

Excellence in Cymbal Sounds: A Conductor's "Crash Course"

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Sponsored by Sabian Cymbals and Vic Firth Mallets

Cymbals appear in every genre from marches to opera yet are often ignored or misunderstood. This clinic examines effective strategies from the podium to "fine tune" sound quality and musicality. More than playing technique this clinic explores selecting cymbals for the "right" sound, how conductor's gestures or terminology can "communicate," placement and balance in the ensemble, sound projection, effects/colors/sounds, effective suspended cymbal possibilities and understanding notation in the score. Good quality performance on both suspended cymbals and crash cymbals takes practice, inquisitiveness and sensitivity to master. Let's start with the fundamentals that are crucial to our goal.

1. Nomenclature

English	Suspended Cymbals
German	das Becken (hängend)
French	la cymbale (suspendue)
Italian	il piatto (sospeso)

English	Crash Cymbals (pair)
German	die Becken (paarweise)
French	les cymbales (à 2)
Italian	i piatti (a due); i cinelli

2. Background

Cymbals originated in Asia as small instruments almost like metal bowls with handles that were struck together. The Saracens in the middle ages brought these to Spain, southern Italy and the Mediterranean region. During the 17th century, large cymbals of cast or hammered alloys were used in Turkish Janissary music along with the bass drum. Introduced into Europe cymbals were quickly adapted into opera and orchestral music as seen in such examples as Haydn's Military Symphony, Mozart's Abduction from the Seraglio and the 4th movement of Beethoven's Ninth Symphony. Today the design and development of cymbals offer an almost infinite vocabulary of sound colors limited only by the imagination of the composer, conductor, or performer. The performance of cymbals however still offers a daunting challenge, as you can't "sneak in" with a cymbal crash.

3. Choosing cymbals

- a. Using a simple rope, suspend each cymbal of the pair to find a possible heavy spot. This is like balancing a tire. Make a pencil mark opposite the heavy spot. When playing, the pencil marks will point upwards and be right where you can see them. This helps insure that the cymbals will not rotate due to gravity, thereby changing sound with repeated crashes. Determine which of the pair is slightly heavier and at first use this as the “bottom” but be willing to reverse the plates to see which way they work best.
- b. Test them in the concert hall or environment you will be playing them to determine response.
- c. Make sure you test them throughout the dynamic range. Soft sounds will respond differently than loud.
- d. Keep in mind hand-hammered cymbals are generally darker in timbre than machine-hammered cymbals.
- e. Thicker cymbals will have a longer decay and will more easily penetrate.

4. *Intent*

- a. Understand the “role” of the cymbal part:
 - a. Special effects
 - b. To highlight the moment or climax
 - c. Combine to make a “color” in balance with other instruments
 - d. Representing an “idiom” (march sound, jazz sound, sound effect)
- b. Conduct percussion instruments as if you were playing them.
- c. Be sensitive to the similarities between percussion playing and the conductor’s gesture. Percussionists respond to gestures.
- d. With some awareness of cymbal potentials a conductor can focus on “HOW” instead of “NOW.”
- e. Encourage your players to “sing the music” instead of counting rests: make “beautiful” sounds.
- f. Have some concepts of what is a good sound and what is not: terminology, allusion, and then instruction.
- g. Avoid listening with your eyes!
- h. Identify ways to describe the different cymbals sounds available: define the context by the color:
 - a. Immediate and outward
 - b. Unfolds more gradually
 - c. Dark or bright
 - d. Supporting part of the ensemble or other purpose
 - e. Hidden, not dominant

5. *The Composer and Score Study*

1. Through history and even in the present, some composers are more “accurate” than others regarding cymbal notation. For example Ravel and Debussy are very accurate as to note length and color whereas Dvorak and Tchaikovsky are much less clear especially regarding note length.

2. It is the challenge of the conductor to communicate to the percussionist how best to understand the composer's wishes. Through score study, listening to a number of recordings, and thoughtful analysis, the conductor can arrive at an understanding of the notation.
3. Many of the variables and confusion of cymbal parts include:
 - Inaccurate length of note
 - Confusion as to how "long" the cymbal resounds (length of decay)
 - Confusion as to whether it should be suspended cymbal or crash
 - Confusion as to the implement to strike the cymbal
 - Dynamics that lead to confusion regarding the balance of cymbals in the ensemble
 - Un-marked or inaccurate articulations
 - Confusion regarding the texture or color envisioned
 - Use of "vague" or unusual descriptors to describe a sound; ex: "*an ominous tone*"

6. Suspended cymbals

Remember that purchasing sets of crash cymbals will offer you twice as many possible suspended cymbal plates

1. Terminology

1. Dome (bell), bow, edge
2. Thickness
 - German: thickest cymbal producing a full dark tone, speaking best at fuller volumes
 - Viennese: Medium thickness cymbal that speaks dark and full throughout dynamic ranges
 - French: thin cymbal producing brighter and higher tones, which speaks well in the low dynamic range
3. Shape and size of dome

2. How to Mount

- a. Choosing a stand vs. a gooseneck.
- b. Using a common cymbal "boom stand" as a "gooseneck."
- c. Mount the suspended cymbal on a high-quality stand that has a metal washer, felt washer and protective rubber/plastic sleeve, including a felt washer and top screw ABOVE the cymbal.
- d. Be sure to position the cymbal flat and slightly above waist height.
- e. The suspended cymbal should hang freely for maximum response. Avoid it clamped to the cymbal stand with a wing nut so tight that it restricts vibration.
- f. Keep an extra supply of cymbal felts, plastic post insulator, protective washers, and wing nuts around. These small parts seem to always be the easiest to lose.

3. Choice of Instrument

- a. There is no single ideal suspended cymbal: look for ones that have a quick response and a long decay.
- b. If possible, have a selection of "dark to bright" sounds in your collection.

- c. Smaller diameter medium weight cymbals are good for general use and lighter textures. Larger diameter cymbals are designed for greater volume and projection capabilities."
- d. Use personal drumset cymbals to increase color possibilities.
- e. Listen and experiment for the perfect color, quality and length of sound.
- f. Explore "specialty" cymbals: cymbals whose shape and design offer really unique sounds. Visit manufacturer's booths and try out as many as possible.

4. Choice of Implements

- a. Avoid using timpani mallets (many composers will request a timpani mallet meaning a "soft" warm tone. Preferably use a yarn marimba mallet. After the composers "intent" is established it is highly recommended to experiment with a wide "library" of mallets, as each will offer a uniquely different color. Encourage percussionists to bring the schools entire collection of mallets to the rehearsal.
- b. Use a softer mallet to bring out the lower, more subdued fundamental pitch of the cymbal. To highlight brighter overtones and articulation use a harder yarn or cord mallet.
- c. Specialized suspended cymbal mallets are made.
- d. Decisions to use either snare sticks or brushes can be determined either by score notation or composers intent. Again, a wide variety of types require experimentation to blend the correct sounds together.
- e. For other color choices explore: metal rods, coin, triangle beater, knitting needles, fingernails, etc.
- f. It is becoming much more common to encounter Violin/Bass bows used on cymbals:
 - Do not over tighten the Bow hairs
 - Keep the bow well-rosined
 - Keep the bow hairs perpendicular to the cymbal edge
 - Start the bow from downward with an upward motion to begin the sound more cleanly
 - Instruct the player to start the motion BEFORE the pulse so that the sound enters cleanly on time instead of building to speak late

5. Warming up the cymbal

- a. To get the best quality sound "prepare" the cymbal before the actual entrance by lightly tapping the cymbals at the edge.
- b. Use the fingers not the mallet to limit extraneous noise.

6. Proper Technique

- a. Use a standard wrist stroke with a glancing relaxed motion.
- b. Strike the cymbal near the edge for most notes using the bow or bell when specified.
- c. Articulation can be changed by relaxing the wrist for a flowing rebounded style stroke

7. Dampening and Articulation

- a. The choice of where to strike the cymbal (beating spot) can make a significant difference in sound color and note length.
- b. Use the hand to stop some of the sound. Grasp with the free hand after striking in notated rest. “Feather out” the sound by slowly grasping cymbal with fingers.
- c. For “secco” or very short sounds, rapidly grab cymbal immediately after striking. A dramatically shorter sound can come from literally grasping the cymbals before striking.
- d. Suspended crashes: strike the bow or edge with a glancing motion.
- e. Articulation for “2-handed” part: lightly press the stomach against the cymbal edge to “shorten” the sound. Increased pressure will shorten it more.

8. Rolls and the composer’s intent: shaping the “wave”

- a. Rolls: place the mallets at 3 and 9 o’clock using a slow, single-stroke roll. The speed of the roll can make a huge difference in the sound. Most students roll too fast. Listen and accommodate the natural resonance and sustain of the instrument.
- a. The shape of the suspended roll crescendo can drastically change the sound of the music.
- b. The “swell” should be well defined to the player either by explanation or conducting gesture.
- c. If a more pronounced crescendo is desired the player can start on one suspended cymbal and, during the swell, move one of the rolling mallets to a second plate.
- d. Fp and diminuendo rolls.

7. Crash cymbals

- Ideally a program should have a minimum of two or three pair of varying sizes and weights.
- Recommendations:
 - 18" Viennese
 - 18" Germanic
 - 20" Germanic
- Any use of cymbal pads should provide minimum contact with the plates because the strongest overtones come from the bell/dome area.
- Match the size and weight of the cymbal to the music. Hand cymbals are often too big for the music.
 - Larger, more resonant cymbals might be useful for musical climaxes and for dramatic effect.
 - Smaller cymbals would be useful when the cymbal part is faster or more rhythmic.
 - Thicker, heavier cymbals would be appropriate for darker, rich moments.
 - Thinner cymbals will possess a lighter tone.

■ Placement in the ensemble

- a. Move the cymbal player next to the bass drummer (especially for marches). It will be easier for the percussionists to communicate timing, phrasing, and blend if they are next to each other and can maintain both audio and visual contact.
- b. Establish a cymbal station that is not shared with other percussion instruments. Have a padded table for mallets/sticks close at hand. Avoid using a cymbal cradle due to extraneous noise; instead use a padded table to rest cymbals. Have all choices within easy reach.
- c. Create “direct line of sight” with instrument, music and conductor.

■ Grip

- The concert cymbal grip should be different than the marching cymbal grip. The hand stays outside of the leather strap and grips the strap at the base of the cymbal bell: like you grip a key to start a car.

■ Warming up the plates

- a. Shortly before the entrance one or both of the cymbal plates should be “prepared” so that the cymbal speaks immediately with the best sound.
- b. This can be done with a light tap against the knee or on the top of the cushioned cymbal holder.

■ Proper Technique

- a. Practice smooth relaxed circular motions with arms. Make the motion or stroke similar to a smooth golf or baseball swing.
- b. Stand with relaxed posture in ready position with cymbals about $\frac{3}{4}$ ” to 1” apart.
- c. Hold cymbals in front of body at about 45° angle.
- d. Two guide points:
 - a. Angle of cymbals relative to each other
 - b. Offset or displacement of cymbal edges
 - c. **THESE GUIDEPOINTS WILL CHANGE DRASTICALLY DEPENDING ON DYNAMIC**
- e. Drop top cymbal onto lower cymbal without forcing it.
- f. Be sure that cymbals make contact off-center and not simultaneously. The term “flam” is sometimes used.
- g. Use gravity and ergonomic motion.
- h. Be sensitive to vary type of contact for different colors.
- i. Upward or downward style motions are both possible.
- j. Follow through and dampen as indicated.
- k. Hanging suspended open for a significantly longer sound.

■ Articulation and Special Effects

- a. Dark sound vs. bright sound.
- b. Touching the dome will change the sound.
- c. When a staccato mark or the term “choke” appears above a note in the cymbal part, it should be played as a full-bodied crash and immediately

- dampened by bringing the plates into the upper body instead of utilizing a “close” or “hi-hat” style method.
- d. Muffle the sound by bringing the cymbals back against the stomach. Carefully analyze your muffling choices by deciding where to stop the sound on rests or not to stop the sound.
- e. Explore “feathering” the muffle to artificially shorten the cymbal note length.
- f. Cymbal roll with hand plates.
- g. Fort-Piano technique.
- h. Scrape (Zischen):
 - o Speed
 - o Intensity
 - o Starting before the beat or “on” the beat
- i. Muting the sound by lowering the crash, (below the level of chairs/players in the rows in front of percussion).

8. Cymbals in the curriculum

- WHEN to start teaching cymbals? Should it be part of curriculum or used as a “reward.”

9. Suggested cymbals for school programs

- a. High School:
 - a. 3 or 4 different pair, ex:
 - 1 pair 18” medium-heavy
 - 1 pair 20” medium-weight
 - 1 pair 19” heavy-weight
 - 1 pair 16” medium-weight
 - b. At least three suspended cymbals
 - 1 16” thin suspended
 - 1 18” medium suspended
 - 1 20” medium suspended
 - c. 1 or more effect cymbals (Chinese, splash)
- b. Middle School
 - a. Two pair of hand cymbals
 - 16” medium-weight
 - 18” medium-weight
 - b. One or two suspended cymbals:
 - 1 16 thin suspended
 - 1 slightly larger (18” thin/medium) with a darker timbre to provide a variety of color.

Remember: accuracy, consistency and quality of sound are always important! With both suspended and crash cymbals study the music to best determine the musical intent of the composer. Listen carefully and be creative with different color combinations. Don’t be afraid to:

EXPERIMENT!

Good luck and have a great time exploring the variety of sounds possible with cymbals!

10. Suggested listening from the repertoire of band and orchestra.

- Modest Mussorgsky: Night on Bald Mountain
- William Schuman: Chester
- Ingolf Dahl: Sinfonietta
- Aaron Copland: Emblem
- Karel Husa: Music for Prague
- Frank Ticheli: Apollo Unleashed from 2nd Symphony
- John Mackey: Asphalt Cocktail

In "Asphalt Cocktail" John is very specific citing specific brands and model numbers. His composition includes "nesting" one style cymbal inside of another. He comments how unique cymbal sounds are, and that he chooses them with awareness of brightness, richness of tone, and different rates of decay." In his most recently completed composition for young band he uses descriptors such as "quick decay, slow decay, and klanging" sound to encourage conductor and player awareness.

- David Maslanka: Concerto for Marimba and Band

In David's compositions he uses combinations of small, medium, and large suspended cymbals to enhance the contour of harmonic root movements, and he is extremely specific marking "at the edge, at the dome, with hard felt timpani mallet, with soft yarn, with medium yarn, and with firm felt." In his Concerto for Marimba he carefully marks exact cut-offs for crash cymbal notes.

11. List of recommended books, sources.

- Payson, Albert: Techniques of playing bass drum, cymbals and accessories.
- Percussive Arts Society: Extensive list of very pertinent articles (PAS.ORG)
- Petrella, Nick: A guide to Cymbals, finger cymbals, & Crotales.
- Vic Firth Education center: Percussion 101
<http://www.vicfirth.com/education/percussion101.php>

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If you have questions after the clinic, feel free to contact me at (817) 272-2526 or mvarner@uta.edu