

# A COMPREHENSIVE EXAMINATION OF ORCHESTRAL PERCUSSION TRAINING

## Level I: Percussion Skills and Concepts

### II. Snare Drum, Triangle, Tambourine

- snare drum skills/fundamentals
  
- Snare Drum Method Survey (digging deeper)
  
- broader applications of technical skills to triangle and tambourine

#### *follow-up ideas*

- ✓ assigned repertoire - 2 works of contrasting style - open (rudimental) and closed (orchestral)
- ✓ triangle technique hand-out
- ✓ tambourine technique hand-out
- ✓ apply tambourine techniques to easy SD etudes

Preparation for III. Cymbals, Bass Drum; Introduction to Keyboard Percussion

cymbals - self-examination questionnaire

bass drum - do principles from "technical structure" apply?

# Snare Drum: Highlights

I. Composite Stroke (the parts) establish the “use of the entire body”

Big Muscle group	back and shoulders
Small muscle group	fingers
Hinges	shoulder, elbow and wrist
Forearm function	“don’t push the stick”

Flexibility, finish of the stroke, follow through (WHIP STROKE)

II. Rebound stroke (letting go) LEGATO approach vs. digital

Discovery and and “exploration” of the rebound motion

“Play in a melodic manner”

Rudimental: accents are “melody”

Classical style: natural strong and weak pulses

“Don’t push the stick” – “Don’t retake the stick” BUT do “reload the stick!”

“2<sup>nd</sup> note of the double” (shape of your roll and embellishments)

III. Embellishments (refined work)

One motion or the sweep passing through the details

Gesture/inflection relationship of wrist to end of stick

“Keep the main note the main note!”

“Broader application of composite stroke to other percussion instruments  
and framework for the physicality of playing”

Christopher Lamb

## The Composite Stroke and small muscle conditioning

Because the fingers represent the percussionist's embouchure, strengthening them and developing **touch sensitivity** are paramount to the sound, phrasing, articulation and even the sense of time. This finger strengthening will improve tambourine touch and dexterity; cymbal "grip" and control; the nuance of triangle playing; coaxing the sound out of bells and any finessing skills needed to color or shape our sounds and rhythms.

Do these selected pages from these specific Snare Drum Survey books.

Focus on developing index and middle finger as well as the space between the two fingers. Notice also how the wrist as the "**transfer station**" functions when either the index/middle or both fingers are applied to each conditioning exercise. Also be aware of how that mix of fingers begins to move up into the lower forearm through the wrist as repetitions increase or tempo accelerates. It's all normal and part of how the composite stroke functions as a "super highway" supporting the physical requirements while giving you command of your musical creativity.

**Apply to all pages listed:** Index/middle finger development; "space between the two fingers; wrist use and how it transfers and creates a cycle of movement between upper and lower forearm; AWD beyond wrist relationship because of tempo, repetition or simply coloring the sound and rhythmic figure.

Master Studies (Vol. 1) Morello

p. 16-17

P. 18-19 8<sup>th</sup>-note and triplet combinations

- p. 21-23 8<sup>th</sup> notes with buzz roll
- p. 25-29 triplets with buzz roll
- p. 40-41 Control Studies: 2<sup>nd</sup> note of the double
- p. 58-59, 62 Stone "killer" (remember: index/middle finger development, wrist relationship)
- p. 90-91 triplets with flams (fingers/wrist/AWD)

### Accents and Rebounds Stone

- p. 21 Rebound Control in the 4-stroke ruff
- p. 22-23 Rebound Control in triplets and dotted 8ths
- p. 30-31 Double strokes versus Buzz exercises (explore the finger possibilities)
- p. 36-37 Accents in Seven-Stroke Rolls
- p. 40-47 Rolling in Mixed Rhythm

### Syncopation Reed

- p. 14-15; 52-54 (triplets used for roll development and finger strengthening)

### The Roll: Sholle

#### **Daily work out for roll development**

3 sections: index finger, middle finger, balance between the two fingers, arm/finger, wrist and AWD

## In the Hands

If a percussionist's fingers represent their "embouchure" and all the expressiveness and stroke finish is housed in those fingertips, then the "grip" or "gripping" of the sticks, mallets, cymbal straps, top heavy triangle beaters and the tambourine shell needs to be considered carefully.

The extreme expressiveness through touch and nuance and the inflection and buoyancy are key musical tools that our fingers are the last to touch when we activate the instrument to release its sound. Be it fundamental bass tones or brilliant overtones it's "in the hands" when it all takes place. The entire composite stroke from the back through the transfer station of the wrists is assisting in the finish of the conceived idea through the finger tips.

It's "in the hand" when we use a shaker twisting and tossing it with wrists and fingers, with the fingers have the final say. When we tap with a pair of brushes it's the dance between the index finger and the middle finger that allows us to explore the full length of the brush. Sticks follow that same pattern of quick stepping from the middle of the hand to the index finger...and the space between in order to make the tips of the fingers say all that we want to say.

Which finger and where in the hand has as much to do with the "feel" as it does with the sound. The relative lightness or fullness has everything to do with the distribution of arm weight, but it's the fingers that need to complete the task.

"In the hand" allows us to blur the lines between rolls and figures, speed and dexterity. It's also "in the hand" or more specifically, where in the hand that determines the roll density and .... yes.... expressiveness.

So, in the end.... don't "grip" it as that stops the composite stroke's continuous flow and motion. Allow there to be movement, a fulcrum, a pivot point, a "see saw" movement, a point of leveraging so that all the energy is free to move around "in the hand".

## TAMBOURINE

hands (two-hand instrument!)

- I.h. - pivot hand a) moves, gives
  - b) rotates in shake
  - c) relaxed

r.h. - thumbs, fingers

wrist - loose right wrist

arms - positionings (feel)

stance/support



### Shake Rolls

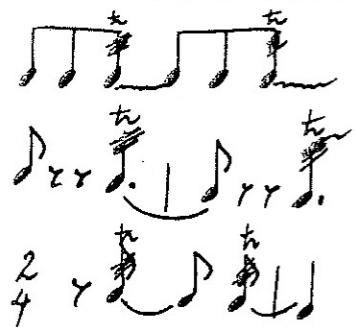
- a) start with or without tap
- b) end with tap, hit or turn
- c) rolls at various angles
- d) squeeze soft rolls

### Suspended Tambourine Roll

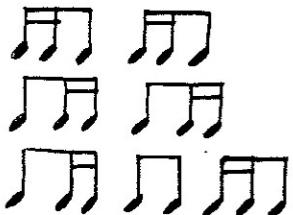
### Thumb or Finger Rolls - endings with tap

- a) thumb
- b) first (index) finger
- c) middle finger
- d) heel
- e) fist
- f) leg
- g) directional change

### Thumb Roll into Shake Roll



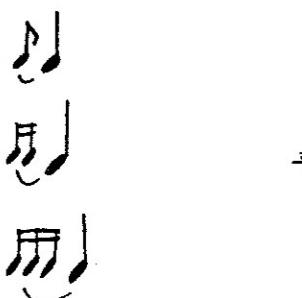
### Knee/Fist Techniques - head up or down



### Other Techniques

- a) open hand
- b) fingers
- c) fist
- d) jingles

### Grace Notes



### Applications and Examples

*Christopher Lamb*

# Tambourine: Highlights

I. A two-handed instrument

Positioning

II. Head and jingle control

Response at the same time...

Touch sensitivity

III. Grip

Overall grip and its effect on sound

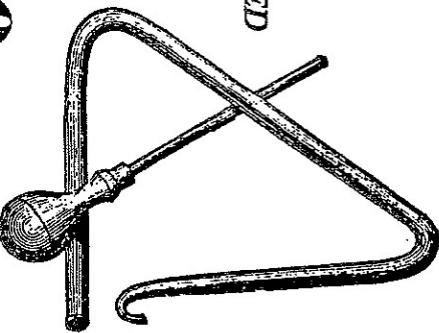
3 point fulcrum for shake rolls

IV. Finger vs. thumb rolls

Christopher Lamb

## EVERYTHING YOU EVER WANTED TO KNOW ABOUT

# The Triangle



As one who writes often about music, I naturally receive many queries regarding the triangle. Here are answers to the most frequent appeals.

### What is a triangle made of?

A solid steel bar about one-half inch thick and 18-24 inches long is bent in two places to form an equilateral (or sometimes isosceles) triangle. The two ends do not quite meet, so that one angle is open. The steel is a common industrial type, such as that used in machine spindles. There is, in fact, a "spindle triangle" with tapered ends, which is known for the variety of timbres a good player can coax from it.

### Why is a triangle triangular?

Mainly for convenience in playing. There is no evidence that a given steel bar would sound much different if bent into some other shape. This shape also recalls early triangles, descendants of an ancient instrument, the sistrum; these often had rings strung along the lower arm that jingled when the triangle was shaken or struck.

### What is a triangle struck with?

Typically, an eight-inch length of one-quarter-inch hard steel "drill rod," wrapped with tape at one end to form a handle. Some players favor large nails, eye bolts, or other metal objects. In *pianissimo* pas-

sages knitting needles are sometimes used, although many players reject this sound as too thin and rattling. Bartók and other twentieth-century composers sometimes specify beaters of wood or other materials, but in general the triangle's distinctive timbre depends on metal-to-metal contact.

### Does the triangle have a distinct pitch?

Yes and no. Every resonating object has a "fundamental" note, plus a series of "partials," or overtones, ascending from it in pitch. In tubular chimes or the glockenspiel, the fundamental note predominates, and we hear a distinct pitch. In the cymbals, on the other hand, the closely spaced high partials so overpower the fundamental that we hear mostly a kind of hiss, or white noise. The triangle falls between these extremes. When it is struck in a quiet room, one hears not the deep note one might expect from so large a piece of metal, but a cluster of high overtones, each very distinct and identifiable. The clash of these dissonant notes produces the "shimmer" so prized by composers and conductors. Incidentally, if the triangle have reached its maximum intensity, it suffices to add the Triangle, in order to convert red-hot into white-heat." Wagner's overture to *Die Meistersinger* illustrates this point. Even the conservative

would have more definite pitch and less shimmer.

### Do all triangles sound alike?

No—in fact, not two do. Because of small variations in materials and manufacturing, even two outwardly identical triangles from the same maker will have noticeably different overtone "fingerprints." A professional percussion player may own as many as a dozen triangles and twice that many beaters; the only way to select one in a store is to play them all. Individual differences in hearing, room acoustics, and musical context all influence the choice of the right triangle for the job.

### When did the triangle become an integral part of the orchestra?

Relatively late, along with the Romantic expansion in percussion inspired by the Industrial Age. In the Middle Ages and Renaissance, the triangle seems to have evoked heavenly vistas; it was much used in churches, and painters often depicted angels holding one. The Hamburg Opera had one in 1710, and for the rest of the century it seems to have served as an exotic "special effect" with connotations either military (Haydn's *Military Symphony*, Beethoven's Ninth Symphony) or Oriental (Turkish-flavored Janissary music, Mozart's *Die Entführung aus dem Serail*). Use of the triangle for its sound alone, not its extramusical associations, began around the time of Rossini, whose *William Tell Overture* (1829) prepares the way for its famous final *allegro* with an English horn solo accompanied by a very long, very soft triangle tremolo. Similar moments occur in Grieg's *Peer Gynt* and Rimsky-Korsakoff's *Capriccio espagnol*. At the other end of the dynamic scale, the triangle is often found reinforcing climaxes; the composer Charles-Marie Widor wrote, "...when the orchestra would seem to

latting or spinning when played, and possible prevents the triangle from oscillating. Keeping this loop as short as possible enables the nonplaying hand to stop the tone of short notes by grasping the instrument. A single note usually sounds best when played near the upper angle and about one inch from the end of the beater. Some players prefer a glancing stroke to reduce the initial "tick" of impact, while others consider that "tick" an essential part of the sound. The tremolo is done with a rapid back-and-forth motion inside one of the two closed angles, moving away from the vertex for crescendo; a long *pianissimo* tremolo, as in *William Tell*, requires an impressive combination of endurance, delicacy, and muscle control. Playing fast or complicated passages usually requires two hands, although some players have developed virtuoso skills with a one-handed, back-and-forth technique.

Of course, utter rhythmic precision—to

a degree undreamed-of by most pianists,

violinists, or singers—is essential in triangle playing. So is a willingness to experiment endlessly with different triangle angles and ways of striking them until the desired sound chemistry is achieved.

A score only tells when to play; there are no phrasing or expression marks—and the player, as any musician, must employ the judgment of an artist.

Brahms used the triangle to add dazzle to the scherzo of his Fourth Symphony.

### Anybody can play the triangle, right?

"Badly manipulated, the triangle will give the impression of a fire bell; in the hands of an artist its sound can enhance the most delicate situation." So says James Blades, British percussionist and music historian. Triangle playing requires a sensitive ear and an empirical attitude toward technique. The instrument is suspended from a loop of thread or gut, the other end of which passes through a spring clip that doubles as a handle and as a means to attach the instrument to a music stand when both hands are needed for playing. Keeping this loop as short as possible prevents the triangle from oscillating. Keeping this loop as short as possible enables the nonplaying hand to stop the tone of short notes by grasping the instrument. A single note usually sounds best when played near the upper angle and about one inch from the end of the beater. Some players prefer a glancing stroke to reduce the initial "tick" of impact, while others consider that "tick" an essential part of the sound. The tremolo is done with a rapid back-and-forth motion inside one of the two closed angles, moving away from the vertex for crescendo; a long *pianissimo* tremolo, as in *William Tell*, requires an impressive combination of endurance, delicacy, and muscle control. Playing fast or complicated passages usually requires two hands, although some players have developed virtuoso skills with a one-handed, back-and-forth technique.

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David Wright

# FOCUS ON PERFORMANCE

## Symphonic Percussion

### Triangle—The Good Sound

Stuart Marrs

**W**HAT IS THE "GOOD SOUND?" WHEN lecturing on the highly underrated idiophone known as the triangle, I start with a survey of opinions regarding preferences of sound production on the instrument. First I produce a sound that is very pure in nature (figure 1)—few tones sounding at the same time. Then I play a sound that is thick and rich with many dissonant tones (figure 2). Invariably, most listeners in the audience prefer the pure sound. This is understandable. In an isolated environment, why would someone prefer dissonance to consonance? The audience always reacts with bewilderment when I recall that it is the second one, the one that is flush with harmonics, that is the accepted norm among professional players. It is preferred in part because the instrument is usually used in an ensemble context. As part of an ensemble, the humble triangle becomes integrally involved in an aspect of acoustics known as "summation of amplitudes." This means that the volume of the notes that are in phase (in tune) with other sounding frequencies add their volume on top of the others while the volume of the notes that are "out of tune" remains soft. If a triangle sound has a few pitches, it has less chance of being "in tune" with the prevailing harmonic structure. A triangle sound more abundant in pitches will always cut through and sound as if it is in tune with the prevailing harmony! A triangle played with the "good sound" accompanying a series of harmonic changes sounds as if it is changing pitches with the chords.

#### How to produce "good sound"

For this issue, we are discussing two modes of vibration. The first, the one that produces the purer tone can

be thought of as existing in a two dimensional plane. The legs of the triangle that form the open end vibrate back and forth, while the opposite side bows in the middle with two closed corners being nodal points of no vibration (figure 3). One creates this mode of vibration by striking the triangle at 90 degrees to its plane, on any of its sides. The second sound breaks out of the two dimensional mold into the third dimension. Here the open legs and closed side not only vibrate back and forth as in the first mode but also vibrate laterally, side to side (figure 4). Scientifically, this is called "torque" or twisting. To make the triangle enter this twisting mode, we simply strike it at a 45 degree angle (or less) to its plane. This causes the instrument to torque and produce the lush desirable sound.

Now that you know how to produce the different sounds try a little experiment. Have a friend play a series of chord progressions on the piano while you play the triangle (the good sound) in the same rhythm. Listen to the triangle seemingly change its pitches to match the chords! The technique of striking the triangle at an acute angle to its plane extends to roll technique. Instead of rolling with the beater perpendicular to the corner of the triangle, try moving the wrist down and away from the corner while you are rolling (figure 5).



Stuart Marrs

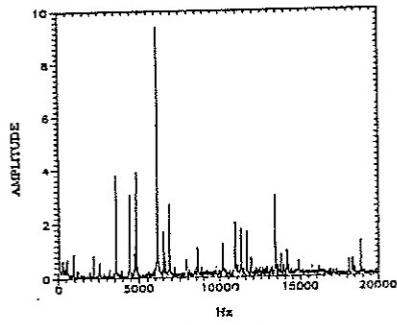


Figure 1. Graph shows fewer numbers of tones when triangle is struck at 90° to its plane when compared with fig. 2. Note the predominant spike at 6000 Hz.

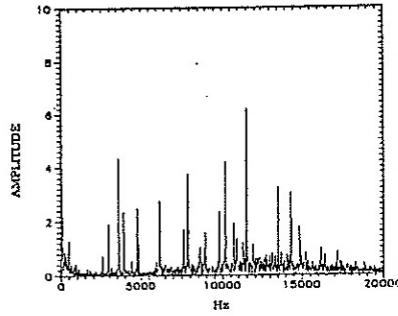


Figure 2. Graph shows increased number of tones when triangle is struck at 45° to its plane. Note that the amplitudes are more homogeneous.

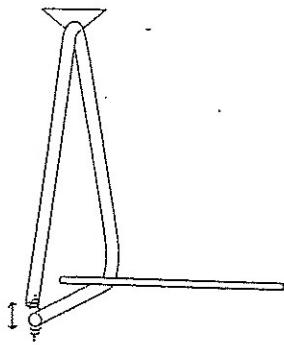


Figure 3. Struck at 90° to its plane, the triangle vibrates in a bi-directional mode, producing fewer partials.

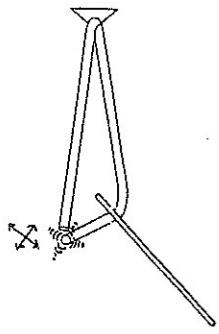


Figure 4. Struck at 45° to its plane, the triangle vibrates in a poly-directional mode, producing multiple partials.

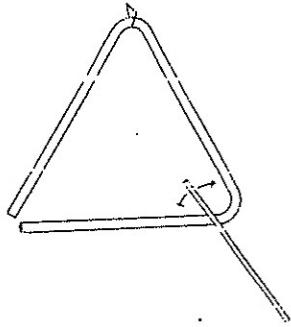


Figure 5. Move the wrist down and to the right from the normal rolling position to achieve the same multiple partials on the roll.

Listen to the dramatic increase in fullness of sound. The beater is striking the triangle at an acute angle to its plane.

There are, of course, many other factors that influence aspects of triangle sound: beaters, holders, the material of the triangle itself. Of these factors, the holder has the greatest affect on the final sound. Here again, we are dealing with two issues: (1) the nature of contact between the triangle and the suspending material and (2) the transfer of vibrations through the suspending material. If the suspending loop is too thick, it will cover more than the nodal point in the top corner of the triangle and muffle vibrations that should be sounding. This will cause a muffled sound and more rapid period of decay. I recommend as thin a line as will securely support the weight of the instrument. If the holes in the bottom of the holder are too close together and the loop too long, then the loop will wrap around the top corner and also muffle vibrations. The answer to this problem is to separate the holes as much as possible and use a short loop so that the triangle line is touching just the bottom of the top corner, not the sides (figure 6). An added bonus to the wide holes of the holder is that the instrument cannot rotate while it is being played as will happen when the holes are too close together.

Whenever possible the triangle holder should be hand held. This is because energy (sound) is lost when the instrument is hung or clipped to a music stand. Again, a little experiment will show what I am describing. In a quiet environment, clip or hang your triangle to a stand and play it with a heavy beater. Touch the stand and feel the vibrations that should be emanating from the instrument passing through the stand. Now play it hand held. Can you hear the difference? The reason the energy doesn't dissipate through the hand as it did through the stand is that the fleshy fingers are poor conductors and allow most of the energy to be released in the form of audible sound waves caused by the vibrating triangle.

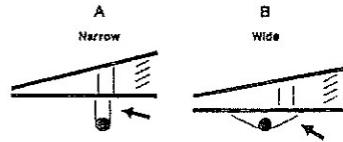


Figure 6. Illustration shows cross-section of base of triangle with loop in A) narrow positioned holes and B) wide positioned holes.

## TRIANGLE: "What do I do with this thing?"

### △ Construction

- (a) different planes
- (b) different angles

Knowledge of the planes and angles makes it imperative for a technique or an approach that gives you full access to the instrument and its color possibilities.

### △ Technical Skills (fluid approach, not a disjointed approach)

- (a) concentrate on one-hand skills
- (b) grip of beater for striking single notes (goal: best sound)
- (c) grip for rolling - loose wrist or more forearm (depending on musical requirements)
- (d) muffling skills

### Applications (for one-hand control)

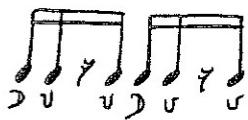
- (a) single notes - all the same or varied
- (b) rolls - minimum of 3 possible angles for variety of colors
- (c) patterns - use of base and side

### Extended Application

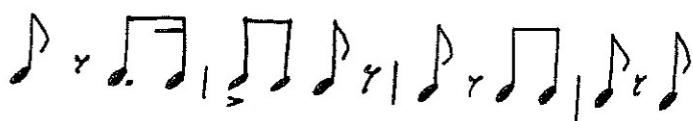
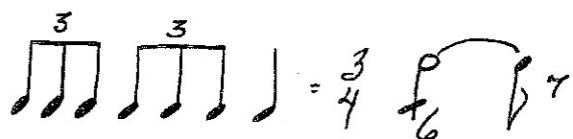
Continue developing skills by playing snare drum exercises on the triangle!

*Christopher Lamb*

## TRIANGLE: Exercises and Excerpts



6 identical notes



Christopher Lamb