



YAMAHA

Educator Series

PERCUSSION



Stanley Leonard

Timpanist, Stanley Leonard, is a noted performing artist, prolific composer and dedicated percussion teacher and mentor. Leonard achieved prominence in the music world during a 38-year career as principal timpanist of the Pittsburgh Symphony Orchestra and member of the faculties of Duquesne and Carnegie-Mellon Universities. Leonard is currently an artist in residence at Duquesne University and a Yamaha performing artist. He is the author of Pedal Technique for the Timpani, a well-known method book unique in its field. He conducted, and can be heard performing his own compositions on the compact disk Canticale, distributed by Ludwig Music.

The Timpani: Understanding the Mystery

By 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 played correctly, 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.

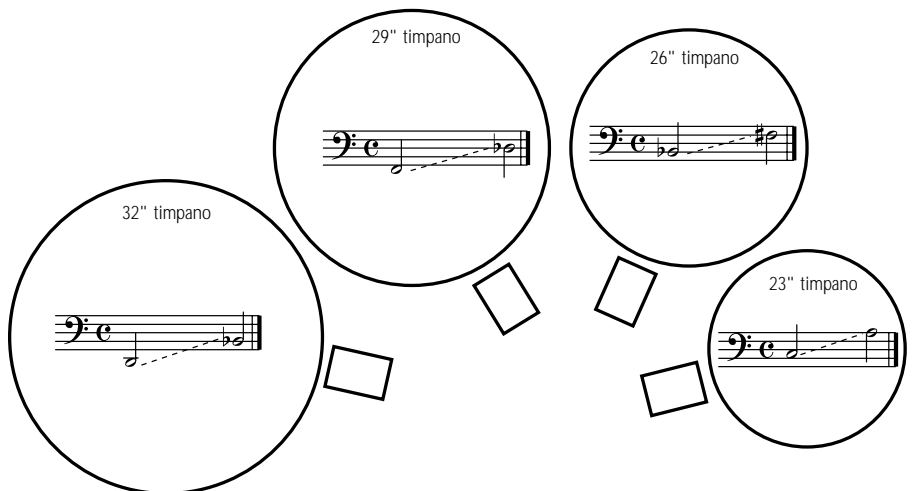
Understanding the musical role of the timpani

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 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: 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





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pitches indicated in the music on the proper drum in the console. Attempting to play a pitch on a drum that cannot sing that note is like trying to fit a square peg in a round hole. It will produce an unsatisfactory musical result and 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 playing 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 the 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 bearing edge (the peak of the bowl over which the head is stretched) of the bowl should be even and smooth or 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 the bowl's bearing edge.

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, changing 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.

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 a Quality 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 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 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 bearing edge. 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 by Mitchell Peters (Alfred Music)
- Pedal Technique for the Timpani by Stanley Leonard (Ludwig Music)
- Changing and Tuning Plastic Timpani Heads by Mark Yancich (Video-Collected Editions, Ltd.)
- Concepts for the Timpani by John Beck (Carl Fischer)

