

ARRANGING FOR STRINGS

Part 2

(School and Amateur Ensembles)

by Vince Corozine

In Part 1, I covered the various approaches to arranging for strings, problem notes for young string players. The use of imitation in arrangements and the use of counterpoint as a way to add interest and to enliven an arrangement. In addition, I offered arranging hints, which I found useful when I arrange music.

Part 2 is an expansion of the points made in Part 1. Part 2 offers ideas regarding the spacing of string chords, how to arrange the same idea in a different way, achieving an appropriate balance in the strings, and transcribing parts from piano music to strings.

REVIEW

Let's recap some of the points made in Part 1.

- Keep the music rhythmically simple and technically undemanding.
- Unisons sound stronger and give the players confidence as compared with divided passages. Remember, there is strength in numbers.
- “Off the string” bowings such as *spiccato*, *jete' (ricochet)*, and *saltando* are difficult to play. It is best to avoid these specialized bowings.
- Rapid chromatic passages should be given to the woodwinds... These are difficult for the string players due to the necessity to slide the fingers quickly when executing these passages.



- Vibrato is not possible on open strings. Avoid using open strings; instead use the fourth finger to “cover” the open note. Vibrato adds warmth and aids intonation.
- If you want to begin a musical line on a low “G” for violin, it is better to give the note to the violas or cellos. No vibrato is possible on this low “G.”

ARRANGING THE SAME IDEA DIFFERENTLY

Nothing is more as dull-sounding than a three to five minute piece of music that is arranged using the same voicing, spacing, and sound throughout. A piece of this length should have at least one modulation to sustain interest and provide a needed lift.

These ideas will assist you in arranging the same idea differently.

- Completion of a partial transference to another octave; higher or lower.
- Repetition in a different key.
- Extension of the whole range by the addition of octaves to the upper and lower parts.
- Alternation of details, through the addition of trills, *appoggiaturas*, pedal points, *mordents* and the like.
- Variation of the general dynamic scheme, such as repeating a phrase at a lower dynamic level.

DISTRIBUTION OF CHORDS

The most resonant distribution (spacing) of chords follows the distribution of overtones in the natural overtone series. Chords voiced in close position in the low register produce conflicting octaves with many dissonances, which make the chord sound thick and muddy. Widely spaced chords are more common and can be quite resonant.

CHRISTMAS ORATORIO Camille Saint-Saens

The image displays a musical score for the Christmas Oratorio by Camille Saint-Saens. It consists of three systems of staves. The first system includes Violins 1-2, Violas, and Cellos. The second system is for the Piano (Pno.), starting at measure 4. The third system is also for the Piano (Pno.), starting at measure 6. The score is written in G major (one sharp) and 12/8 time. The first system shows a melodic line for the violins and a supporting bass line for the violas and cellos. The piano part in the second system features a complex, flowing melody in the right hand and a more rhythmic accompaniment in the left hand. The third system continues the piano part, showing a more static harmonic structure in the right hand and a similar accompaniment in the left hand.

In the excerpt from the Christmas Oratorio by Camille Saint-Saens, you will notice how the second violins and violas move together in a *legato* fashion in parallel thirds. This creates a sonorous underpinning along with the pedal point in the cellos. The inner-voice movement adds color and motion to the piece. The organ augments this lovely string passage during a performance.

STRING BALANCE

By having more than two violins playing one part, the results is better intonation and blend. Unless, of course, you are writing for a string quartet, where each part is of equal value and the four string players balance within themselves.

Pizzicato is more resonant when played on the lower strings. For violins, it is best to keep *pizzicato* notes within the treble staff.

OCTAVES

Writing octaves between the first and second violins generally weakens the sound. A one-octave spread is considered “old-fashioned” and dated. “Gaped Octaves” sound much stronger and projects better than a one-octave musical line. This means that the violins will play the upper octave in unison, while the violas and cellos play the same musical line two octaves below. The resulting sound is full and resonant.

Although the middle octave is omitted, the melody sounds as full and resonant as when a three-octave spread is used. It is worth reiterating that a three-octave “gapped” coupling or strings is always preferable to a one-octave pairing for projection of a musical line.

The image shows a musical score for Violins and Cellos. The Violins part is written in the treble clef, and the Cellos part is written in the bass clef. Both parts are in the key of D major (indicated by two sharps) and common time (indicated by 'C'). The tempo/mood is marked *mf*. The score consists of four measures. In the first measure, the Violins play a whole note G5 (two ledger lines above the staff) and the Cellos play a whole note G2 (two ledger lines below the staff). In the second measure, the Violins play a half note A5 (one ledger line above) and a half note B5 (one ledger line above), beamed together. The Cellos play a half note A2 (one ledger line below) and a half note B2 (one ledger line below), beamed together. In the third measure, the Violins play a whole note C6 (three ledger lines above) and the Cellos play a whole note C3 (three ledger lines below). In the fourth measure, the Violins play a half note D6 (three ledger lines above) and a half note E6 (three ledger lines above), beamed together. The Cellos play a half note D3 (three ledger lines below) and a half note E3 (three ledger lines below), beamed together. The piece ends with a double bar line.

One variation on this would be to have the violas double the first violins on the upper octave (if the notes are comfortably in the range of the viola), and the second violin and cello play the lower octave.

Another variation is to write a musical line in three octaves. Unison violins play on the top octave, violas play the middle octave, and the cellos play the lower octave. This produces a powerful sound that can easily project out of the orchestra.

RATIO OF BALANCE

In a string quartet, all of the strings learn to balance their volume with one another. In a large string ensemble, you must be careful to have enough strings on hand to achieve a proper balance.

I try to have a minimum of three violins on a part, two violas on a part, and at least one cello on a part.

A string ratio that works well is:

two violins = one viola
two violas = one cello
two cellos = one string bass

Keeping in mind that a high unison violin line sounds wonderful in a recording studio, but sounds a bit thin and weak in live performances. Therefore, another instrument, such as the oboe, should double this line at the octave below, in live performances.

These effective string combinations, which I have used in the recording studio, work well together.

- 9 violins, (5/4) 2 violas, 2 cellos
- Nine violins and three cellos work well, if each is treated as a separate unit. (More about this in my next article)
- When creating a background for a vocalist or soloist, the following is a full maximum sound, creating powerful resonance.
12 violins (5/4/3), 4 violas, 4 cellos

As you can see, it is better to have more violins on the top part than on any other part. This adds resonance and depth to the overall violin sound.

IMITATION

Imitation is a compositional device that adds interest to an arrangement. The interval selected to begin the imitation should be a consonant one; i.e.: third, sixth, or octave.

molto rall.

Violin 1
Violin 2
Viola
Cello

mp
mp
mp
mp

imitation 6th below melody
imitation 10th below melody

Observe that the imitation in measure two begins on a consonant interval of a sixth with the melody. Notice in measure three how the entering imitative note begins on a consonant chord tone of a tenth below the melody.

Notice that the string bass is *tacet* until the final note, where it adds depth to the final cadence. The string bass is usually omitted from *piano* or *pianissimo* passages, as its sound anchors the ensemble and is usually too strong and dominant for soft passages.

In the next excerpt from “The Tsar’s Bride” by Nicholas Rimsky-Korsakov, you will notice that the violas and cellos imitate the violins one beat later. This difference in bowing patterns creates a fusion of sound that adds variety to the string sound.

The composer adds two oboes, two bassoons, and four horns to thicken the cadences, and he deftly uses them alone in the last measure to quietly end the piece. It is important to notice that the two string unison lines in mm 1-3 are written in parallel sixths with each other, creating a sonorous, consonant blend of sound. Observe how the composer cleverly augments the rhythms at the end of m 4 to arrive at mm 7-8, and 9-10.

If you were planning to arrange this selection for school orchestra, my recommendation is to transpose it to D major, making it an easier key for the strings to play.

Rimsky-Korsakov

The Tsar's Bride

Add oboes, bassoons, and horns for fullness at cadences

♩ = 96
Strings written in parallel sixths (imitation)

Violins 1-2
Violas
Cellos
Basses

p
p

Add basses

6

DISTRIBUTION OF CHORDS

The typical voicing for five saxophones in a jazz ensemble is called “Four-way-close” with the baritone saxophone doubling the melody at the octave below. A few prominent authors of orchestration books recommend this method for both voicing saxophones and strings. I have found that this voicing does not work very well for strings. The result is a small, cramped sound.

A better way to approach the voicing of chords in a string section is for you to use a “Four-way close” voicing with the second note from the top dropped one octave.

The examples below show each method:

<p>Four-way close, melody doubled an octave lower</p> <p style="text-align: center;">G⁶ B⁹ E^{m7}</p>	<p>Four-way close, second voice dropped an octave, melody doubled an octave lower</p> <p style="text-align: center;">G⁶ B⁹ E^{m7}</p>

Tschaikovsky, in most of his orchestrations used this technique.

In order to achieve a full and resounding string sound, you should allocate the strings in the following manner. Notice the ranges of the instruments and the instruments which doubling the top violin part. Both examples will sound big and resonant.

Both examples sound very full and resonant	
<p style="text-align: center;">D</p>	<p style="text-align: center;">G</p>
<p>Violins 1-2</p>	<p>Viola and second cello double melody an octave lower</p>
<p>Cellos Basses</p>	

TRANSCRIBING PIANO MUSIC FOR STRINGS

This excerpt from a sonata by Beethoven consists of all sixteenth notes. Yes, proficient violinists are able to play the sixteenth notes with good results. However, the piano has a built in pedal that the strings do not possess. The piano part alone will result in a more resonant sound than the sixteenth notes played by the violins alone.

Here is one way to transcribe the piano excerpt by Beethoven for violins. The result is that each part is easier to play, while at the same time adding resonance to the string sound.

SONATA Beethoven

The image shows a musical score for three instruments: Piano, Violin 1, and Violin 2. The Piano part is written in treble clef with a key signature of three flats and a 2/4 time signature. It consists of a continuous sixteenth-note melody. The Violin 1 part is also in treble clef with the same key signature and time signature. It plays a four-note phrase with a slur over the first and third notes. The Violin 2 part is in treble clef with the same key signature and time signature. It plays a sixteenth-note accompaniment. All parts are marked with a piano (*p*) dynamic. The score is titled 'SONATA' and 'Beethoven'.

Notice that the first violins play the first and third notes *legato* for added resonance, while the second violins play the second and fourth notes *staccato* to ensure the rhythmic feel of constant sixteenths to permeate.

Most textbooks on orchestration contain examples of how to transcribe piano music for orchestral instruments. However, one of the best books for learning how to transcribe piano music is Joseph Wagner's, *ORCHESTRATION: A Practical Handbook* published by McGraw-Hill.

In Part Three and Part Four, I will discuss arranging music for proficient (Amateur or professional) string players. The areas will cover the number of string players needed to achieve a big, full sound, examples of effective endings, inner voice movement, string effects, and contrapuntal writing.