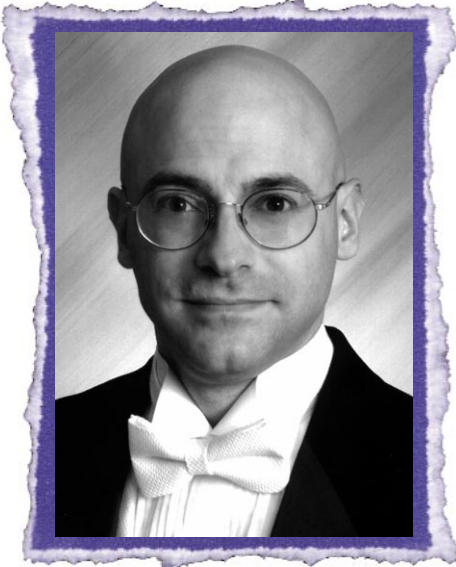




YAMAHA

Educator Series

PERCUSSION



Nick Petrella

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Choosing Cymbals for Band & Orchestra

By Nick Petrella

When selecting cymbals, a few characteristics remain constant. For all cymbals, the characteristics that affect timbre are the bell size, cymbal weight and profile. The larger the bell, the more overtones the cymbal produces. As cymbals of a given size increase in weight their response will be slower, they will have a longer sustain, they will be capable of producing more volume and their pitch will raise. The pitch is also affected by the profile, which is the amount of bow from the bell to the edge. When all other considerations are equal, a higher profile produces a higher pitch.

As with all generalizations, remember that there are differences. When thinking of cymbals use people as an analogy – we all have different personalities and characteristics that make us unique. Please refer to the simplified graph below.

| | | |
|--------------|---|--|
| Small bell | = | less overtones |
| Large bell | = | more overtones |
| Light cymbal | = | quick response, short sustain, less volume, and dark |
| Heavy cymbal | = | slow response, long sustain, more volume, and bright |
| Low profile | = | dark |
| High profile | = | bright |

To help distinguish between the numerous sizes and models of cymbals, new cymbals are clearly labeled. Before purchasing it is advisable to consult a manufacturer's cymbal list to become familiar with the characteristics of each model. Having an idea of the different sound qualities available will help to narrow the selection process. For example, although it is very rare that any two cymbals will sound exactly the same, two pairs of 22" HH Germanic hand cymbals have a greater chance of producing a similar sound than a pair of 16" HH Germanic when compared with a pair of 22" HH Germanic. Narrowing the selection process before listening is important as our ears become "tired" when concentrating on cymbal sounds for long periods of time. This lack of concentration will hamper our musical decision making.

Hand Cymbals

A choice cymbal sound produced by a pair of hand cymbals is one that grows or blossoms after it is set into motion. It should also have a wide range of overtones and each cymbal should sound good separately. Cymbals that have a strong fundamental pitch or a warbling quality should be avoided. Not only will they sound unmusical but they may interfere with the tonality of a piece. Pairs tend to sound best if their interval is not more than a minor third. This allows for a single blended sound rather than two distinct sounds.



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When purchasing hand cymbals it is best to visit a retailer who has a large inventory and who will allow the buyer to “audition” the cymbals in the concert hall or stadium where they will be played. Choosing cymbals in this manner will provide an accurate perception of how the cymbals will sound in a specific venue, minus the audience. It is best to undertake this selection process with at least one other person, preferably an advanced percussionist. This will allow all involved to take turns playing on different areas of the stage and listening from different areas of the auditorium.



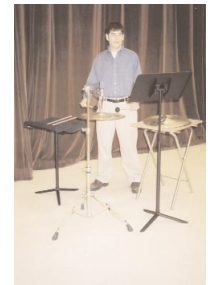
If a specific venue is not possible, “audition” the cymbals in any acoustically-sound concert hall. If the retailer does not allow the cymbals out of the store, test them in the largest area of the store or listen to them outside. Cymbals, like all percussion instruments, need a large enough area to produce their full spectrum of sound.

When listening to hand cymbals it is advisable to bring two short pieces of rope, looped and knotted at one end to use as straps. This will save time by eliminating the tying of cymbal straps. As noted earlier, it helps to take breaks when listening as concentration tends to be less focused after a while. When listening, separate the cymbals into stacks of “yes,” “no,” and “listen again.” After the initial round of listening take a break and resume by listening to the cymbals in the “listen again” stack.

After choosing a pair of cymbals from the “yes” stack, decide which will go in the left and right hands; and keep this consistent. This will enhance the production of consistent sounds and is advisable when performing with marked cymbals, a topic addressed below. Most right-handed percussionists hold the lighter cymbal in the right hand and the weightier cymbal in the left. The opposite holds true for left-handed percussionists. The principle reason is that many think a fuller sound is produced when the hand with more motion holds the lighter cymbal. This is a topic of much debate among experienced percussionists; therefore, listen critically and experiment with the cymbals in different hands to decide which method works best for you.

Suspended Cymbals

In addition to the numerous suspended cymbals on the market, any cymbal may be used as a suspended cymbal. It is up to the performer to decide which cymbal to use for each musical situation. Because a 17” or 18” suspended cymbal will prove effective for most situations, it is advisable for those beginning a cymbal inventory to acquire one of these first. The next step would be to add cymbals larger and smaller and then cymbals of the same size but with different timbres and characteristics.



When purchasing suspended cymbals it may be more economical to buy two pairs of hand cymbals than to buy one pair of hand cymbals and two suspended cymbals. Remember that each pair of hand cymbals constitutes two suspended cymbals. Although suspended cymbals might sound good separately, they might not match as pairs.



The easiest way to suspend hand cymbals is to place the straps over a horizontally tilted boom stand. When a boom stand is unavailable, use a goose-neck stand that has some “spring.” Two reasons for suspending a cymbal by a strap are so that

the cymbal can hang freely, which will aid in the production of a full sound, rather than playing it into a post-type stand which inhibits a full sound. Also, hand cymbals can be used without removing the straps. When a suspended cymbal without straps is on a post-type stand, it should move freely and the cymbal post should be covered with a rubber or nylon sleeve to avoid damaging the cymbal. If it is too tight on the stand the motion and sound will be inhibited and damage to the bell may result.





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"Auditioning" cymbals with the same sticks and mallets used when performing is equally as important as a specific venue. The selection of sticks and mallets will aid in keeping variables to a minimum.

As an experiment, listen to the same cymbal in the following ways and determine how the sound has changed. Be sure to use the same mallet. You may be surprised by the differences.

Play the cymbal:

- as you gently toss it a few inches, then catch it.
- as it is balanced on your finger.
- while it is suspended by a cotton rope.
- while it is suspended by a leather strap.
- while it is on a post-type stand.

Choosing Cymbals for a Particular Piece

When choosing cymbals for individual works, the most accurate and musical decisions are based upon score study, listening to recordings and attentive listening in rehearsals. These methods are very important especially if an ensemble has a vast selection of cymbals from which to choose. The character, dynamics and tempi in a piece are a few items to be taken into consideration. Is the work a march? Does it contain a forte crash with tutti strings or tutti brass? These factors all influence cymbal choice.

When selecting cymbals, use your ears and not your eyes. In other words, do not limit your selection by reading the names on the cymbal. There is nothing wrong in using "orchestral" cymbals in a marching band and "marching" cymbals for a concert band. To emphasize this point, have a friend play different cymbals and, with your eyes closed, try to discern the sizes and models. Even though there is a visual aspect to percussion performance, the sound is most important.

*Excerpts reprinted from A Guide To Cymbals, Finger Cymbals and Crotales by Dr. Nick Petrella, with permission from SABIAN. Exerpts from The Ultimate Guide to Cymbals and A Guide to Cymbals, Finger Cymbals and Crotales are Reprinted with permission from Carl Fischer, LLC and Sabian Inc. respectively.

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