

Timpani FUNdamentals

Ruth Cahn &
Stanley Leonard



Performance Principles for the Timpani

Tune the drums to the correct pitch

Music created by the timpani is truly expressed only when each drum is tuned to the correct pitch.

Strike the proper playing spot

Use the playing spot's maximum area to produce the best sound.

Lift the stroke

The stroke articulates the music as it draws the sound from the drumhead.

Balance the sound between drums

The timpani console is one instrument with separate parts.

Develop technical skills

Secure technical skills allow the performer to focus on the musical vocabulary.

Imagine the sound

Create the sound in your mind before you strike the drum.

Interpret the music precisely

Music comes alive with precise dynamics, rhythm, phrasing, nuance, and the proper sticks.

Listen to the other players

Timpani are part of a musical team that has a common goal.

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Performance Principles in Action Stanley Leonard and Ruth Cahn

Tune the drums to the correct pitch

1. Memorize the pitch range of each size timpano
2. Tune intervals by solfeggio, familiar songs, or the name of the pitch.
3. Develop bass clef reading skills.
4. Listen to the musicians in the ensemble and adjust the pitch if necessary.

Strike the proper playing spot

1. Strike the proper playing spot consistently on each drum.
2. Discover the playing spot by listening.
3. Trust your own ear and do not be influenced by the playing habits of other students.
4. Perform the roll with special attention to the correct playing spot.

Lift the stroke

1. Play with a good grip – your grip will influence the lift and everything else you play..
2. Create a single tone with the advantage of the lift.
3. Perform alternating strokes with the same dynamic and lift.
4. Use roll strokes that lift the sound from the drum.

Balance the sound between drums

1. Remember to play the timpani as a console of drums.
2. Be aware of the sound produced on each size timpano.
3. Compare the sound of the same pitch on different drum sizes.
4. Keep listening and adjusting, trust your own ears.

Develop technical skills

1. Perform with sticking patterns that articulate the music correctly.
2. Use both cross sticking and shifting patterns while performing.
3. Practice dampening quickly and quietly while playing on two drums.
4. Pay attention to the speed of the roll on different pitches.

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Imagine the sound

- 1. Create the sound in your mind before you strike the drum.
- 2. Imagine how your part will fit into the music being performed.

Interpret the music precisely

- 1. Follow all the musical indications in your part carefully.
- 2. Play all the rhythms correctly.
- 3. Be familiar with the full musical score so you will know when to lead and when to be a part of the team.
- 4. Express your creativity, become an exciting performer.

Listen to the other players

- 1. Attend concerts, listen and observe other timpani players performing.
- 2. Listen to the other players in the ensemble in addition to watching the conductor.
- 3. Be aware of musical ideas that non-percussionists are demonstrating.
- 4. Create your own style of performing in combination with concepts from other players and teachers.

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Performance Pathways

Eight basic steps for increasing musical and performing skills:

1. Study your instrument with a good teacher
2. Use the techniques you are taught
3. Practice regularly
4. Discipline your attention in rehearsals
5. Listen to the sounds you play
6. Improve the sounds you play
7. Perform rhythms, pitches, and dynamics correctly
8. Maintain the instruments in good playing condition

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The Role of the Timpani Mentor by Ruth Cahn - Percussive Arts Society's Timpani Fundamentals

Webster's dictionary offers the following definition of a mentor:
Mentor—a faithful counselor, a wise loyal advisor, a teacher or coach

Who Is a Timpani Mentor?

Over the last several years I have listened to many professional timpanists, both performers and teachers, recount with enthusiasm and joy the life changing benefits given to them by a musical mentor. These common elements emerged from their stories.

- Mentors are highly skilled in the musical and technical aspects of performing timpani and exhibit a passionate love of playing in orchestral/chamber or other musical genres.
- Mentors help to develop a student's listening skills.
- Many highly effective mentors constantly engage students in learning by observation, self-assessment, posing questions and evaluating what they hear.
- Mentors always keep the best interests of the student first, support students in all respects, and write recommendation letters.
- Most students encounter their mentor while still in high school—the earlier the better.
- Many students have the opportunity to observe their mentor as a performer.
- Students find that the mentor is not only a fine teacher, but a counselor and advisor who will have a far-reaching influence on the student's future in music.
- Mentors and students tend to continue these "special" relationships throughout their lives and careers.

"How can I (a student) find a mentor?"

1. Start by asking your band or orchestra director, who may already be a mentor of another sort for you, for suggestions of fine local timpanists and percussionists of proven teaching and playing ability.
2. Call the nearest professional symphony orchestra for the name of their timpanist.
3. Contact any colleges or universities in your area that have music departments and ask for the names of their percussion faculty.
4. Join the nearest youth orchestra and ask other students and the director for their suggestions. If you like a fellow student's playing, inquire about their teacher.
5. Attend concerts of the nearest professional orchestra and listen to and meet the timpanist, get to know the timpanist and percussionists.
6. Attend summer music camps and percussion seminars and "days of percussion".

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If you locate someone who seems that they might be a match for you:

- Ask to take a lesson or ask if you could play for them—just once, no strings attached.
- Be willing to travel a long distance to work with the mentor.
- Realize that a “high-level” mentor may only be able to work with you on a limited basis and may not replace your current timpani/percussion teacher.
- Help your parents to understand the value of the mentor so that they can support any special needs that working with the mentor may include. (Trips, sticks, materials etc.)
- Understand that the mentor is there to help you on your journey, but can’t guarantee the outcome!

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The Timpani: Understanding the Mystery Stanley Leonard

There is a certain mystery about the percussion instruments called the timpani or kettledrums. These large, imposing instruments add color and drama to band and orchestral music. When well-played, their voice brings dimension and style to the ensemble sound like no other instrument. Realizing the timpani's full musical potential, however, is sometimes an elusive goal for the student musician. The focus of this article is to remove the mystery about the timpani, and to help performers and teachers begin the process toward higher levels of musical performance and achievement.

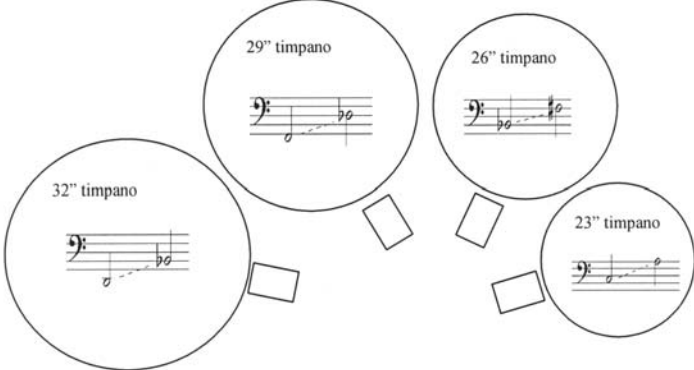
Understanding the musical role of the timpani

Boom, bam, boom is not the musical role of the timpani. The sound of the timpani, with correct intonation and pitch, reinforces the harmonic character of music. It adds depth and increased dimension to the bass line. Its sound affects the character of musical expression in a performance. The timpani can create a solidarity in the rhythmic articulation of an ensemble.

The timpani must be performed with a sense of their role in the musical balance of an ensemble. There are times when the timpani must be heard and take a leading role. There are moments in the music when the timpani are to blend and support the music. It is important for the timpanist to listen to the music and create the sound character of the timpani in keeping with the character of the music being performed.

Becoming familiar with the instrument and its mechanical functioning

The single timpano or kettledrum is not a stand-alone instrument. It needs at least a partner to become the *console* of the timpani. Regardless of the number of additional drums, the console plays as one instrumental voice. Each drum in this console has a specific range of pitches that are determined by the size of the timpano involved. The larger the drum, the lower the pitches that can be played on that drum. The smaller the drum, the higher the pitches possible. Here is a chart that spells out the pitch range of a typical timpani console of four drums:



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Each timpano in this console has a voice that allows it to “sing” in a particular *musical range* of pitches. The performer **must** be aware of the pitch range of **each drum** in order to play the pitches indicated in the music on the proper drum in the console. **Attempting to play a pitch on a drum which cannot sing that note is like trying to fit a square peg in a round hole.** It will produce an unsatisfactory musical result and also may damage the instrument.

The Drumhead

The drumhead provides the timpano with a voice. Most schools today use plastic heads on their timpani. Some professional performers continue to use traditional calfskin heads. The manmade plastic membrane is very strong and is capable of taking considerable abuse. A drumhead that is protected and performed on correctly will produce a satisfactory musical result for a long time. The trick here is to *not abuse it!*

Do not play on the head with any implements other than proper timpani sticks. Cover the head with a hard protective disc after using and do not set objects on top of it. It is not a table. Keep the head clean by wiping it with a damp cloth or paper towel and then drying it afterward. The drumhead must be carefully tuned. The pitch at each tuning screws should sound the same. Listen for the pitch relationship between tuning screws that are opposite each other on the drumhead.

The Bowl

The bowl of the timpano is made from copper or fiberglass. It is the resonating chamber of the instrument and amplifies the sound of the head after it is struck. A bowl made from copper will dent. A dented bowl loses its amplifying power. Take every precaution to avoid denting the bowl of the timpano. The rim of the bowl should be perfectly round and smooth. The drumhead rests on this rim. If the rim is not round and smooth the drumhead will not vibrate properly. The timpano will be unable to “sing” with its true voice. Be careful when moving the instrument and placing it in a stored position so as not to dent the bowl or damage (bend/dent) the “roundness” of the bowl's rim.

The Pedal

The pedal is the most unique part of the timpano’s mechanical parts. It allows the performer to change the tension of the *counterhoop* on the drumhead, and therefore its pitch, without adjusting the tuning screws. The pedal mechanism is attached to rods that control the tension of the counterhoop on the drumhead. When the pedal is depressed, the rods pull the counterhoop down, increasing the tension on the head and raising the pitch of the drumhead. Reversing this pedal motion releases the tension on the counterhoop, lowering the pitch. The pedal mechanism includes all the moving parts of a pedal timpano. It is important that all these moving parts are kept clean, and lubricated.

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Arrange the drums in the timpani console so that the pedals always face the performer and are within easy reach of both feet. Pedals should be left in a mid-range position, keeping tension on the head, when the drums are stored.

Producing the Sound

A singing sound on the kettledrum is produced by the combination of a musical stroke played on the proper beating spot of a correctly tuned, very large, drumhead. A musical stroke is one that attempts to *lift the sound* out of the drum, not push the sound down into the bowl. This is accomplished by lifting the stick quickly off the drumhead after striking it. The stroke needs to energize the drumhead to vibrate freely. Pushing down on the drumhead hinders the vibrating potential of the head.

The performer must play with a variety of musical tone characteristics. Performance techniques should be developed for playing legato and staccato strokes. In addition to stroke articulation, a variety of timpani sticks are used to produce different tone colors: larger, soft felt sticks, for soft, full sounds; a medium-hard pair of felt sticks for general playing; and a pair of sticks with small, hard heads, preferably not solid hard felt, for loud, rhythmic articulation.

The **beating spot** (the spot on the drumhead where it is played) of the timpano head is always *between* the tuning screws facing the performer. Imagine an arc reaching out about three to four inches from the rim of the bowl between the screws. Always play within this arc to produce the best sound. The sticks should utilize a good portion of this area while playing. Strike the beating spot three inches from the rim, never on the rim, or too far out from the rim of the bowl. Do not keep the heads of the sticks too close together when striking the drumhead. Utilize a large area of the beating spot when producing the sound.

Remember, it is the stroke that *articulates the music*. Be sure to strike *each* drumhead in the timpani console in the correct beating spot. The player's position in relationship to the drums is a key element in doing this. Some timpanists stand while performing, others play from a sitting position. The recommended position is seated on a stool that is high enough to allow the timpanist's arms, while playing, to be slightly above the edge of the drum. From a seated position, the player is able to maintain a consistent performing relationship to each drum in the timpani console. This consistent physical relationship provides accuracy in striking the beating spot and helps control the motion of the stroke as the player moves from one drum to another in the console.

The mysteries of the timpani are dispelled as the performer begins the process of understanding and applies the fundamentals presented in this article. More detailed musical and technical aspects about the timpani and timpani performance can be addressed as skills progress and the timpanist grows in appreciation of the music created by these wonderful instruments.

Additional sources for study and information:

Fundamental Method for Timpani

Mitchell Peters (Alfred Music)

Pedal Technique for the Timpani

Stanley Leonard (Ludwig Music)

Changing and Tuning Plastic Timpani Heads

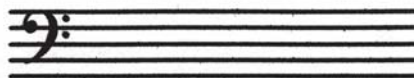
Mark Yancich (Video-Collected Editions, Ltd.)

Have You Mastered the Basic “Performance Principles” for Timpani?

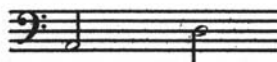
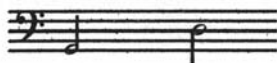
Students—take this quiz to see where you need to do more study!

Tune the Drums to the Correct Pitch

Please write the names of the lines and spaces in the bass clef on the staff below.



Name each interval below:

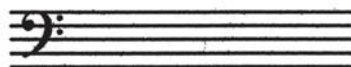
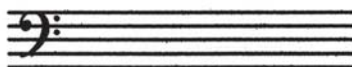


What solfeggio syllables or songs help you to sing each interval above?

Write the range of each timpani at indicated:

28 inch:

25 inch:



Strike the Proper Playing Spot

In general, where is the best playing spot on a timpani head?

How many inches from the rim? _____

Describe the sound quality of the best playing spot? _____

Lift the Stroke

Which 2 fingers form the pivot point (fulcrum) of your grip? _____

Please describe how/why the “lift stroke” improves timpani sound. _____

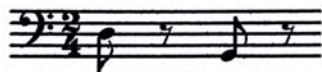
Balance the Sound Between Drums

What is the **best** strategy to use in balancing the sound of the drums? (circle correct one)

- Hit each drum with equal force.
- Rely on how your hands react to the head.
- Listen to the sounds and adjust your technique to produce a balanced sound.
- Good stick control will do this automatically.

Develop Technical Skills

Can you play the following dampening exercise?



To avoid crossing what sticking should you use in the following excerpt?



Interpret the Music Precisely

Which best describes the timpanist's responsibilities in interpreting music?

- The timpanist should try to do all dynamics and indications on the page.
- The timpanist should follow the conductor for tempo, dynamics etc.
- The timpanist should listen to recordings of the composition.
- The timpanist should know the full score.
- The timpanist should add their own creativity
- All of the above.

Listen to Other Players

How many concerts have you attended in the last year where you heard a fine timpanist? _____

Have you heard a fine timpanist on a CD? Which CD? _____

What did you enjoy about the playing of the "live or recorded" timpanist?

Have you ever played a duet or chamber piece with timpani and another instrument? _____

(This would be a great goal with lots of new sounds and creative energy.)

Have you watched a conductor conduct when you are not playing? _____

What kinds of non-verbal instructions did the conductor give to the musicians? _____

Thank you for taking time to reflect on the Performance Principles for Timpani.

I hope that your reflections will help you grow as a timpanist!

Enjoy the sound and the chance to play an amazing instrument!