Laying out the score

Let's start with a blank slate. At this point, **you need to know what type of equipment you are working with, the setup, how many players are in the ensemble and their ability levels. Now you can lay out the score page.** While there are several ways to lay out the score, it will help you keep track of your players if you create **one staff line per player**. If you have 8 players in the pit, create 8 separate staves to accommodate them. Here are the two most obvious ways to do this:

Creating a personalized staff for each player

This method is most appropriate if you rotate your players to different instruments throughout the show. It also works well if you have a strong knowledge of your player's capabilities. By creating a personalized staff for each player, you are creating a **"custom made" part** for them. This will help you to write for the strengths and weaknesses of the ensemble. Also, anytime you want to address a certain player during rehearsal, you'll know exactly where to locate their staff line on the score.

Check out figure 5-A, and you'll see the staves named after each player in the pit. In order to keep track of who is playing on what instrument, it's important that you create labels in the music to indicate what instrument is being used.

Figure 5-A: Pit score sample from SCV's opener in the year 2000

Having each staff line represent main instruments

In any front ensemble score, you'll find there are primary instruments which are used for the majority of the show. In arranging scores for the Vanguard, our main voices are: 3 vibraphones, 3 low-A marimbas, 5 timpani, glockenspiel, xylophone, and percussion. These nine staves comprise the front ensemble score. Of course, we'll use other instruments throughout the show; these are simply our main voices.

When setting up your score in this manner, it's customary to list the high pitched instruments on top and the low pitched instruments on the bottom. This is fairly common in percussion ensemble literature and makes it easier to quickly locate a certain instrument in the score. Figure 5-B is an example of this page setup. Notice you still need to label any instrument changes that may occur along the way.

Figure 5-B: 2002 Pit score. Each staff represents a different "main" instrument.

On pages 78-82, we discussed different ways that the pit can be set up. If you are using the **"pod" style setup**, each "pod" will need its own staff line on the score. Perhaps you have a marimba with a glockenspiel mounted on the front, plus a concert tom, temple blocks, two suspended cymbals, a china cymbal, and a splash cymbal. This is more of a "multi-percussion" setup. As long as you know what instruments are available to each player on their staff, you are armed with all the information you need to start writing. If you are using an **antiphonal or split setup** you will want to group together the instruments from each side in the score. For example, all of the instruments on side one of the pit will be in the top half of the score and all of the instruments on side two will be on the bottom half of the score.

Formulating your ideas

Formulating your ideas is perhaps the most important step in the arranging process. This is the time to think through all of your options. When writing for such a diverse instrumentation, it's easy to get carried away and overwrite. It can be equally tempting to simply mirror the parts of the wind players, resulting in a score that doesn't complement the overall package. The following pages will guide you in generating and organizing your ideas into score form. Now the fun begins!

The Phrase Chart

The first step in the organization process is creating a phrase chart. This chart will include **a general analysis of what the winds and battery percussion are playing during each phrase.** This chart will allow you to see the bigger picture and flow of the entire chart. From here you can start to formulate ideas for the pit's role. Information in your chart may be as vague as "metal colors," "harp effects," "string parts from original," "tacet," or as specific as sketching in rhythms and pitches.

Phrase Nam	# of counts	Tempo	Meter	Percussion Notes	Wind Notes	Original Recording	Other Notes
1	32	QN=180	4/4	Bass ostinato, snare/tenor colors. Vibe/ Mar supplement ostinato feel w/8ths	Low brass play trombone melody. Mellos play split ostinato counterpoint figure. Low Brass main melody.	String/flute counterpoint - trombone on melody	1st two bars, percussion sets up new tempo
1A	14			Continue feel, lead into next phrase with growth	continue as above	continue as above	
2	16			Melodic accents distributed throughout battery ens.	Mellos take over tromb. melody	continue as above	
2A	18			2 against 3 feel for variety, then melodic build to impact of phrase 3	Sops take over melody, mellos cover moving trumpet line	tromb still carrying melody, trumpet adding more motion underneath	
3	12			Add decending flourishes in keys and BD's, otherwise full	Full out, all sections	Rich harmonies, musical "arrival point"	Halt - impact statement
4	20			Bring it back down a bit, cyms cresc lead into phrase 4A w/sizz run. Xylo/tenor 16th ost, 2 choirs of vibe/mar to simulate sop counterpoint	Sops cover 8th note counterpoint as ostinato to setup next phrase. mellos sustain horn part	Trumpet counterpoint ostinato, blended string 16ths with flute/clar flourishes	
4A	24			Timpani, bold w/low brass statement. ostinatos continue, while battery supports melodic accents	Low brass - tromb statement over the top of sop 8th note ostinato	Continues as above w/ trombone adding BIG melodic statement over the top.	
4B	16			Full ensemble. Unison impacts in rhythm w/brass	Full ensemble. Rhythm impacts. Modulate key for better bugle range.	Arrival point of tension build	
5	57		3/4	Bass brush texture for new feel, Sn w/mids, Tenor w/baris, bass w/brass reenter, all add into build	Sop trio (9 cts), Mid-horn trio (9 cts), Baritone trio (9 cts)	Horns hand theme off to muted trp, then hand off to upper ww, hand off to string. 3 MEAS. PHRASES	9+9+9+9+9+12 Build/fabricate impact at end of phrase
6	31			Snare break	tacet - perc feature	N/A	

Figure 5-C: Phrase chart from a portion of Barber's Symphony No. 1 and No. 2 production from 1999.

To add a melodic voice or counterpoint to the musical ensemble

This arrangement from the 2003 SCV show is from a chamber piece for 15 string players. The brass parts (as seen here) used all of the material from the original score; leaving nothing for the pit. For our needs on the field, this was a bit boring. So the vibes took the lead on top of this material by playing an augmented melodic theme. Notice the battery playing a very supportive, accompanimental role so as to not get in the way. This is a case where the pit is scored to take the lead, however it's blended into the overall ensemble for a more holistic sound. Oftentimes, it's just as easy to have the other sections simply tacet for these types of phrases. This was an instance however, where we needed the energy of a more fully orchestrated feel. For this reason, the melody is limited to metallic keyboards while accompanimental elements still exist in the marimbas, timpani, and percussion.

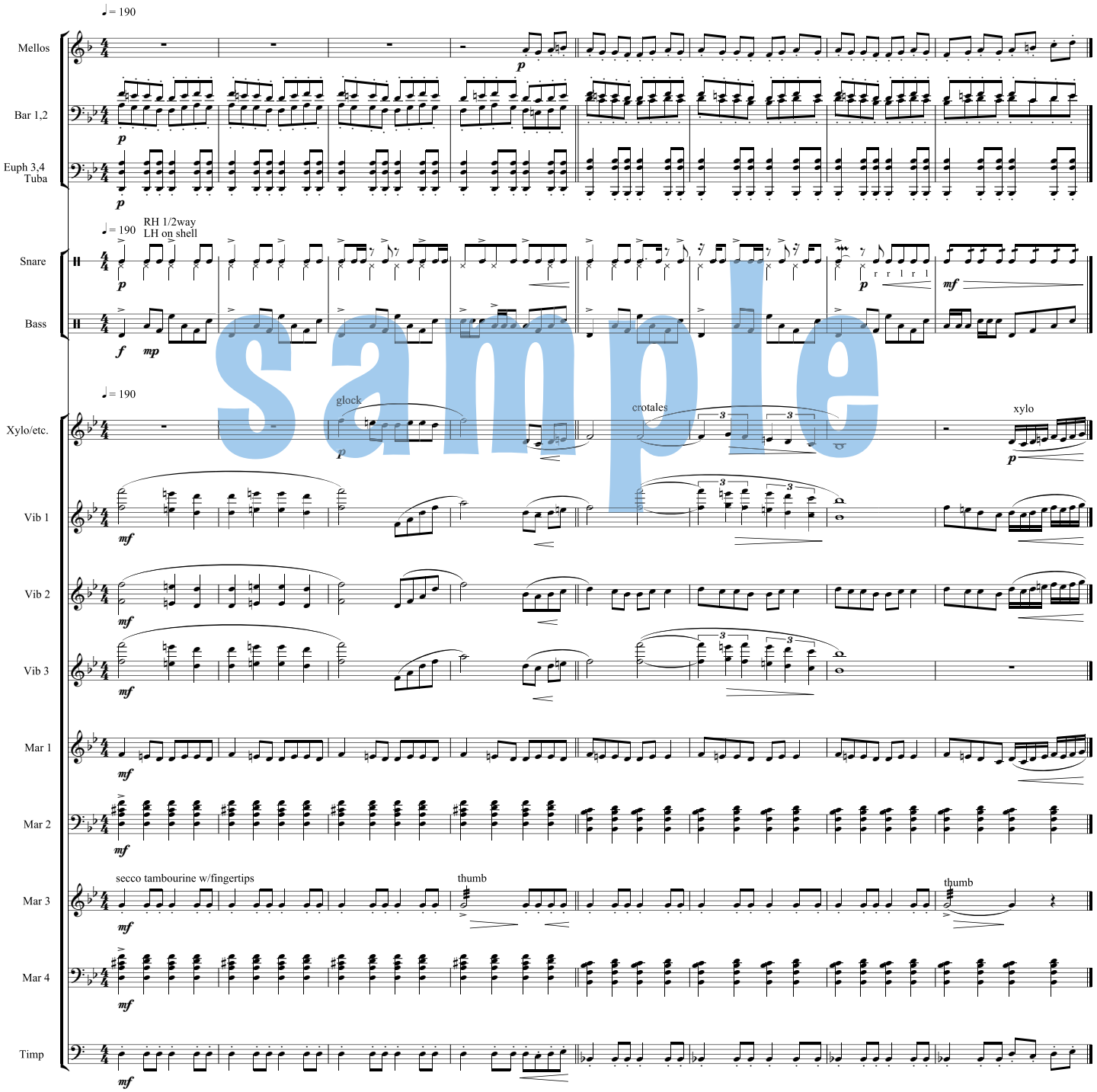

Figure 5-G: Pit takes the lead over brass in this example from the 2003 closer.

Composing Runs

What would drum corps be without some high speed runs on the keyboards? Practicing all summer long, today's pit performers can finish the season with an ungodly amount of chops. While there are much more difficult techniques to display in four-mallet independence, runs are ironically the sections where audiences and judges like to "oooh and aahh." There is *probably* no harm to this; runs are flashy, and people like to hear them. Nothing wrong with that...

Writing runs is usually the sole responsibility of the pit arranger. Often, the original scores don't contain this musical embellishment. To create runs from scratch, use the same process you used to create counter melodies in the previous section. Start with a harmonic analysis of the wind parts, experiment with the rhythm and what chord tones you want to start on, create a shape for the line, then start to experiment with pitches. Finally, decide how it should be scored (thick texture, thin texture, etc.)

Here's an example from the 1998 SCV Opener. You'll see the sequence in the brass parts modulating up a minor-third every two bars. These are simple, major-chord harmonies (with a minor 7th adding tension on the downbeat of each two-bar sequence). The trick is to find a scale mode which fits into this harmonic structure. Also, since the run is made up of a series of quick 16th notes, it's important for it to "fit" on the instrument so the players can navigate through the bars without awkward interval jumps.

Figure 5-M: Brass reduction and primary pit score from the end of the 1998 SCV opener.

Orchestration concepts

Writing Harmonic Mallet lines

Sometimes it's more appropriate to take a single melodic line and have it played in harmony with another line. It can create a thicker texture and add more interest. Since this technique may slightly reduce the amount of keyboard projection, it's not something you want to rely on for a majority of your show. Harmonizing keyboard lines is usually best appreciated in situations where the keyboards can be heard clearly. Often it's easiest to write the main (top) melodic line, then harmonize with a second line by writing in thirds or fourths below the main line. Here are a few examples of some keyboard lines that have been used in past arrangements.

Figure 5-O: This excerpt, from the 1999 SCV opener uses "quartal" harmonies. These are harmonic lines that are parallel in motion, but separated by an interval of a fourth.

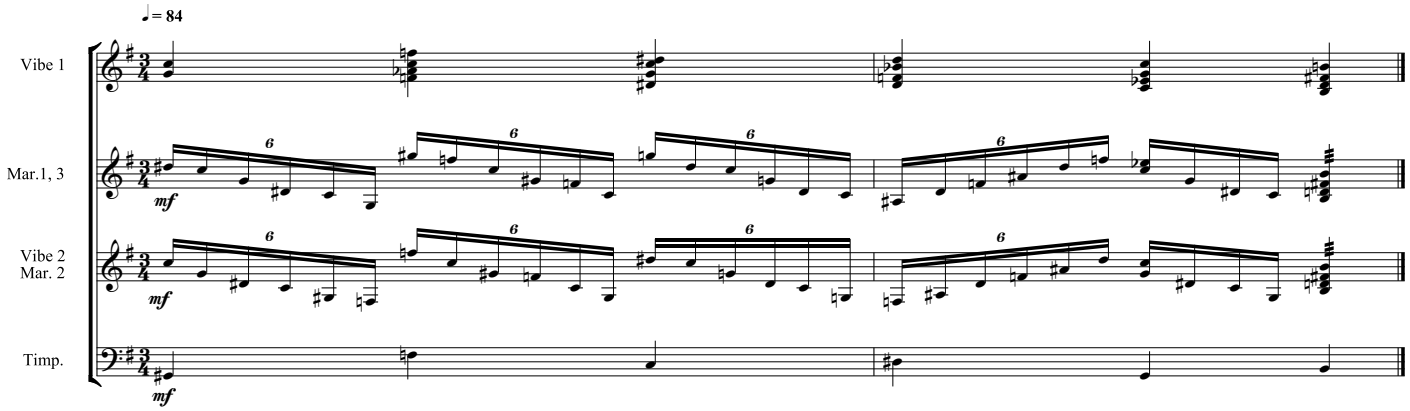

Figure 5-P: In this excerpt from the 2000 SCV intro production, you'll see the sixtuplet lines are actually arpeggiated chords. Rather than being played in unison, they are performed in inversions. The harmonies are the same, but the starting point within the arpeggios is different.

Using the instrument's best range

Don't be afraid to spend a fair amount of time experimenting with the **ranges** of keyboard lines. When writing, it's good to have each instrument's **characteristic sound** in your head, so you can write the parts in a range that blends well and projects. Just for fun, imagine what a medium soft marimba mallet will sound like in the upper-most range of the instrument. It'll sound kind of fluffy, right? Now imagine using that same mallet in the lower range of the instrument. You can probably imagine a more resonant sound, and more pure fundamental tone from the bar simply because the mallet is more appropriate for the range. These are things you need to think about when writing. Have an idea of what timbre will result from writing too high, or too low.

You might also find it helpful to consider the instrument's **transposing qualities** to determine in what range it will sound best. For example, since a xylophone sounds one octave higher than written, this phrase (which appears as a unison line between xylophone and marimba), would actually sound in octaves. This is a handy scoring technique to get more projection. If you want more sound out of a singular line, you'll find it helpful to have the keyboard lines spread out among an octave or two.

Figure 5-Q: To add more fullness and warmth to this line, marimba 2 is written down an octave from marimba 3. Between the xylophone's natural transposition (one octave higher than written), the marimba 1 line (sounds as written), and the marimba 2 part written an octave lower, you'll have three keyboard players performing the same line in three different octaves. This will create a very full sounding phrase.

Timpani ranges are limited on each drum, however the heads usually sound their best at higher tensions. For example, a C on the 29" drum will sound much better than a C on a 26" drum. You should try to factor this into your writing. Also, you might find it beneficial to play certain **timpani impacts in octaves**. Another method would be to write for a unison double stop on two different drums for more projection. If you choose to use these doubling methods, be sure there is enough time to tune accordingly. A good timpanist can do this quickly, but if your timpanist isn't very experienced, you should allow enough time for them to set their pitches. For a general reminder of timpani ranges, refer to the timpani range chart on page 22.

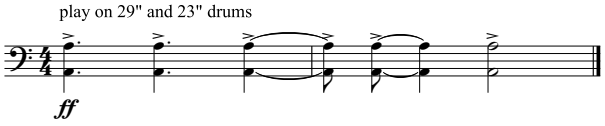

Figure 5-R1: Timpani impacts in octaves

Figure 5-R2: Timpani impacts in double-stops (same pitch, two drums)

Overwriting continued...

Here's another example where overwriting cluttered the ensemble. This is an excerpt from the 1996 SCV production of "La Mer." Observing the pit score, it doesn't necessarily appear to be overwritten. However, this is a case where it's important to note the pit's role in relation to the rest of the ensemble. In our brass arrangement, these four bars were designed to sound bold and triumphant; an impact! The running triplet to 8th note part in the xylophone was taken from the strings in Debussy's original score, as well as the timpani part and the quarter note triplet melody seen in the Marimba 2 part. The problem isn't that these parts are inappropriate. It's just that during an impact moment on the marching field, sometimes the intent is more clearly heard by *eliminating* musical ideas that aren't as prominent in the original. It's merely a matter of identifying the **main musical priorities**, and letting them do the work.

Figure 5-T1: Reduction score from the 1996 closer. This is the original version with a few too many things going on.

Considering how the setup will affect the overall sound

It's pretty safe to say that no two front ensembles have exactly the same setup. When writing, you'll find it very helpful to keep a "map" of the pit nearby so you know where the music is going to come from. Simply draw a rough sketch of the pit, and label each instrument with the player's name.

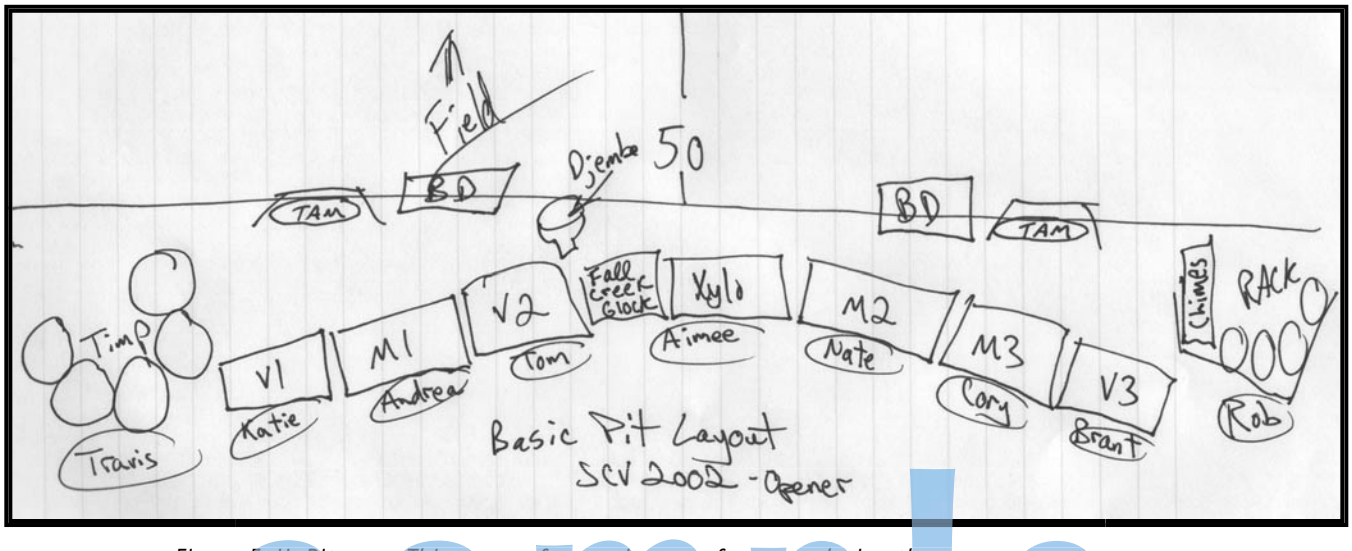

Figure 5-U: Pit map. This scrap of paper is never far away during the arrangement process.

Here's one consideration. It's often helpful to have people who are playing similar parts stand next to each other so they can more effectively listen. We refer to these as **choirs or "teams."** By positioning players closer to each other, their musical material will be weighted more heavily in that general area of the pit. If you want a "full pit" sound, be sure that the entire pit is contributing to the material being played. Otherwise you might find that certain phrases have a lop-sided balance in relation to others.