpsworld.com/2002/0121_letter.cfm.
- "Letters to the Editor: Electronics and amplification." *Drum Corps World*, 25 January 2002. http://drumcorpsworld.com/2002/0125_letter.cfm.
- Maher, Christopher, et al. CorpsReps.com: The Drum Corps Repertoire Database. http://www.corpsreps.com.
- Osheroff, Raphael and Robert Zinko, "The Big Parade: The Veterans Organizations and the Drum and Bugle Corps Movement." In *A History of Drum and Bugle Corps*, vol. 1, edited by Steve Vickers, 1-62. Madison: Sights and Sounds, Inc., 2002.
- Pirtle, Scooter. "The Evolution of the Bugle." In *A History of Drum and Bugle Corps*, vol. 1, edited by Steve Vickers, 63-90. Madison: Sights and Sounds, Inc., 2002.
- "Rules up, down, overturned and clarified during annual vote." DCI.org, 24 January 2009. http://www.dci.org/news/view.cfm?news_id=222ba8af-d8e6-44cd-9952-77c2575edf73.
- Sward, Rosalie. "How Musical and Visual Design has Evolved." In *A History of Drum and Bugle Corps*, vol. 1, edited by Steve Vickers, 97-186. Madison: Sights and Sounds, Inc., 2002.
- Weiss, Lauren Vogel. "Development of Marching Percussion During the 20th Century." In *A History of Drum and Bugle Corps*, vol. 1, edited by Steve Vickers, 91-96. Madison: Sights and Sounds, Inc., 2002.