


# Veteran Drill Writers Cite Common Pitfalls 

Compiled by Catherine Sell Lenzini

1 What common mistakes should directors avoid in designing drills?

Greg Bimm: Some directors forget to keep enough distance from front to back between the design elements. From the stands the width of the field appears narrower than when looking at dots on a page. Two dimensional views have no height, but people stand tall and compress the distances. The farther away any element is, the greater the vertical spacing should be.
Disjunct transitions from one picture to the next are another problem. Often the first form is clear and pretty, but the next fifteen counts are jumbled garbage until the second picture forms on the last count of the move, leaving only one count out of 16 that is worth looking at. Thinking about how one picture evolves into the next creates a smooth transition and ensures that a drill will be attractive throughout.
Many directors put the colorguard too far out to one side, and it seems detached from a formation. I've seen drills in which the winds and percussion have nice maneuvers, but the colorguard stands motionless on the 25 yard line, which makes them look small and unimportant and emphasizes places where they are not perfectly together. The colorguard should complement the formation, not just supplement it. A bass drum out on the 25 yard line can still be heard, but the colorguard is only a visual element. Consider the audience's line of sight and the focal point of the drill when placing the colorguard. If the colorguard is small, keep it together to preserve the visual effect.
A good drill is completely coordinated with the phrases of the music. Directors should analyze the musical phrases carefully before designing a drill; the goal is for the motion to ebb and flow exactly with the musical phrases.

Mitch Rogers: The biggest problem I see is a lack of coordination between percussion, guard, winds, and props. A director might have a good idea for a particular moment of music, such as a circle collapsing into a line on the 50 that opens into a circle again, while another element of the band is off to the side in a holding pattern. Unless there is a musical reason for these to be uncoordinated, the two elements should have an action-reaction relationship. One element can push or pull another along so everybody on the field works together to create an effect.
Often I see drills that make it impossible for the ensemble to play a passage together, as when the trumpets and flutes have an intricate unison melody, but they are separated by 30 yards. With a production sheet that lists each musical passage you can avoid getting stuck and having to rewrite half of the drill. Take in the whole of the music before positioning elements on the field for precision with a minimum of rehearsal time instead of spending weeks rehearsing a poorly staged drill. If the trumpets have a simple melody line accompanied by a sequence of offbeats in the low brass, the designer might want to place the low brass behind the trumpets to highlight the beautiful melody. However, with an inexperienced band it may be better to put the oompah players in front of the trumpets so they hear the downbeats of the melody and play the offbeats precisely. This too will save rehearsal time to polish the performance.
Uncoordinated transitions between good ideas are common problems. Some directors force a drill through a tortuous course leading up to a certain moment, but it is better to give up a great idea than to stick with a great idea surrounded by poor transitions. The goal is for an audience not to identify the transitions but see an evolution of visual elements that builds to a climax and then flows away with no indication that good design practices were compromised.

Bob Buckner: The most common mistakes are often the result of poor instrumental staging. If the battery percussion is placed in front of and away from the wind parts they support there will be phasing problems that occupy large amounts of rehearsal time. With the battery in front, the pulse suffers along with the blend and musical balance. Directors should watch tapes of outstanding band design rather than drum corps performances. Although drum corps have wonderful designs, they have more rehearsal time and more select personnel than most bands, and in Drum Corps International competitions it is mandatory that the battery percussion sweep the front periodically. Most good designers place the melody voices, countermelody voices, and background voices according to the desired musical balance.
Jon Vanderkolff: The biggest mistake is to sacrifice music for visual effects. A drill writer may have a great idea, such as a rotating box, but it doesn't fit the music. The idea looks great on paper, but when you see it with the music, something is obviously wrong. To avoid this problem use a recording and the score while creating a drill to identify which parts have melody or accompaniment and place them accordingly. Dynamics also affect placement; a big crescendo to a fortissimo passage calls for a visual counterpart, whether it is to stop and play or to continue moving. A complicated effect like a rotating box might work in music with block scoring, which allows greater freedom, but if flutes and clarinets have the melody with a low brass accompaniment, you should look for a different effect in which the flutes and clarinets are in front of the low brass. A drill should highlight the prominent instruments in the music.

> 2 What moves or design elements make drills needlessly difficult?

Greg Bimm: Directors often call for the wrong step size for the tempo. Long steps work only for a narrow range of tempos; the faster the music the harder it is to take a long step, and with a very slow tempo, it is difficult to take a long step because there is no upper body momentum. This problem is easily solved by using shorter distances or having students go into double time during slow tempos.
Directors sometimes write charts that encompass 32 or 48 counts of complicated movements. It is better to divide these into two smaller charts to give marchers a halfway point. Many times drills break down because students don't have enough information. With a pass through, marchers should know exactly where and when the lines will meet. I often plan pass throughs to happen at a phrase break to match the music and minimize confusion.

All marching photos courtesy of Bands of America/Jolesch Photography

Bob Buckner: Marching band lovers are fascinated by the exciting complexity of the visual elements, but many bands try too many complex moves and as a result reduce their musical effectiveness. Too often the musical accompaniment to the visual effect is lacking, and my advice is to include only a few complex moves.
Jon Vanderkolff: During a challenging piece of music, a huge step size is difficult. Keep in mind that the musicians have many responsibilities; if the music is hard, they may not be able to perform a complex visual effect. When designing for trombones, remember that they occupy anywhere from three to six feet. Many times you see them passing through the tubas at a two-step interval, which causes them to raise their slides up over their heads, turn and face the end zone, stop playing, or even hit each other. Allowing extra space for trombones does not detract from the forms because of the long slide. Trombones need even more space than trumpets, which can use a smaller interval like one and a half or two steps. If the trombones are

with the melody formed a curved shape such as a circle, a large arc, or a squiggle, with the rest of the band forming a geometric shape surrounding the curve. The middle piece was Gabriel's Oboe from the movie The Mission. In contrast to the passive, ballad-like music, the drill was active and scattered because it was based on the paintings of Jackson Pollack, who dribbled and flung paint onto the canvas. The last piece was Niagara Falls and the artist was Salvador Dali. In 1997 we performed an oriental show using Three Japanese Dances, a band piece, as well as something from the movie soundtrack to The Joy Luck Club.

Found in many college libraries, the series of books published by Cassavant contain a wealth of geometric ideas such as linear or solid triangles or circles that roll down the field, called cycloids. Much of what has been done, such as the solid block that turns into a rhombus and slants to one side or triangles that turn, spin and move back together, was invented by Cassavant, who was director of bands at the University of Indiana in Pennsylvania. Playing around with the ideas in these books can lead to patterns that really work, such as an idea I have used in nearly every show for almost 13 years. Cassavant describes a regular triangle, which adds two marchers to each row ( 1,3 5,7 , etc.), and a residual triangle, which adds one marcher to each row ( $1,2,3,4,5$, etc.) like a set of bowling pins. I discovered that if you pass two residual triangles through each other at an angle, the audience cannot see the pathway and thinks that a
collision will occur. When the two triangles line up center to center, they form one regular triangle. Because the sum of the marchers in a regular triangle is always a perfect square ( $9,16,25,36$, etc.), a regular triangle can be manipulated in many ways to become a box or some other shape.
Mitch Rogers: A show should be unified by a musical or visual thread that ties everything together. A jazz opener followed by The Pines of Rome and You Are My Life leaves an audience unfulfilled. Themes need not be elaborate; one simple idea is to perform highlights from a Broadway musical, basing the drill on feelings expressed in the musical. Marching band has moved way beyond robotic precision to having students communicate something, and Broadway musicals are rich with emotion. Many directors create historical shows using music that reflects the spirit of a certain time. To find new ideas, directors should look to plays, musicals, ballets, operas, and movies instead of other marching shows.
One simple yet powerful technique is to move a band from an asymmetric to a symmetric form at a key point in the music; I use this frequently as a strong way of resolving a musical phrase. Designers often overlook forms that collapse into a line on the 50 yard line, then open into another form. Working around the 50 is an effective way to create a climax or new feeling of excitement because it is right in the line of sight of the judges or audience. When a relatively static form hits the 50 and bursts open into a box or V , it usually causes the audience to applaud.


marching straight forward or slightly backward and the lines are not rotating, a two-step interval is fine, but if they start moving around each other or passing through they should use at least a three-step interval.
The arrangement of the score should determine the placement of the instruments on the field. Instruments playing the same parts should be near each other, even if the flutes play with the trombones. Writing the drill to fit the music is an aspect of drill design that has changed considerably over the years.

## 3 <br> What are the most common mistakes in drills that do not match the music?

Greg Bimm: Sometimes designers go to great lengths to use a specific form, causing marchers to travel too great a distance and resulting in an unclear formation. As a drill writer I have wasted time trying to get marchers to a form I was obsessing about.
Bob Buckner: Many times I find that drill writers don't give enough consideration to phrasing, resulting in movements that begin or end in illogical places in the music. Designers can avoid this by carefully analyzing the scores before writing the drill. Good designers also make count sheets that include information about meter, tempo, phrasing, auxiliaries, percussion, and visual ideas; this is an important aspect of show design.
Jon Vanderkolff: Designers should consider the location of the percussion battery, especially with a large band that is spread out to where they can't all see the conductor. The battery should be in a vicinity where the band can hear its pulse, such as behind the band. A conductor and the battery can stay together by watching each other, and the band can either watch the conductor or listen to the battery.

At any given point a designer should know the focus of the music; the part with the melody should be featured at that moment of the drill.

## 4. How can directors add variety to the music and movements of a show?

Mitch Rogers: Appropriate visual variety complements the music to the point where it can make something wonderful out of music with little variety such as Ravel's Bolero. In drill writing you might find that you've been using curvilinear forms for awhile, but the music is becoming more angular, harsh, or staccato, so you switch to more linear forms to create visual variety. Shows that present curve after arc after curve become dull. A new texture highlights a climax or change in the music.
Variety in step size is important to avoid a continuous, plodding pace. Many bands are not at the level of development where they can move quickly, but if the pieces in the show have similar tempos, increasing or decreasing the step size produces a change of pace even though the tempo remains the same. A 10 -minute show with only one tempo can still be engaging if a director creates interest in other ways.
Bob Buckner: Many people recreate the same show year after year, but the best groups stretch the envelope with new musical and visual ideas. A fine organization can take a previously used musical theme in a completely different direction. Adapting stock charts for your band's strengths and weaknesses or using a completely different tempo, energy, or focus in the opening of a new show helps a band break out of old habits. I try to begin my designs at a point where I have a clear visual idea rather than always starting at the beginning. With practice working backwards can be as easy as working forwards.
Jon Vanderkolff: The first step in planning a show is the musical arrangement. If this has enough variety and the drill fits the arrangement, the show will have enough variety. Directors should also know the strengths and weaknesses of their bands and design a show that shows off strengths and helps develop weaknesses without highlighting them.

> 5 What are some of the best themes for shows and what simple drill ideas are often overlooked?

Greg Bimm: Last year our show was based on three artists. The opening music was Blue Shades, with visuals based on the paintings of Kandinsky, which often feature geometrically straight forms interrupted by circles and squiggles. In Blue Shades any section


Variety in staging the colorguard is also overlooked. Instead of placing them in an arc in the back, a line in the front, or a block in the middle, have the guard form a circle or a zig zag to create different textures. Frequently the colorguard is the last thing added to a drill, but today it is the most important element in the overall effect of a show.
Bob Buckner: Sometimes when a show is announced I think it will never work, only to be astounded at the resulting program. Theme shows maintain continuity better than variety shows, but both can be effective with skilled designers and performers. Designers and arrangers often forget that a show should entertain the average person in the stands, not just marching band aficionados. I have seen a small group of fans or staff cheer wildly for something in a show that I failed to experience. If marching band is to survive as a musical activity, directors and designers should focus on entertaining and attracting the average person with great arrangements and designs.
Jon Vanderkolff: Many times we lose sight of obvious things that make our art form special. One of the historical strengths of this art form is precise

Greg Bimm is director of bands at Marian Catholic High School (Chicago Heights, Illinois) where the marching and concert bands have earned over 500 awards and honors. Bimm and the instrumental music staff design their own marching shows.
Mitch Rogers has been the drill designer for the Plymouth-Canton High School Band, a perennial B.O.A. Grand National finalist and Michigan State Champion, since 1992. He is also drill designer for the Grand National Champion Spring (Texas) High School Marching Band.
Bob Buckner has been a drill writer for over 30 years and is associate director at Western Carolina University.
Jon Vanderkolff has designed marching shows for several B.O.A. National finalist bands as well as state champion bands in Indiana, Massachusetts and Maine.
execution. Whether it is a simple company front or a box moving across the field, an effect gets the greatest response when it is done well. Make sure that you have a show that students can really perform. Some of the best bands concentrate on perfect execution rather than cutting-edge maneuvers, and this sets them apart from other bands. Other groups receive awards more for what they attempt than what they actually achieve. A director should find his own voice and use this to show off the talents of students. If you have a gifted trumpet player who is going to be the next Miles Davis, focus on that player to help the band stand apart.

## 6 What general advice can you offer about drill writing?

Greg Bimm: Know the music first. Think about the overall concept, then break it down into its parts before putting it back together. Remember that the design may not translate perfectly to the field, and whether or not you write your own drill, be willing and allow time to make changes. A couple of steps one way or the other can open things up and make a big difference. I make changes even in the last week before a performance. Frequently evaluate the use of props, which too often are just something to lean on. My view is that too much money is spent on props and too many props are used today.
Mitch Rogers: Before writing a drill, directors should create a production sheet that shows the important events phrase by phrase and chart by chart. This helps a director place elements for different effects. It also lists other requirements such as wind staging or the movement of a soloist, so that when a designer creates a certain moment, he knows what leads to and what follows that moment. A production sheet helps a director organize his thoughts before putting formations down on paper,

Continued on page 70

## Drill Writing, continued from page 16

which calls upon a different set of skills. When you're focused on step sizes and keeping instruments at a certain interval, it is easy to overlook the 30 trumpet players standing around on the outside with little to do.

My production sheets have four or five columns, with the first containing measure numbers and the number of counts in each phrase. The second column lists which parts play the melody and countermelody and how they should be staged, which is not always obvious. Percussion issues occupy the third column, and production issues, especially logistical matters for the colorguard, appear in the fourth column. The colorguard column should be precisely detailed, including the number of performers on each piece of equipment, when they change equipment, and staging concerns. When I see the guard suddenly run to the sideline, change equipment, and run back again, I know that the designer forgot to plan for that change before writing the drill. The final column lists expressive goals such as whether a moment should be angry, sad, or exciting, and what element of the band should have the spotlight. With this information in front of you, designing the drill proceeds more easily and with fewer mistakes.
As a judge I see many shows in which music, drill, and colorguard are poorly coordinated. I recommend that directors follow the example of the Cavaliers drum and bugle corps and use mostly straight-line-path moves in which each performer moves from one position to the next in a straight line, using equal steps and every count of music in the phrase. This works well for high school bands because each student is accountable for his position, rather than following someone else. To create a straight-line-path drill, you create snapshots of the motion. To rotate a curvilinear formation, make three or four intermediate charts showing the rotation at four, eight, and 12 steps. Instead of trying to find a curved path and maintain his position relative to others, each student marches from his first position to the intermediate positions and then the final position, creating the impression that the form is rotating. It won't look exactly like a rotation, but it takes much less rehearsal time, and if a key person in a form is absent, the others can still march their own course. It also gives directors a tool for evaluating students' knowledge of the show. I
often have half of the students march while the other half evaluates them.
Bob Buckner: My advice is to practice design, because it is more fun if you understand the mechanics well. Practice can include writing several versions of a show or just charting out visual concepts. With computer programs you can quickly bring your visualizations to life and decide if you like them. Just as you would take a road map on a major journey, plan your drills carefully, because they will occupy a major part of the school year. Good planning can make the year go much more smoothly; teenagers enjoy physical activity, good music, and the approval of others, and your activity provides this.
Jon Vanderkolff: Directing a marching band is a collaborative activity that calls for good communication among the band director, the colorguard director, and any drum, brass, or woodwind directors. Even directors who don't do their own writing should oversee the entire production. Always keep people up to date and get their input as a show is being written. Try to show off the band's strengths while developing its weaknesses. In young bands the colorguard is often weak, but designers still have them imitating the complicated moves of the Cadets. It is better to give this weak element a realistic goal to achieve without taking away from the overall effect.

## 7 Do you write drills by hand or on the computer?

Greg Bimm: Although drill-writing software is much better than it used to be, I still write drills by hand. I know exceptional writers who work on computers, but I started out using paper and my perception of movement and spacing is based on a sheet of paper. I've worked with a couple of programs, but I find them restrictive because they are foreign to me. Learning to create with them would be worthwhile for someone just getting started because they make things easier. However, it seems to me that computers can lead some people to use only the tools and icons that make the drill work well within the program. I've seen drills in which the interaction of the elements makes them look as if they were done on a computer. Some directors allow the computer to come up with the ideas instead of using the computer to implement their ideas.

Mitch Rogers: I go right to the computer. Occasionally I sketch things out at an early stage, when many complicated issues have yet to be resolved. Unless a designer writes only one drill a year, writing by hand takes too long. The computer also provides the exact coordinates for students. When choosing a computer program, look for a good tool set and animation capability. Most directors can see drills in their head, but they may not realize all the details such as two groups bumping into each other. Animation lets them check to make sure things are working correctly. If your band competes in different states or if the guard performs on a gym floor, the flexibility for different field configurations is helpful. Some programs are better for such administrative jobs as printing out coordinates with each student's name.
Jon Vanderkolff: I write everything by hand. There are really excellent drill writers who use computers, but I love to draw and the detail of working by hand. With computers it is so easy to cut, paste, and go on to the next item that I don't pause to think about every little section of the band or what the person on the end has to do. Both methods have merit, although writing by hand does take forever, especially for bands with 300 members.

## Work Premiered

The Salem County Brass Society conducted by Charles Musser will premiere Commemoration Overture, Op. 384, by David Uber, emeritus professor of music at the College of New Jersey on April 30, 2000 at Carney's Point, New Jersey. Uber has again received the A.S.C.A.P. award for the year 2000. A complete catalog of Uber's pieces including publishers and level of difficulty is available free by contacting David Uber, 283 Mountain View Road, Tinmouth, Vermont.

## Recent Publication

Warner Bros. Publications introduced the new book Approaching the Standards by Willie L. Hill, Jr., renowned music educator and saxophonist. The three-volume book, available for either $\mathrm{C}, \mathrm{B} b, \mathrm{E} b$, and bass clef instruments, offers a new approach to jazz improvisation with theoretical material for improvisational performing. Each volume includes a book and play-along C.D. featuring eight jazz standards. For more information, contact Warner Bros. Publications at 800-327-7643.

