Percussionist

An Official Publication of
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VOLUME XI, NUMBER 1
FALL 1973

PERCUSSIVE ARTS SOCIETY
(PAS)

PURPOSE--To elevate the level of music percussion performance and teaching; to expand understanding of the needs and responsibilities of the percussion student, teacher, and performer; and to promote a greater communication between all areas of the percussion arts.

Percussionist VOLUME XI, NUMBER 1
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In this issue

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FOUR-MALLET GRIPS

by Lynn Glassock
Assistant Professor of Music
California State University, Fresno

There are three basic methods of holding and playing four mallets in common use today. The purpose of this article is to give a thorough description of each of the three methods. It is sometimes felt that there is no possibility for individual variation, which of course is not the case. Because of hand size, etc., a slight variation may feel more comfortable. Figure 1 identifies the parts of the hand used in the following discussion.

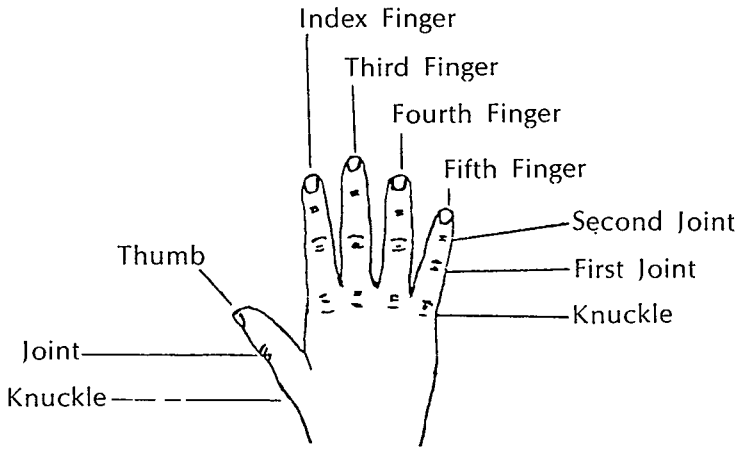

Fig. 1--Terms used in identifying parts of the hand.

The manner in which the mallets are held is the same for both the right and left hand for each of the three grips. All illustrations of the grips are of the right hand to facilitate comparisons.

MUSSER GRIP

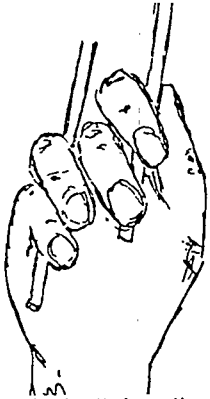

Fig. 2--View of the Musser grip in "close" position (for small intervals).

The name "Musser" grip has evolved from a method of holding four mallets which was developed and used by the marimba manufacturer and performer, Clair Omar Musser. In this grip the inner mallet is held between the thumb and the second joint of the index finger. It is necessary for the inner mallet to be held very close to the end of the shaft so that the sticks will not touch or cross when it (the inner mallet) is maneuvered for large intervals. The inner mallet is also partially held by the third finger, which is curved around the shaft just below the index finger.

The outer mallet is held independently of the inner mallet. The shaft of the outer mallet extends between the third and fourth fingers and passes between the knuckle and first joint of these fingers. The fourth and fifth fingers are curled around the outer stick, which extends slightly (approximately one and one-half inches) past the fifth finger. In Figure 2 the grip is shown in a "close" position from a view facing the palm of the hand.

Because the outer mallet is not held as near to the end of the shaft as the inner mallet, the ball of the inner mallet is further from the hand than the ball of the outer mallet. This will cause the inner mallet to be "longer" than the outer mallet.

When changing from small to large intervals, or vice versa, the motion of the mallets is controlled independently. "Theoretically, the outer mallet is stationary while the inner one pivots toward or away from it in adjustment to various intervals."[1] After some facility has been obtained, however, the outer mallet may also be maneuvered to aid in the "opening" and "closing" of the mallets.

When playing large intervals, the inner mallet is usually held between the thumb and index finger in the same manner used for playing small intervals. Figure 3 shows the Musser grip in an "open position.

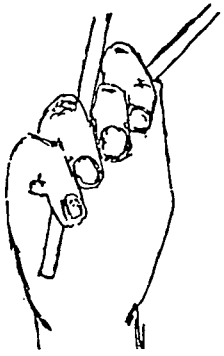

Fig. 3--View of Musser grip in "open" position (for large intervals).

However, when playing extremely large intervals the index and third fingers curve around the shaft and the thumb "slides" to the top of the shaft.

(See Figure 4.) Less strain is involved in playing extremely large intervals in this manner.[2]

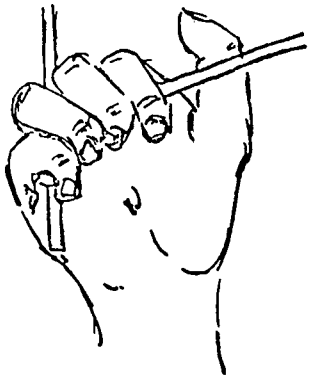

Fig. 4--View of Musser grip used in playing extremely large intervals.

When using the Musser grip, the palms of the hands will be almost perpendicular to the floor. (See Figure 5.)

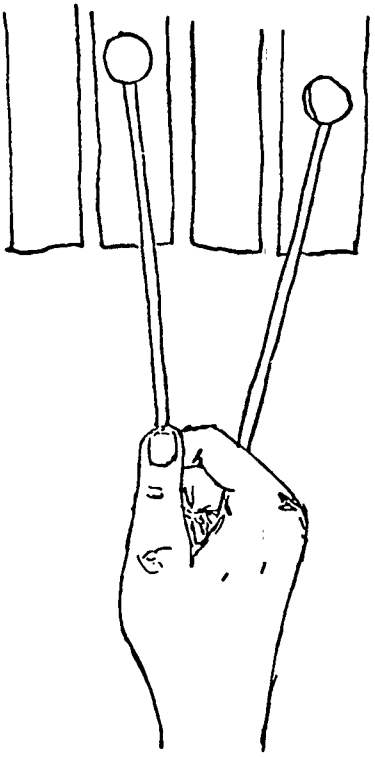

Fig. 5--Top view of Musser grip.

In most instances the playing of a major or minor second does not require an altered positioning of the hand or fingers. However, because the inner mallet is "longer" than the outer mallet, the playing of a minor second with the outer mallet striking an "accidental" bar and the inner mallet striking a "natural" bar will result in the need for a large hand turn. (See figure 6.)

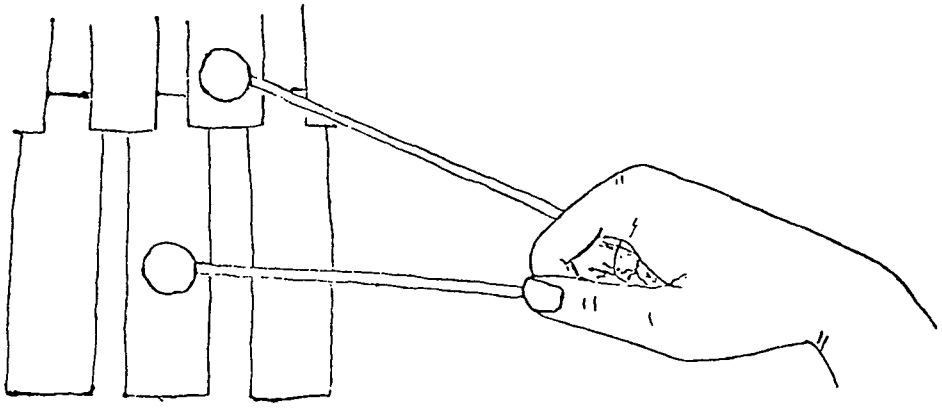

Fig. 6--View of Musser grip showing a large hand turn.

CROSS STICK GRIP NO. 1

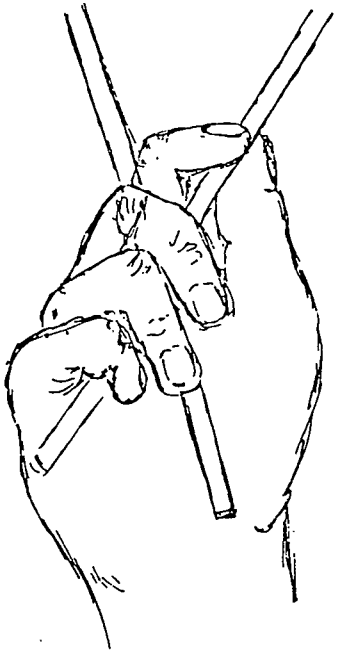

Fig. 7--View of cross stick grip No. 1 in "close" position

The "cross stick" method of holding four mallets is quite different from that of the Musser grip. Unlike the Musser grip the mallets cross, and, instead of two, only one finger is between the mallets.

When using cross stick grip No. 1, the shaft of the outer mallet extends between the index and third fingers and passes between the knuckle and the first joint of these two fingers. This outer mallet is the closer of the two mallets to the palm of the hand at the point where the sticks cross. The mallets normally cross approximately three inches from the ends of the sticks; however, this location may vary.

Although the outer mallet is held basically in the same position for both small and large intervals, this is not the case with the inner mallet. The position of individual fingers changes somewhat with the size of interval to be played. When playing small intervals the inside mallet comes between the thumb and index finger. (See Figure 7.)

When playing large or extremely large intervals, the index finger is curled around the shaft slightly closer to the end, and the inside mallet is below and on the side of the thumb.[3] (See Figure 8.)

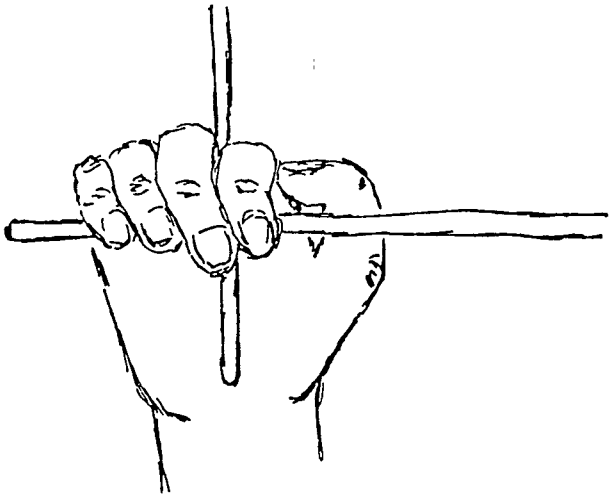

Fig. 8--View of cross stick grip No. 1 in "open" position.

When playing a small interval, the third finger is curled around the point where the sticks cross, but is curled only over the inside mallet and touches the outside mallet with the tip when playing large intervals.[4]

The position of the fourth finger also changes in that it is curled over the inside mallet and touches the outside mallet with the tip when playing small intervals, and is curled around only the inside mallet when playing large intervals. The fifth finger will always remain curled around the inside mallet.[5]

In cross stick grip No. 1 the fourth and fifth fingers play an important part in moving the mallets from an "open" to "close" position.

Instead of the task of opening and closing the mallets falling solely upon the index finger and thumb, the fourth and fifth fingers should be used. The third finger is to stablize the outer mallet. The fourth and fifth fingers then can pull or push the inner mallet along with the index finger and thumb to facilitate the desired opening and closing of the mallets. [It should be stressed] how important it is to put these two fingers to work. Their use will mean the difference between a minimum of mallet control, and a maximum of mallet control. One might even say that the secret to four mallet control is in using the fourth and fifth fingers.[6]

When playing a major or minor second, either (a) the index finger must be extended or removed from between the mallets, or (b) the mallets must be at an angle which will permit the playing of the interval with the index finger remaining between the mallets. (See Figures 9 and 10.) It is possible (and may sometimes be necessary) to use a combination of these two procedures.

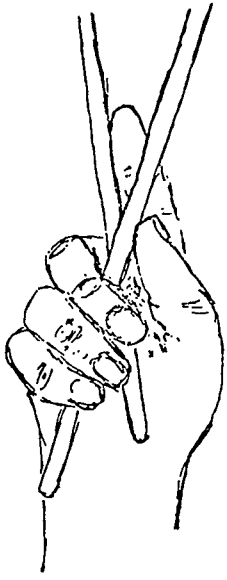

Fig. 9--View of cross stick grip No. 1 with extended index finger for the playing of a major or minor second.

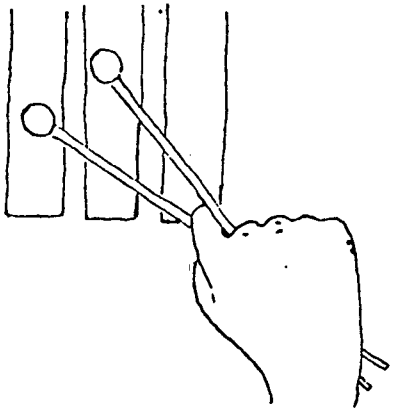

Fig. 10--View of cross stick grip No. 1 with mallets angled for the playing of a major or minor second.

CROSS STICK GRIP NO. 2

Fig. 11--View of cross stick grip No. 2 in "close" position.

Cross stick grip No. 2 may look and, at first, seem to be similar to the previous grip described (cross stick grip No. 1). However, a more detailed evaluation will show substantial differences.

The mallets are crossed approximately three inches from the ends of the sticks as in the previous method, but with this grip the outside mallet is on the bottom and the inside mallet is closest to the palm.

The outer mallet extends between the index and third fingers, which are both *curved* but not curled around the stick. The shaft passes between the first and second joints of the index finger and crosses the third finger at the first joint.[7] (See Figure 11.)

The fourth and fifth fingers are curled around the point where the sticks cross and, except for extremely large intervals, never change their basic position.[8] (See Figure 12.)

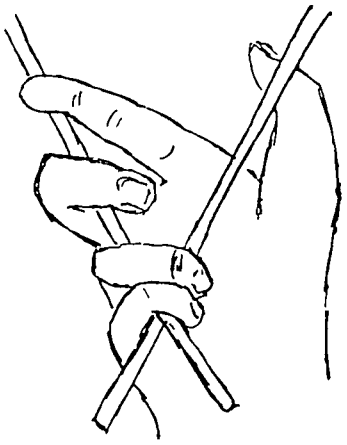

Fig. 12--View of cross stick grip No. 2 in "open" position.

In the case of an extremely large interval, the fourth finger may release its grip and, therefore, leave only the fifth finger to be curled around the point where the sticks cross. (See Figure 13.) Thus, the outer mallet is held between the index and third fingers, and also by the fourth and fifth fingers (only the fifth finger in extremely large intervals) where the sticks cross.

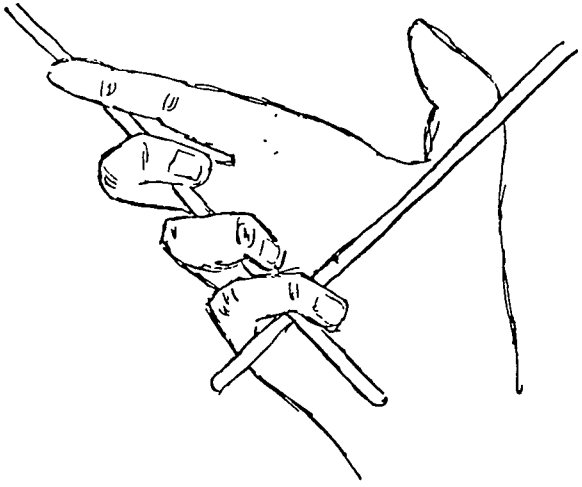

Fig. 13--View of cross stick grip No. 2 used in playing extremely large intervals.

The inside mallet is also held by the fourth and fifth fingers at the crossing point and is aided by the thumb, which exerts pressure on the top of the shaft when playing small intervals and on the inside (side nearest the index finger) of the shaft when playing large intervals.[9] The shaft passes between the joint and tip of the thumb when playing both large and small intervals. However, when playing exceptionally large intervals, the shaft usually passes between the joint and the knuckle of the thumb. (See Figures 11, 12 and 13.)

The "opening" and "closing" of the mallets that is necessary for the playing of large and small intervals is done by (a) the thumb, plus some assistance from the fourth and fifth fingers, for the inside mallet, and (b) the index and third fingers, plus some assistance from the fourth and fifth fingers, for the outside mallet.[10]

The procedures for playing major and minor seconds are the same as those listed under Cross Stick Grip No. 1. Figure 14 shows the grip when the index finger is extended.

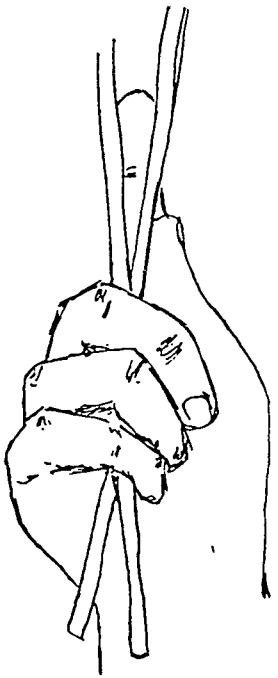

Fig. 14--View of cross stick grip No. 2 with extended index finger for the playing of a major or minor second.

When playing a major or minor second using the hand turn method, the view looks identical to Figure 10.

[1]Vida Chenoweth, "Four-Mallet Technique," *Percussionist*, I (December, 1963), 5.

[2]Lionel Hampton, *Method for Vibraharp, Xylophone and Marimba*, edited by David Gornston (New York, 1939), p. 19.

[3]Gary Burton, *Four Mallet Studies* (Glenview, Illinois, 1968), pp. 4-5.

[4]*Ibid.*

[5]*Ibid.*

[6]*Ibid.*, p. 5.

[7]Howard M. Peterson, *The Mallet Instrumental Fundamental Series--Book One* (New York, 1966), pp. 2-3.

[8]Phil Kraus, *Modern Mallet Method*, edited by Doug Allan (New York, 1960), pp. VIII, X.

[9]Jacques Delecluse, *Methode Complete de Vibraphone* (Paris, 1963), pp. 59-61.

[10]Kraus, p. VIII.

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President's Corner

As we begin a new school year, I would like to inform the membership of some of the upcoming PAS activities. PAS will host all the usual sessions at the Midwest Instrumental Conference in Chicago with one important addition and one deletion. All events will take place on Friday, December 21, 1973 at the Conrad Hilton. Included will be the commercial members breakfast, the general membership meeting and the Board of Directors annual meeting. The addition will be a meeting of all State Chapter Chairmen in attendance at the conference. The deletion is the "Day of Percussion."

The former "Day of Percussion" will assume a new name, location and scope for 1973-74. It is with a great deal of excitement and anticipation that we announce the PERCUSSIVE ARTS SOCIETY NATIONAL CONFERENCE to be held March 26-27 on the campus of California State University at Northridge, California. A very dedicated committee consisting of Lloyd McCausland, Gary Burton, Roy Burns, Joel Leach, Mervin Britton, Martin Zyskowski, and Scott Higgens is hard at work planning this event and the details will soon be revealed. The Conference will be hosted by the California State Chapter.

A frequent criticism leveled at the national PAS activities is that they are always held in Chicago. The advantage, of course, is its central location. However, I feel that we should start moving around the country more, so that the membership who are unable to attend the Chicago activities, will still be able to participate in some of the national PAS programs. We therefore anticipate that the PAS National Conference will continually move to different locations around the country. I hope the membership will take advantage of as many of these activities as possible.

RUDIMENTAL DRUMMING IN THE UNITED STATES, 1860-1900

by Donald Gilbert

About the Author:

Mr. Gilbert holds a B.M. degree from Eastman and a M.M. degree from Michigan State University. He has done advanced graduate study at the University of Michigan. He has had considerable performance experience and numerous publications. Presently Mr. Gilbert is instrumental music director at Whiteford Agriculture Schools, Ottawa Lake, Michigan.

The Civil War marked the high point for the rudimental style of drumming in the United States. It was a mobile war. Whole armies covered much ground on the forced march, fought their battles and often retired in quick retreat. Musically, it was really a drummer boy's war, for it was he who called the great formations to battle, tapped the camps to sleep and, together with the fifes, set the cadence for those long and weary marches. For many young boys, enlisting as a drummer or fifer was the only way to get into the fight, since the minimum age for the draft, at least in the Union Army, was eighteen.[1]

Although at the beginning of the War, many Union regiments had complete bands, the necessity of using bandsmen on the firing line soon depleted their ranks. After 1862, the drum and fife corps offered the only dependable source of music in many of the regiments. As in the War for Independence and succeeding wars, all formations and calls, from reveille to taps, were announced by the drummer boys, often to the accompaniment of the fife.[2]

The esteem in which drummers and fifers were held can be seen in the following news article taken from the Sacramento Daily Union, dated May 8, 1863:

> In the First and Eleventh Corps drums and trumpets or fifes are the only martial music, and it is preferred by the men for marching as being firmer and more accurate. In some of these Drum corps I counted eighty snare drums and thirty trumpets; and in others there were seventy-five or eighty drums and half that number of fifes and piccolos. The reader who has not heard such a band can scarcely imagine the florious and inspiring effect of the roll and beat of so large a number of drums, intermingled with the martial blare of the trumpet and the shriek of the ear piercing fife.[3]

Several important drum method books were published in the latter half of the nineteenth century which greatly influenced the direction of rudimental drumming in the twentieth century. The first of these books was *Drummer and Fifer's Guide* by George B. Bruce, prin-

cipal drum instructor at the school of practice, Governor's Island, New York, and Daniel D. Emmett, fifer and composer of the famous *Dixie.*[4] Twentieth century percussionists refer to this book as the Bruce and Emmett method. This method was quite similar to Charles Ashworth's method of 1812. The first rudiment listed in the Bruce and Emmett method is the double stroke or "Da-Da-Ma-Ma" roll. The roll is notated, however, with an accent on the second beat of the open roll. Furthermore, each rudiment including the double stroke roll was to be played slowly at first (open), accelerate to a reasonable speed (close), and decelerate to the original tempo (open). The Bruce and Emmett method received wide distribution for approximately the next forty years.[5]

The second important method book was the *System of Instruction for the Drum and Fife* written by Gardner A. Strube. This book published in 1869, was adopted for use in the United States Army.[6] The Strube method differed from the Bruce and Emmett method only slightly; however, it was these slight differences which led to the formation of the National Association of Rudimental Drummers in 1932. The double stroke roll, which is still the first lesson, is played with no accent on the second beat. Furthermore, Strube did not feel it necessary to open any of the rudiments after they had been closed.[7] The notation of the rudiments was designed to show the fingering (sticking). Strube used the fourth space for left hand strokes, the first space for right hand strokes and the third space for rolls beginning with the left hand and ending with the right.[8]

The Strube book lists twenty-five rudiments which he calls lessons. His method was used extensively in the eastern part of the country, particularly in New England.

In the last quarter of the nineteenth century, the bugle replaced the fife as the accompanying instrument to the drum. The emphasis now shifted from the drum and fife corps to the drum and bugle corps. Out of this change came the need for a new method book. In 1886, John Philip Sousa published his book entitled simply *The Trumpet and Drum.*[9] Essentially, it followed the format of the earlier method books written for drum and fife. It lists the rudiments, various duty calls, and drum beatings. The fife tunes in the older method books, of course, have been rewritten to fit the peculiarities of the bugle. This book soon became the guide for all service drummers.[10] The Sousa method along with the Strube method and the Bruce and Emmett method remained stable fixtures in the percussionist's world, long into the twentieth century.

References

1. *The Civil War, Fort Sumter to Gettysburg,* Vol. I. Record note accompanying Mercury record No. LPs2-501. p. 6.

2. William Carter White, *A History of Military Music in America,* (New York: Exposition Press, 1944), p. 71.

3. Kenneth A. Bernard, *Lincoln and the Music of the Civil War*, (Caldwell, Idaho: Caxton Printers, Ltd., 1966), p. 134.

4. W. F. Ludwig, Sr., "The Development of Drum Rudiments," *The Ludwig Drummer*, V (Spring 1965), p. 16.

5. *Ibid.*, p. 16.

6. *Ibid.*, p. 16.

7. *Ibid.*, p. 17.

8. Carl E. Gardner, *Modern Method for Percussion*, (New York: Carl Fischer Inc., 1919), p. 96.

9. W. F. Ludwig, Sr., p. 16.

10. *Ibid.*, p. 16.

The Challenge

PAS NATIONAL CONFERENCE PROGRESS REPORT

PASNC March 26/27, 1974 at California State University Northridge campus.

Chartered bus transportation is planned to run from Anaheim Convention Center to CSUN Campus.

Holiday Inn and other motel housing available in Northridge from $12/$14 single, $14/$20 double. Lower rates available for early reservations. Anybody wishing to take advantage of early reservation rates, notify L.S. McCausland, 17610 Community St., Northridge, Ca. 91324; with dates inclusive, type of room, number in party.

PAS has commissioned William Kraft to compose a percussion ensemble work commemorating the first PAS National Conference. The commissioned work will be performed in a program presented by the Los Angeles Percussion Ensemble, conducted by the composer William Kraft.

Other highlights of this two day conference will feature clinics by Gary Burton and Roy Burns, presented in solo context with the Falconaires Jazz/Rock Ensemble.

Other events planned are "Marching Percussion Clinic and Workshop"; Harry Partch music program, conducted by Danlee Mitchell of California State Univ. San Diego; panel discussion of composers and their use of percussion; elementary, jr. high, high school percussion ensemble clinic and performance PAS California chapter sponsored "all western states percussion festival" competition finals, consisting of seven performing categories of drum set; timpani; keyboard; orchestra snare drum; rudimental snare drum; solo multiple percussion; and percussion ensemble; all categories in two divisions; high school and college.

Any one wishing to present their elementary, jr. high school, or high school percussion ensemble please forward a tape recording of their program to the PASNC Planning Committee for consideration. Any other performing groups desiring to participate may also submit a tape for consideration.

A STUDENT'S PREPARATION OF ZYKLUS
by Jim Lambert

Karlheinz Stockhausen initiated a new era in solo percussion performance with his *Nr. 9 Zyklus.* Before preparing to study *Zyklus,* it was found that a background in avant-garde percussion music was very helpful. These somewhat freely notated compositions include: Gitta Steiner's *Four Bagatelles for Solo Vibraphone, Four Songs for Medium Voice and Vibraphone, Three Poems for Voice and Percussion* (Seesaw Music Corporation); Howard Zwickler's *Tone-row Exercises for Mallet Percussion* (Music for Percussion); John Bergamo's *Style Studies* (Music for Percussion); Reginald Smith Brindle's *Orion* (Peters); Neely Bruce's *Untitled Piece No. IV* (Media Press); Morton Feldman's *The King of Denmark* (Peters). Any of these provide a good transition from a total training in traditional thought to a new level of creativity in meter, notation, rhythm, and form.

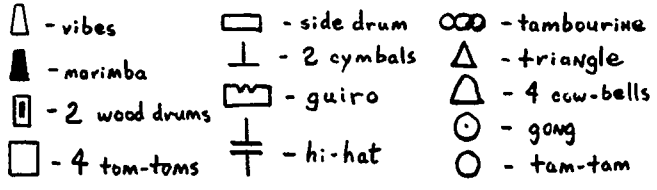
The graphic notation of *Zyklus* itself is explained in George O'Connor's article "Prevailing Trends in Contemporary Percussion Notation" *(Percussionist,* Vol. 3, Sept., 1966, pp. 61-74). Stockhausen employs only note heads for all percussion instruments except the marimba and vibes, these are notated with stemmed notes. In all cases relative size of the note symbols determines dynamic levels (small meaning soft, graduated to large meaning loud). (See Figure 1).

Figure 1. 

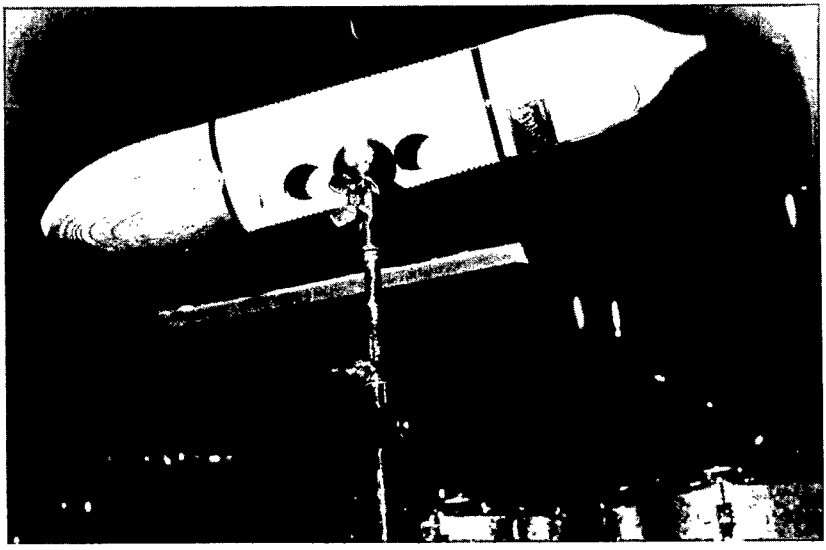
The following example shows horizontal spacing of the note heads. Dots placed in close linear proximity are played faster than ones spread apart.

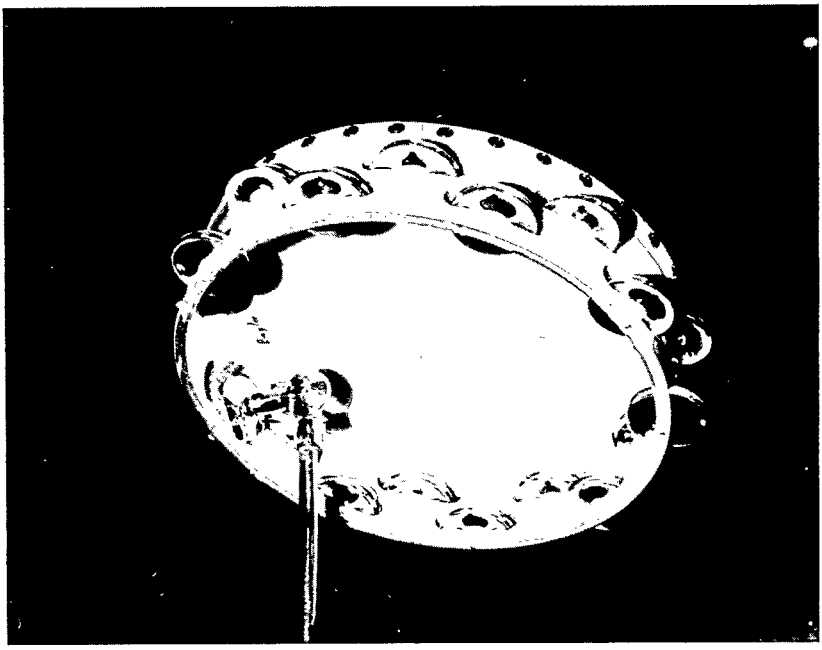
Figure 2. 

Once the student is thoroughly familiar with the basics of Stockhausen's notational devices, a study of other performances should be made. The author listened to Christoph Caskel's recording (Time Records, No. 58001) and made notes according to the type sound interpreted from the designs. The intention is not to copy the performer but to pay careful attention to dynamics and the continuity of sound germinative from a small rhythmic motive. The symbols and performance notation for the various instruments must be memorized. (See Figure 3).

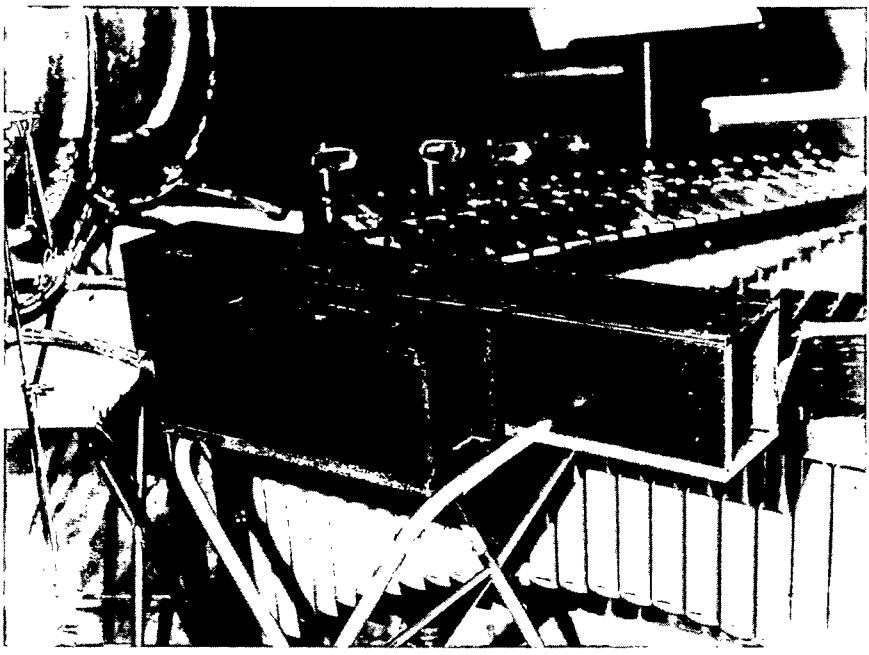
Fig. 3 

Stands for a guiro and a tambourine can be improvised by using cymbal poles. A 1/4 inch hole should be drilled between the two large holes in the guiro. The guiro is then attached to the cymbal pole in the following manner: metal washer, felt washer, guiro, felt washer, small metal washer, small wing nut. A 1/4 inch hole should be drilled adjacent to the large hole in the tambourine; the instrument is then attached to a cymbal pole in the same manner as is the guiro. (See Figures 4 and 5).



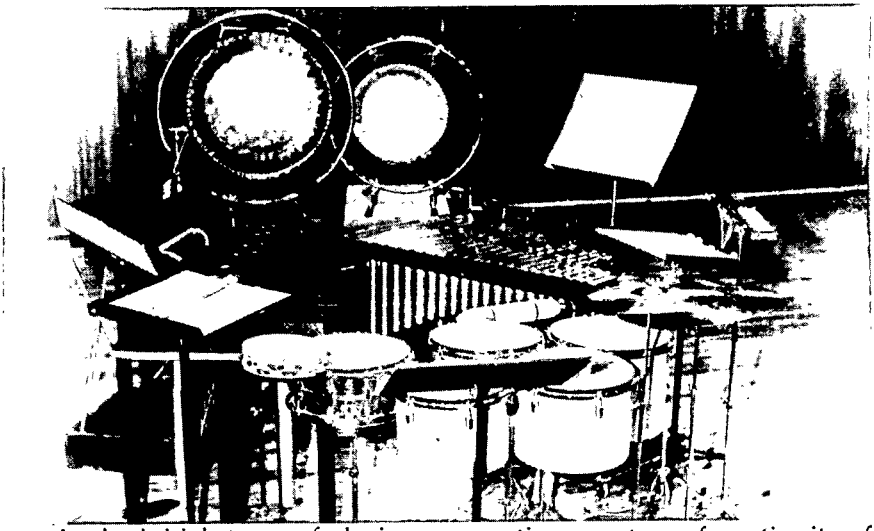


Four different pitched cowbells should be arranged in proper pitch order. The Swiss *heldenglocken* are preferred, though ordinary cowbells may be substituted. If necessary, different pitches may be obtained by filing the cowbells, thus raising the pitch. These may be attached to cymbal poles with ordinary cowbell clamps. Two African slit drums may be rented from most specialty drum shops, or they can be quite easily constructed. Oblong boxes of 3/4 or 5/8 inch plywood are made with one side having tongues of wood routed out at different lengths. Two distinct pitches are produced when the tongues are struck. In effect the box serves as a resonating chamber for these tongues. (See Figure 6).



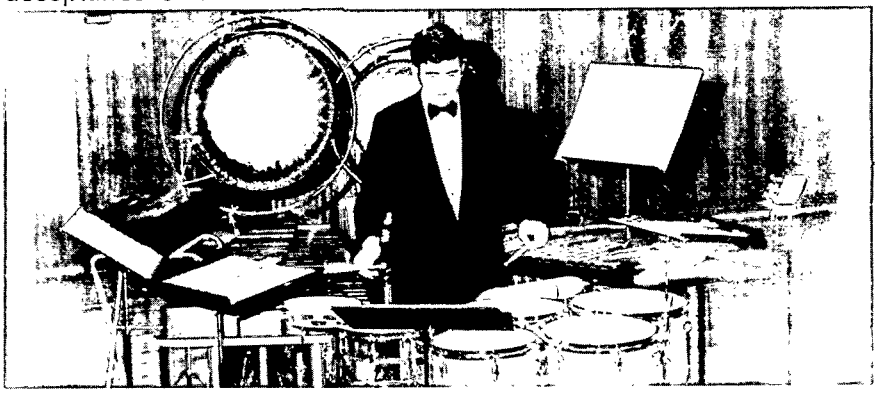
Next the score should be detached from its spiral binding and should be cut into separate segments. Two scores are needed since there is notation on both sides. Alternative measures may be discarded so that only what is to be played remains. Glue these segments to three large pieces of cardboard (approx. 24" X 36"). Pay meticulous attention to the correct sequence of these segments.

The next step is to prepare a set-up similar to the one designed on the score. At this time an issue of the *Percussionist* is most helpful to show an alternative set-up (Max Neuhaus, "Zyklus," *Percussionist*, Vol. III, No. 1, pp. 6'12). A final combination of opinions culminated in the following set-up which suited the performer's needs and available instruments. Deviations were minimized in order to preserve the general circular pattern made by the performer throughout the work. (See Figure 7).



In the initial stages of playing preparation, mastery of continuity of short sequences (e.g., a page at a time) should be sought as a primary goal. Original rhythmic motives should be improvised to unify the sounds. Through repetition certain patterns are developed, reflecting the performer's own interpretation of the notation. At this point the percussionist's own creativity is most apparent. Consistency in set-up leads to a feeling of one percussion instrument with many timbres. Try to have no more than one step between any two instruments. It is helpful to record and analyze for musicality at this point. Dynamics and balance are always problem areas. For example, a soft triangle roll must balance a soft gong roll or a soft snare drum roll.

Zyklus should not frighten or inhibit the percussionist; rather, it should allow him to free confined ideas within a multiple percussion expression. At the same time a sincere performance approach should be maintained to prevent random, hypocritical noise-making from occurring. Musical intention should be communicated by the performer. Half-hearted, half-intelligible performances can only frustrate further acceptance of the idiom.



EVOLVING SOLO TECHNICS FOR THE MARIMBA
by Linda Pimentel

(Cont. from p. 110, PERCUSSIONIST, Vol. X, No. 4, 1973.)

As a beginning marimba student must put so much emphasis on firm, even strokes, the marimbist often carries this trait over into his mature performance. He attacks everything in the same fashion, missing entirely subtleties of expression that other methods of striking would afford. The rhythmic-pattern stroke is one of the least used methods of striking the marimba. This technic offers freedom and independence to each mallet, opening the doors to well developed contrapuntal performance.

The rhythmic-pattern stroke is based on the principle that the tendency of the mallet to rebound after striking a note can be utilized to arrive more easily at a succeeding note. If a note is struck by bringing the mallet straight down, the energy derived from the collision of mallet and bar will bounce the mallet straight up. The force of gravity will, however, hold the mallet back, so that the effects are neither noticeable nor useful. The force of the collision also influences the amount of rebound; accented notes have more rebound than unaccented notes. The texture of the surface of the mallets determines, to some degree, the extent of rebound, though even thickly wrapped yarn mallets will usually rebound if the attack is firm.

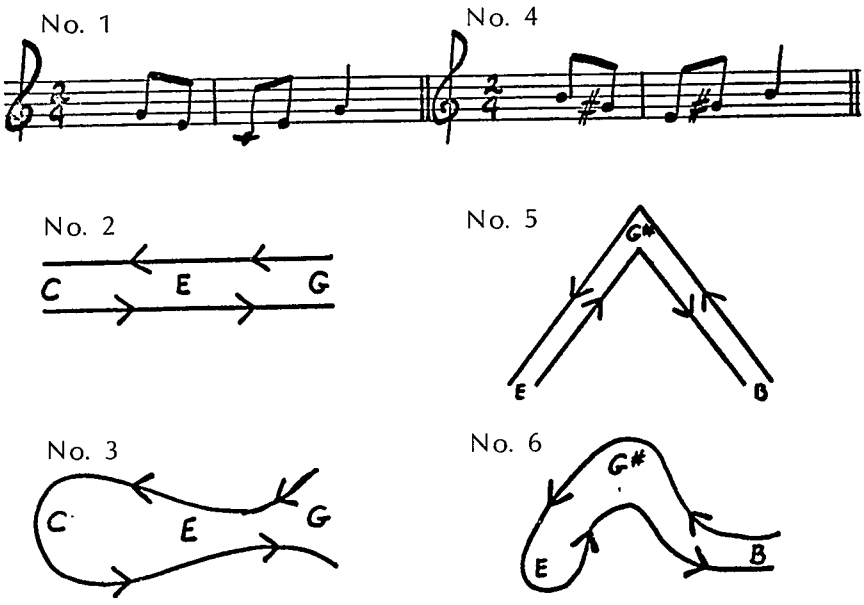
If the surface of the bar is struck at an angle, the rebound, continuing in a like direction, is much stronger. This is due in part to the arm of the performer continuing to move in the same direction. The marimbist may lose energy and control when a melody changes directions.

Two separate calculations are incorporated in the rhythmic-pattern stroke. First, various types of natural accents are employed to take advantage of their rebound potential. Second, the motions of the arm are calculated and separately practiced in order to make graceful, circular patterns. A close look at an example may clarify both procedures.

In the first diagram the notes leap down the triad and then up. The arm, swinging from the elbow and the shoulder, could make a pattern similar to diagram no. 2, as the arm moving directly toward the C reverses direction, then heads for the G. The change of direction is time and energy consuming. In diagram no. 3 the arm, rotating from the shoulder and being "led by the elbow," makes a more circular pattern, without entirely changing direction. The forearm maintains a horizontal position, and the wrist makes small flicking strokes, using either the wrist-flick or the finger-rebound stroke. The natural meter accent, falling on the C, can be struck firmly, giving continued rebound to the notes following it. Diagram no. 4 contains a G-sharp.

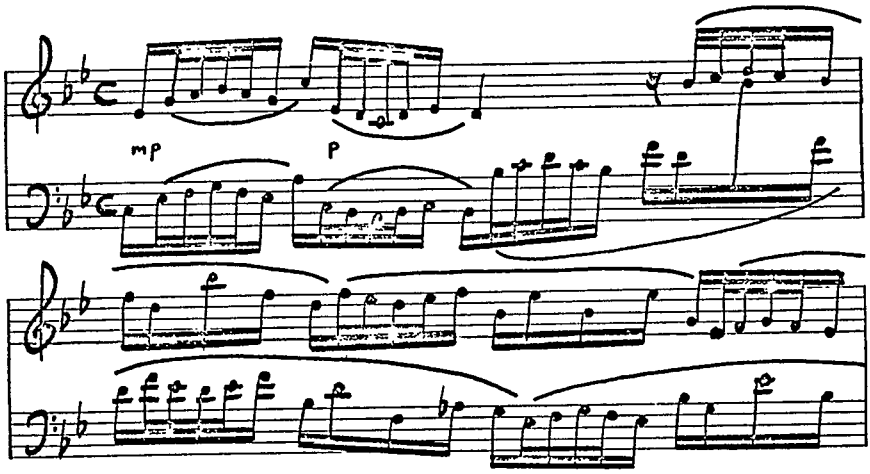
Most performers make four separate arm motions, as in diagram no. 5. The pattern can be better executed in one flowing circular motion as in diagram no. 6. The next two examples contain several circular patterns and make extensive use of the rhythmic-pattern stroke.

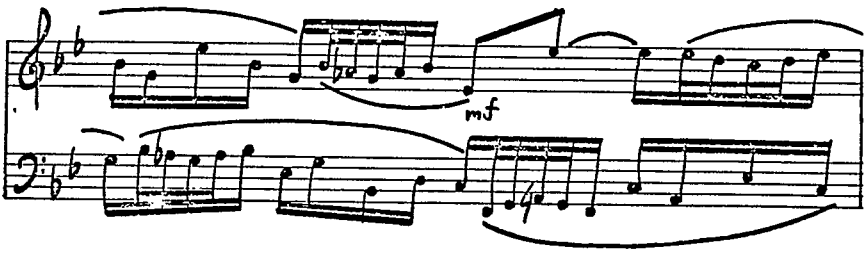
Example 12



Circular Patterns

Example 13

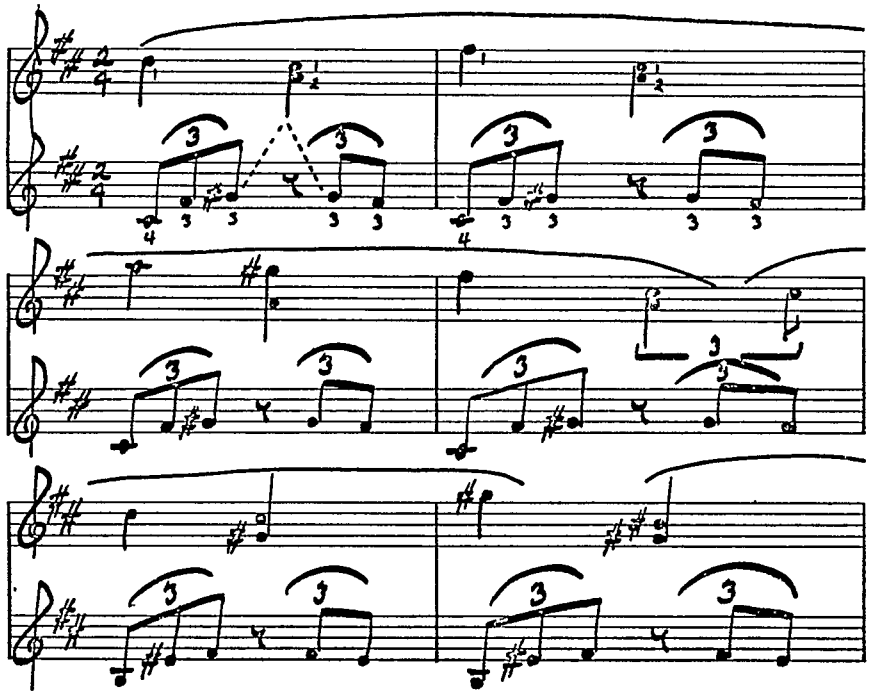




INVENTIO XIV,[14] rhythmic-pattern stroke

[14]J. S. Bach, INVENTIO XIV (New York: Edwin F. Kalmus, 1943), p. 20.

Example 14



VARIATION NO. 1---D MAJOR,[15] rhythmic-pattern stroke

[15]Dmitri Kabalevsky, VARIATION NO. 1---D MAJOR (TOCCATA) (New York: Leeds Music Corporation, 1947), pp. 4-5.

To be continued

THE UNIVERSITY PERCUSSION SCENE

by Bob Tilles
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Chicago, Illinois

The majority of percussion students attending university music schools are receiving a thorough education in the field of music and percussion.

The colleges have the facilities for screening and improving their professors, which results in faculties that are carefully selected by the various deans of music schools who conscientiously try to hire the very best educators they can for their schools.

Faculty members are encouraged to improve their own pedagogy and to advance and enlarge their knowledge of music. By and large, the atmosphere for greater learning is excellent and most conducive to study and success in the field of music for both student and instructor.

Admittedly, there are many excellent private teachers not associated with universities doing a good job of teaching. They reside mainly in or near the principal music centers scattered throughout the world. However, it is an old complaint of the Percussive Arts Society (PAS) that private teachers are impossible to rate or classify and that the unsophisticated student may fall into the wrong hands more often than not. In contrast to this situation, the faculties at college level have approval of the state and the accreditation body of their region in addition to supervision of their curriculum.

True, there is still some incompetent instruction performed in college classrooms, but each year this is lessened by the addition of experienced, professional persons hired to the faculties.

It is common today to find experts in percussion, teaching at many state and private universities. In the midwest area for example, players from the recording, symphony, and network studio fields are teaching in Illinois, Indiana, Michigan, Wisconsin, Kansas, Minnesota, Missouri, etc. This situation is also duplicated in other sections of the country.

In addition to private instruction, the undergraduate percussion student gets to play in the university concert band, symphony orchestra, percussion ensemble, and/or any number of lab bands and combos. The advantages of this playing experience are almost equal to private or class tutoring.

A few of the many valuable lessons acquired at college are: learning ensemble playing, following a conductor, interpreting musical modes, phrasing, discipline, different styles, and actual playing routines.

Another addition to private lessons and ensemble playing is the percussion instrument methods course that is offered by most music schools. Although this course is beamed specifically to music educators, the percussion major can study the methods of teaching employed in the curriculum and utilize his instructor's pedagogic approach for his own future teaching.

During the course of his private instruction the percussion major in college can expect to master the following lessons:

1. Snare drum rudiments and technique, sight reading and repertoire studies in classical, military, and modern snare drum, and Latin rhythms.

2. Xylophone, vibes, marimba, bells, chimes including: scales, chord study, technique, sight reading, and repertoire study in classical and modern music.

3. Timpani study encompassing tuning, technique, sight reading, repertoire, etc.

4. Small accessories such as castanets, tambourines, triangles, cymbals, sound effects, etc.

5. Experience in Avant-Garde and electronic music.

6. Recital experience for the undergrad and graduate student in applied percussion.

7. Composing original music and the opportunity to conduct and perform these and other works.

All of this private tutoring will be applied to actual performance in band, orchestra, ensembles, etc. and will be supervised and monitored by the instructor.

To further enlarge the knowledge of the college percussionist, advanced study of piano, harmony, theory, solfegge, composition plus other orchestral instruments is undertaken along with other academic courses needed to fulfill degree requirements.

The popularity of percussion music is heightened each year and the manufacturers of drums and mallet instruments are struggling to keep up with the increasing demands for new instruments. Publishers are also increasing their output of instruction books, solos, and percussion ensemble music.

Regarding ensembles, more and more parts require mallet players and the study of keyboard instruments is imperative for today's student and tomorrow's professional.

As a world wide traveler, and famous percussion authority, Gene Krupa said, "I have seen some excellent teaching done in the colleges, and I think the ensemble playing is very practical and realistic. I can personally vouch for the professional standard of instruction being given at some of our better music colleges."

In summary, it is encouraging that the percussion problems of today and tomorrow are being realistically met by a group of serious and hard working percussion instructors at the many fine college music schools throughout the world.

More and more, the qualified and experienced men and women in percussion are joining music faculties everywhere, and the student will have many competent teachers to choose from while working towards his coveted degree.

The future professionals and teachers of percussion being developed in colleges today will be a well rounded and educated group of fine young men and women of tomorrow.

CARE AND MAINTENANCE OF CHIMES

by Wilbur T. England

Instructor of Music
Indiana University

Chimes, like any other instrument, are often abused and mishandled because of the absence of proper care, maintenance, and a general respect for the playing of the instrument. Reasons for this may be an absence of education in these areas and lack of common sense; which boils down to a genuine lack of reference and knowledge of the subject. This article will attempt to organize the few and varied ideas from my experience and the experience of other teachers and performers in the profession.

The manner of striking the instrument is the first concern and of great importance in the total picture of melodic percussion. Chime mallets consist of tightly rolled rawhide heads with wooden handles. This type will often come with the set of chimes and are suitable for normal use. Since chime mallets have two striking heads, it is a good idea to cover or soften one head to meet other tonal dynamic requirements. This is usually done by glueing a piece of chamois or moleskin on one of the mallet heads. A number of other coverings may be used, including a handkerchief, buckskin, Dr. Schooll's Kirofelt, leather discs, bandaids, felt, or rubber, these can be used in any combination with the softer, mellow, more pianissimo sounds relaized through the thickness of covering. In most cases the regular rawhide mallet is too hard and should be covered to protect the instrument, as well as to create the different timbres. Other types of mallets which may be used are laminated leather, wooden, or plexiglass mallats; (often hardware stores will have a sale on various hammers some of which can be bought and used effectively) the yellow or red plexiglass and the plexiglass and rubber combination. Care should be used when selecting the plexiglass hammers, for they might be extremely hard and create a very brittle sound, thereby causing both a lack of depth tone quality and noticable mallet contact. The rubber type hammer can be used for soft passages, but may have too much contact and the tone may lack indepth. Occasionally cabinet maker's hammers may be used and vibraphone mallets have ben used for pianissimo rolls. Deagan now produces a mallet kit with "striking heads of graduated hardness", You must be very careful with the mallet you use, making sure it will not dent, scratch, or scrape the surface. Thus, no metal hammers or mallets or even brass bell mallets should be used except in specified cases, and with discretion. I found the matching of weight between the mallet and chime, and of matching the size of the mallet and chime, and of matching the size of the mallet with the diameter of the chime, to be of great importance. If the

mallet handle strikes lower bars while playing chromatically, it can be wrapped with moleskin, to protect the chime and the sound. The mallet should always strike the chime at the raised striking edge at the top or lip (old sets will have a straight tube with no raised edge, but should be struck at the top edge, Areas below the lip of the chime, 1/4" should never be struck! Hitting the chime at the wrong area with the wrong mallet will result in some kind of damage to the chime intonation over a given period of time. A triangle beater or drum stick rubbed across the chimes can cause permanent damage. If a composer writes for "striking the chime at the center of length," a very soft marimba mallet may be used. A glissando can be produced with a rattan handle or a very thin smooth dowl of metal or plastic.

To initiate proper sound on chimes, proper suspension is necessary (hung correctly from the forks at the top). For the maintenance of the actual chime, this is one of the most critical and difficult aspects. The first point to check is a freely suspended chime and one not leaning on the felt of the frame. If the chime is perfectly perpendicular to the gravity, it will be free and can vibrate. Suspension is done with a commercial type of cord or string (metal and fiber strung through the chime) tying the cord to the fork. It is best to use gut, or plactic wound wire. Never use a mono filament line for it tends to become brittle in cold weather and stretch in warm weather. Shoelaces, leather, rawhide, and plastic clothes line have been used, but are not recommended because of thickness which often muffles the chime sound, retards vibration, and affects the pitch. Cat gut would be ideal, but it is difficult to manipulate. When replacing a suspension cord, synthetic rubber tubing should be placed through the hole, or the cord should be wrapped with tubing, to protect from the sharp edges of the chime holes. This is imperative for wire cords or the cord will vibrate. Years ago any suspension cord replacement had to be done by the manufacturer, because of the difficulty and unavailable string, but, after many complaints, manufacturers are now making the materials very durable and available on request. The cords should be checked before buying and should be closely watched. It is good to check the holes in the chimes for smoothness to prevent eventual fraying of the cord. The most difficult aspect of replacing suspension cords is leveling the chimes as a set, on both the natural and accend tubes. Accuracy is very important, and takes a lot of patience and time. There are no guidelines, except to keep all chimes the same in height with little sway or play. The cord should be tight on the forks with no understring, or the chime will knock against the frame. One point to check when purchasing the chimes is the plating. Bad chrome plating can chip, corrode, rust, or scratch and eventually affect the pitch. A metal polish will coat the chimes with an oil substance, a light film or oil kept on the chime will help prevent corrosion in humid areas of the country or during long storage.

Dampening and muffling of the chimes may be done with the hand, but generally it is done with a pedaling mechanism, similar to that of a vibraphone or piano, which brings felt against the vibrating bars to stop the tone. The pedal mechanism motion should work as a piano pedal mechanism and should be kept at about the same height (able to keep the heel of the foot on the floor while operating). This can be accomplished through adjustment. A peice of rubber is usually guled on the bottom of the pedal, at the factory, so it isn't heard striking the floor, but if that is not sufficient, a carpet can be placed under the pedal. The dampening system should affect every chime and should be dusted, cleaned, and oiled regularly.

The felt material dampening system should cover the circular area through which a chime passes, not only to muffle the chime, but also to prevent its swaying and clanging against another. After continued usage, the felt may get flat and pressed. If this does happen, it can be replaced by using piano damper felt or moleskin and a not-so-permanent glue, (Elmer's), or you may want to just raise the knap of the felt to its original texture. If a permanent poxy is used, you may have trouble replacing it. Some feel this is an unnecessary point and would never need to be done if the system is working, but consistent care will result in less major work in later years.

Most chime racks are very sturdy and serve their purpose well, but often a composition will need continued use of only three or four notes. In this case, these particular notes should be moved to the end of the rack adjacent to each other for security and simplicity of playing, or could be placed on a separate smaller auxiliary rack. This smaller rack for three or four tubes can be easily built with wood or metal pipe tubing. The rack could be shaped like the original rack or like a hat rack with just one supporting tube, (but then the supporting tube would have to be quite heavy). A good suggestion for either rack is to place a piece of moleskin behind the chime's cap so the chime could knock against the softer area if there happens to be an undue amount of sway or play.

The one peculiarity of the chimes is the very dissonant overtone series. First of all, the A in any keyboard instrument will usually be tuned to 442 (factory) vibrations per second (VPS) due to the great dissonance when used together harmonically and for the variable degrees in pitch in an orchestra or band. Other notes are then tuned to compensate for various timbres or registers. The chimes will produce a hum tone after striking from their "difference tones" (three octave lower overtones) and their other overtones. To the performer, the chimes will seem out of tune from this and its prominent fourths and octaves. So for true quality and pitch, chimes should be at least seventy-five feet away when heard. If any tuning problem arises they should be sent to the factory. Don't judge the overall tuning on octaves for as a rule the higher octave will be flat.

Due to the size and awkwardness of the chimes, they obviously will cause a problem when being transported from place to place. The chime stand is sometimes very awkward and very collapsible in most case. The chimes should be moved as a unit for small to average trips, and are provided with wheels for same. If you're going up or down stairs, it is easier to tip the caps of the chimes toward you than to carry them upright. For average trips, they can be wheeled into a truck and covered, making sure to secure it from rolling or falling. The only time the set should be dismantled for moving is for very long trips, repairs, or storage. In this case the chimes can be removed and wrapped separately and the stand can remain as was or be broken down somewhat, (cases can be purchased through the manufacturer). Large traveling fibercases have been made for individual parts, or for the entire set, (on special order and are very expensive). For storage, a thick drop cover or zipper cover can and should be used for adequate protection.

A metal polish/cleaner is recommended by each manufacturer which is used to keep the chime tube in good condition. However a soft damp cloth can be used to sipe off the chimes periodically. A motored buffing wheel set should not be used for the heat will crystallize the metal and change the tone quality and pitch. Other general care would be to check all tightening and fastening mechanisms and use vaseline (3 in 1 oil) for maximum lubrication of moving parts.

One and one-half octave chime sets are the most popular size, the diameter of each tube being from one inch to one and one-half inch in size, (the one and one-half inch having the greatest tonal depth and resonance). The tone power of the chimes comes from the wall thickness, as well as the diameter size, which is determined by the factory.

Much of the general knowledge of the care and maintenance comes from experimentation and personal experience. However, the best care and maintenance for the chimes, and any other instrument, is a good education in the physical properties of the instrument, a general knowledge of care and maintenance of the instrument and most of all **respect** for the instrument.

PERCUSSION RESEARCH

The Percussion Research Collection
by Sherman Hong

Under the auspices of the Percussive Arts Society and with the cooperation of the University of Southern Mississippi, a Percussion Research Collection will soon become a reality. This writer and members of the Percussive Arts Society have long felt that there should be a source library for research and storage of research materials which would be available to all interested persons.

Research papers, theses, and dissertations concerned with different aspects of percussion have been written with increasing frequency. However, much of what was discovered or recommended by percussion researchers failed to gain a widespread audience even among percussionists. A great deal of research was and is left unread because of the inadequate ways used to make such research known, i.e., *Dissertation Abstracts* is concerned with doctoral dissertations and is used by those looking for particular subjects; and such abstracts are usually not readily available. There is, at present, no source listing the many masters theses done recently. The *Percussion Research Bulletin* lists those which have been brought to the attention of the Percussion Research committee and by interested teachers; however, this writer feels that many sources are still unknown to the society.

The Percussion Research Collection should be a stepping-stone toward solidifying the study of percussion on an academic, as well as musical plane. A central collection should make acquisition of studies by individuals much more convenient and should stimulate further research.

The following should be observed when sending materials or requesting copies of studies in the collection:

1. Send all materials to: Mr. Henry Simmons
   Mississippi Room
   USM Library
   Southern Station Box 53
   Hattiesburg, MS 39401
2. Writers whose works will be included should enclose written permission for the university to reproduce any or all parts of their works.
3. Xeroxing will be available at 10c per page.
4. Microfilming will be available; cost will be determined by length of study.

All materials included in the collection will be in closed stacks. The collection will be housed at USM at no cost to the Percussive Arts Society. This writer will make available a listing of housed materials when the collection is established.

With the cooperation of all percussionists, teachers, and researchers, the Percussion Research Collection should be a boom to all interested persons. Only *you* can make our collection an effective reality.

THE JAZZ/ ROCK PERCUSSION ENSEMBLE
by Ron Delp

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About the Author:

RON DELP is former instructor of percussion and arranging at Berklee College of Music and is the composer/author of several published compositions (ASCAP), articles and books. His professional performance ranges from jazz drummer, vibist, and show and studio percussionist to percussionist with the Boston Opera, Ballet, and Pops.

The percussion ensemble has come a long way since the early days of Henry Cowell, Amadeo Roldan and Edgar Varese. As a shaping force of 20th century music, percussion has influenced and guided compositional styles from Stravinsky and Bartok to today's experimental composers.

Still, no music has been as heavily dependent upon percussion as has jazz and rock.

The percussion ensemble has proven its ability to function as a self-contained musical group incorporating rhythm, melody, harmony, and timbrel qualities all its own. However, ninety-nine percent of the music written for percussion ensemble is conceived from two opposite poles. Either it is 1) music written strictly for instruments of percussion or, 2) transcriptions (especially for mallet ensemble) of works originally composed for 'traditional' instruments.

What is needed is more of an opportunity for percussion students to perform the music of their generation (pop, jazz, rock) on their own instruments. This need to relate to jazz and rock music is evident. According to a recent compilation of percussion pieces most often performed in concert (Percussive Notes Magazine, Vol. 10, No. 3), Vic Firth's *Encore in Jazz*, an effective though rather dated piece, placed fifth. An impressive showing, considering the hundreds of percussion ensemble compositions on the market.

Many ensemble directors seeking more modern concert pieces do their own arrangements of pop tunes. Scanning the list of concert programs submitted to Percussive Notes magazine reveals that the majority of the tunes arranged are two-beat or novelty tunes, or songs in the pop 'marimba band' vein. Neither students nor audiences are dumb . . they know trite music when they hear it!

We must realize the need for percussion students to actively participate in jazz and rock on instruments other than the standard drum set, and begin organizing ensembles and composing music in the jazz-rock vein. There are several reasons why this performance experience is necessary for the 'total percussion' student:

1) many of the percussion instruments (vibraphone, marimba, Latin and African instruments, etc) relate to pop, jazz and rock music more directly than to 'legit' music.

2) the ensemble situation provides melodic and harmonic improvisational experience the average percussion student would not be able to obtain elsewhere.

3) the familiar form of most jazz and rock tunes helps build 'tighter' ensemble performance.

4) more graduates will end up performing pop, jazz, or rock music (shows, recording, television, etc.) than will perform in a full-time symphonic organization.

5) most students are playing some sort of jazz or rock music outside of school, but usually only on drums. The jazz-rock ensemble gives them experience playing modern music on mallets, timpani, and traps.

Berklee percussion students perform in jazz-rock ensembles in addition to the regular percussion ensembles. These groups consist of five mallet players (who double timpani and traps), a drummer, guitar or piano, and bass. The basic mallet instrumentation is: two vibraphones, marimba, xylophone, orchestra bells & chimes.

Music for these ensembles is all original manuscript and is arranged in three categories: 1) the entire arrangement is written out with no solos, 2) jazz solos written, 3) open solos on chord changes. The simple arrangements are written for two mallets only, the more difficult utilize four mallet technique, both notated and with chord symbols only.

I had the pleasure of conducting an ensemble at the recent MENC Eastern Division Convention, and was thrilled at the audience reaction to the massive sound the group produced. No one had ever heard anything like it before. We used 35 different percussion instruments such as thumb piano, cuica, pod rattles, flexatone, talking drum, and even water chimes.

Possibilities for the jazz-rock percussion ensemble are unlimited if only directors will take advantage of them. Instrumentation may be a problem for a high school group, but most colleges have adequate equipment. If two vibraphones are not available a second marimba can be used in place of one of the vibes. Scoring to produce a big sound that won't sound like a cartoon soundtrack requires experimentation. Published music of value is rare, but with the recent surge in stage band compositions, more music for percussion will certainly appear.

I hope that this article will stimulate some thought and prompt the formation of more jazz-rock percussion ensembles. the most important outcome of this experience is that the students love it, and gain insight into both music AND their instruments that is unobtainable even in stage band. Besides, they are a lot of fund to teach, too.

THE CONSTRUCTIONAL DEVELOPMENT OF THE MARIMBA

by Irving G. Jacob

About the Author:

Mr. Jacob is a member of the California Chapter of the Percussive Arts Society and a graduate of California State University, Northridge, having received his Master of Arts degree in music in June, 1972. He has studied percussion with Mr. Ron Fink of North Texas State University; Mr. Joel Leach of CSUN; and Mr. Lloyd McCausland, who currently is serving his second term as President of the California Chapter of *PAS.*

This past year he has performed as a percussionist with the Ventura Symphony Orchestra of Ventura, Ca. and the West Los Angeles Symphony Orchestra (Mount Community Orchestra). Mr. Jacob is currently working for a California State Junior College Credential to be earned in February, 1974.

This article is an attempt to trace the chronological development of the marimba. The marimba, unlike many instruments whose developments occurred in Europe, experienced most of its development in Africa and Guatemala. However, many arguments exist as to the origin. Although some argue for Africa, the general agreement is southeast Asia.

Because it was considered too primitive, the Europeans ignored the marimba until the 1920's and instead, focused more attention on the xylophone. Although the latter is mentioned, the purpose of this article is not to give the difference between this and the marimba.

Although the earlier African instruments contributed to the development of the Marimba, the instruments are discussed in the present tense since they are used in the African tribes of today. The earlier Guatemalan marimbas (*con tecomates* and sencilla) are also used, although not as commonly as the present day *marimba doble*, consisting of two instruments.

In her book *The Marimbas of Guatemala,* Vida Chenoweth refers to two African tribes people as "Bavendas" and "Chopis" while in his book *The Musical Instruments of the Native Races of South Africa,* Percival R. Kirby refers to them as the "Vendas" and "Tshopis," both of whom refer to the same people. This author will refer to them as the "Vendas" and "Chopis."

The marimba, according to Curt Sachs and E.M. von Hornbostel, belongs in the classification of instruments known as idiophones. These instruments are set into motion by the action of the player.[1] The classification goes further as to whether they are struck, shaken, or rubbed. Also, the nature of the material is classified as to whether it be of wood, metal, or stone. The marimba then is a struck idiophone of the xylophone group due to the wooden bars. However, the marimba differs from the true xylophone in that it contains a resonator for each key and each resonator is tuned to its corresponding key.

The wooden bars are graduated in size, tuned to a scale, and mounted in such a way that they are free to vibrate when struck with mallets held in the performer's hands. The resonators are placed under the middle of each bar for amplification. The open ends of the resonators are near, but do not touch the bars, since direct contact would prevent proper vibration.

The earliest known instruments related to the marimba are found in southeast Asia where in 1949 French ethnologist, Georges Condominas, made a survey of Indo-China taking him near the Vietnamese village of Ndut Lieng Krak. While there he heard a road construction or building gang talking of stones they had extracted from the ground while constructing a road. He heard them mention "those big gray stones." The stones were given to him and Condominas discovered that these were a prehistoric lithophone with eleven keys made of schistic rock. This is considered to be the oldest pitched instrument in existence.[2] This huge marimba, thought to have been played by Stone Age men, is said to be four to five thousand years old.

Of the eleven keys, the largest was forty inches long, six inches wide, two inches thick, and weighed twenty-five pounds while the smallest was approximately twenty-six inches in length. Condominas accidentally struck one of the plates and found that it emitted a sonorous note and vibrated strongly in his hands. The others also rang loudly when struck. Seven keys were found to be pitched in a complete Eastern or Javanese pentatonic scale while three other plates formed part of a second scale and probably were part of another instrument.[3] The eleventh stone was broken. (This is probably why Vida Chenoweth mentions only ten stones instead of eleven.[4])

The stones were composed of schistic rock transformed, by ancient lavas and earth pressure, into a "ringing" or phonolithic state. Prehistorians decided that the way in which the stones were chipped or fashioned is characteristic of the Bacsonians, a tropical race of Stone Age men who made crude tools of the same schistic type of rock as the lithophone in Indo-China between four and nine thousand years ago.

In making the instrument, it is believed that the Bacsonians hewed the lithophone plates from solid extrusions of rock and tuned them to a high degree of tonal accuracy by a process of chipping or flaking. At first it was thought that the core of the plates had been split from the original rock by fire treatment, but physicists concluded that excessive heat would have destroyed the tense musical quality of the stone.[5]

An inconsistent relationship exists between the length and weight of the lithophone plates and the pitches they emit. The longest and heaviest plate does not emit the lowest pitch. It is considered that

pitch and sonority may have resulted from a complex relationship of weight, length, method of chipping, and curvature.[6]

In Java and Bali the native orchestra, *gamelan,* contains bronze adaptations of two types of idiophones, the *saron* and *gender.*[7] The former is said to have existed as early as 900 A.D. and has a wooden trough resonator, while the latter dates back to about 1157 and is a more complex metallophone containing tuned bamboo resonators below the keys.[8] The *gender* is very important in the evolution of the marimba because it seems to be the earliest struck idiophone known to contain both a key and a vibrating resonator tuned to the key.[9]

The *gender* is used in the *gamelan* as an instrument for elaborating the melodies played by other instruments and consists of a series of seven or more thin bronze keys. They are made of fine alloy and are suspended by strings over individual tube resonators. The instrument as a whole stands about two feet from the ground to the top and is fixed in a frame. The playing sticks terminate in padded disks. The combination of key, resonator, and beater produces a mellow, nonpercussive sound.[10]

Two systems to which the *gender* can be tuned are the *slendro* and *pelog* scales. From the lowest to highest note the *slendro* scale usually employs the pitches C, E flat, F, G, B flat, and C' while the *pelog* scale employs the pitches C, D, E, F, G, A, B, C', the same as the Western C major scale.

Each tuning system contains three modes known as *patets* and each *patet* contains a set of principal tones receiving special melodic emphasis. Also, these tones are given names of their own. The three *patets* of the *slendro* scale are *Nem, Sanga,* and *Manyura.* The principal tones of the *Nem* mode are C *(nem),* F *(gulu),* and B flat *(lima).* The principal tones of the *Sanga* mode are E flat *(barang),* F *(gulu),* and B flat *(lima).* The principal tones of the *Manyura* mode are C *(nem),* F *(gulu),* and G *(dada).* As is shown, some tones of one mode are the same as of another.

The three *patets* of the *pelog* scale are *Lima, Nem,* and *Barang.* The principal tones of the *Lima* mode are E *(penunggul),* F *(gulu),* and B *(lima).* The principal tones of the *Nem* mode are C *(nem),* F *(gulu),* and B *(lima).* The principal tones of the *Barang* mode are C *(nem),* F *(gulu),* and G *(dada).* Here again is the case where some principal tones of one mode are the same as of another. Another observation is that the *Nem* mode is employed both in the *slendro* and *pelog* scales and the same principal tones of the mode are employed in both scales.

The names of tones, however, carry more than only one pitch. It must be pointed out that the pitches just named are only the principal pitches used in the two tuning systems. Below is a chart giving the scales, names of tones, and pitches under which the tones are categorized.

SLENDRO SCALE

1) *Nem*--C; D flat; D natural.
2) *Barang*--E flat; E natural.
3) *Gulu*--F; G flat.
4) *Dada*--G natural; A flat; A natural.
5) *Lima*--B flat; B natural.
6) *Nem*--C'.[11]

PELOG SCALE

1) *Nem*--C; D flat.
2) *Barang*--D natural; E flat.
3) *Penunggul Bem*--E natural.
4) *Gulu*--F; G flat.
5) *Dada*--G natural; A flat.
6) *Pelog*--A natural; B flat.
7) *Lima*--B natural.
8) *Nem*--C'.[12]

Musicologists such as Hornbostel, Jaap Kunst, and Siegfried Nadel generally agree that the musical instruments of southeast Asia, particularly the *gender* of Java, exerted a strong influence on the development of the African marimba. Supporting this argument is a statement by Sachs in *The History of Musical Instruments:*

> "Many implements, tools, weapons, and instruments in a well-defined area of African Bantu districts are so closely connected with the corresponding objects of Southeastern Asia that an early communication across the Indian Ocean through the Zambesi Valley can be assumed. Certain accordances in the tuning of xylophones in Asia and Africa confirm this statement."[13]

The word "marimba" is an African term of which several name variants exist. For example, the name variant *malimba* is a Bantu term referring to an idiophone containing gourd resonators and played by the Shangana-Ndau people, a tribe living on the coast of Mozambique near the Sabi River. In the southern region of the Republic of Congo in the basin of the Sankuru and Kasai Rivers the same instrument known as *madimba.* It contains calabash resonators with vibration apertures. This instrument is used by many tribes in the southern region, with size varying from five to seventeen keys of the Bapende, Bakwese, and Bambala tribes. In the northern region of the Republic of Congo the same instrument is known as *manza.* It is constructed on the same principal as the other name variants and is played by the Azande and Yakomas people. Also, it is the only type containing a consistent number of keys (ten).[14] Another difference between the *madimba* and *manza* is that the latter does not contain vibration apertures on the bottom of its resonators.

Another group of Africans playing the marimba or its name variant is the Vendas, a tribe living in the Sotho nation of Rhodesia. Their terminology, *mbila*, is also common among the Chopis, a tribe living in the southern part of Mozambique off the coast north of Lorenco Marques. In addition to the word *"mbila,"* the Chopis call their instrument *timbila*, both names applying to the same instrument. The word *"timbila,"* however, is unknown to the Vendas.

Although *"mbila"* is applied by both the Vendas and Chopis, both idiophones are constructed differently, the differences being the basic materials, method of assembling parts, and size. Also, the two races have their own method of performance.[15]

An early reference to the *mbila* occurs in Father Joao dos Santos' description of his visit to Ethiopia in 1586. The instrument described is probably the Venda type rather than that of the Chopis:[16]

> "Quiteve (the chief) makes use of another class of Kaffirs, great musicians and dancers, who have no other office than to sit in the last room of the king's palace, at the outer door, and round his dwelling, playing many different musical instruments, and singing to them a great variety of songs and discourses in praise of the King, in very high and sonorous voices. The best and most musical of their instruments is called the *ambira*, which greatly resembles our organs; it is composed of long gourds, some very wide and some very narrow, held close together and arranged in order. The narrowest, which form the treble, are placed on the left, contrary to that of our organs, and after the treble come the other gourds with their different sounds of contralto, tenor, and bass, being eighteen gourds in all. Each gourd has a small opening at the side near the end, and at the bottom a small hole the size of a dollar, covered with a certain kind of spider's web, very fine, closely woven, and strong, which does not break. Upon all the mouths of these gourds, which are the same size and placed in a row, keys of thin wood are suspended by cords so that each key is held in the air above the hollow of its gourd, not reaching the edges of the mouth. The instrument being thus constructed, the Kaffirs play upon the keys with sticks after the fashion of drum-sticks, at the points of which are buttons made of sinew rolled into a light ball of the size of a nut, so that striking the notes with these two sticks, the blows resound in the mouths of the gourds, producing a sweet and rhythmical harmony, which can be heard as far as the sound of a good harpsichord. There are many of these instruments, and many musicians who play upon them very well."[17]

As it noted, the name *"ambira"* is the same as *"mbila."* However, dos Santos' description of the higher pitched gourds placed on the left and moving to the right, as the pitches become lower, no longer holds true.

(To be continued next issue of PERCUSSIONIST).

A STUDY OF VOCATIONAL PREPARATION FOR PERCUSSIONISTS

Researcher:
F. Michael Combs
Dept of Music
Univ of Tennessee
Knoxville, Tn.

Sponsor: Bureau of Educational Research and Service
Univ of Tennessee
Knoxville, Tn.
Date begun: June 5, 1972
Date completed: November 1, 1972

(Cont. from PERCUSSIONIST, Vol. X, No. 4, Page 130.)

Introduction

With the growing popularity of the percussion instruments, and the ever increasing demands placed on the percussionist, a large number of skilled percussionists are being developed at the public school level. Many of these students want to pursue some area of percussion as a possible life's vocation, but find little guidance in the area of such practical considerations as the type of training, job market, and salary that might be expected.

The following research project has been designed to offer counsel to those considering percussion as a major area of advanced study.

Tool

Questionnaires with reply envelopes were sent to the membership of the Percussive Arts Society.

B. PROFESSIONAL PERFORMERS Total 167

Results by Occupation

2. In what other additional part-time occupations are you engaged that contribute substantially to your income?

College teacher 19
Public school teacher 1
Private instructor 65
Both college teacher and private instructor 21
Both private teacher and other 4
College teacher, public school teacher, and other 2
Both college teacher and other 2
Public School teacher, private teacher, and other 1
Other 12

private business
recording
writing
construction work
TV production
orchestra librarian
real estate
radio announcer
administration
conductor
hotel clerk
composition and arranging
music store owner
income tax consultant
drum corps instructor
publishing
No response or "none" 29

3. What degree do you presently hold? (highest only listed)

BS in mus ed 11
BM 27
BA 17
MM 26
MS 3
MEd 3
PhD 2
EdD 0
Other 16
- diploma (8)
- certificate (2)
- assoc. of science
- English degrees

No response 21
"None" 41

4. Toward what degree, if any, are you presently working?

None 89
No response 37
Bachelors 18
Masters 17
PhD 4
DMA 1
Language, law 1

5. What degree, if any, do you think is necessary in order to be successful in your primary occupation?

BS in mus ed 8
BM 19
BA 8
MM 14
MS 2
MEd 2
PhD 1
EdD 0
None 90
No response 18
Combinations:
- BM or BA (1)
- BS, BM, BA (2)
- BA, MM, PhD (1)
- BM, BA, MM (1)

Comments:
any degree
talent
BME
high school background

6. What training or preparation did you have for your occupation *other* than collegiate instruction?

professional playing 20
private study with professional artists 18
other 2
professional playing and private study 115
professional playing, private study, and other 12
comments:

self study
listening
music camps
practice
reading
human relations
attending concerts
study abroad
community orchestras

7. What training or preparation for your occupation would you advise that a young person have, other than formal collegiate instruction?

playing 49
private study with professionals 58
private attention 2
experience 15
community musical groups 2
piano 5
training orchestra experience
analysis of professionals
learn your axe
practice 4
listen 8
professional experience
music camps
study abroad
amateur playing
solfegge
h.s. music courses
singing
good, general education
research
practical experience
ear training
theory 2
desire
exposure
get to know impt people
proper stimulation
exposure to all kinds of music
read
human relations

8. In preparation for the position you now hold, at what type of institution would you recommend that a young student begin his study (for the first 4 years)?

Small college or university 16
Large college or university 17
Music conservatory 78

Other 28
Small or large college 2
Large college or music conservatory 4
Small or large college or music conservatory 5
Large college, music conservatory, or other 1
Small college or music conservatory 4
Music conservatory or other 3
All 2
No response 3

9. Do you feel that you are receiving an adequate remuneration for your occupation?

Yes 99
No 63
No response 5

10. Including all income from music teaching, performing, writing, etc., into what salary bracket do you fall?

A. Less than $7000	46
B. As much as $7000 but less than $12,000	49
C. As much as $12,000 but less than $15,000	16
D. As much as $15,000 but less than $18,000	19
E. Over $18,000	36
No response	1

SALARY IN RELATION TO DEGREE
FOR PROFESSIONAL PERFORMERS
Chart III

Salary	Bachelors	Masters	Doctorate	Other	None	N.R.
A	23	2	0	1	14	6
B	20	12	1	6	5	5
C	4	3		2	5	2
D	5	5		1	4	4
E	10	12	1	1	4	1

11. In what other occupation, if any, would you rather be?

No other occupation 132 No response 6
Other occupation 30

12. Would you recommend, generally, that a young person pursue the occupation in which you are now engaged?

Yes 51
No 20
With reservations 78
Other 17
No response 1

C. PUBLIC SCHOOL TEACHERS Total 215

2. In what additional part-time occupation are you engaged that contribute substantially to your income?

College teacher 24
Professional player 91
Private instructor 117
Other 51

3. What degree do you presently hold? (highest only listed)

BS in mus ed 56	MS 19
BM 36	MEd 24
BA 18	PhD 0
MM 33	EdD 0

Other 29
BME (7)
BED
MA (14)
MME (3)
MA
BFA
MMS
MAT

4. Toward what other degree, if any, are you presently working?

None 78	BM	MS 14	DME
No response 54	MM 16	Ed Sp	Specialist
MA 14	PhD 7	El. Ed	Certification
MME 12	MED 11	DMA 3	MST
EdD			

5. What degree, if any, do you think is necessary in order to be successful in your primary occupation?

BS in mus ed 64
BM 19
BA 19
MM 39
MS 22
MEd 25
PhD 3
EdD 3
Other 22
BME
MA (3)
MME (2)
None 5
No response 11

6. What training or preparation did you have for your occupation *other* than collegiate instruction?

Professional playing 50
Private study with professional artists 42
Other 22
Professional playing and private study 75
Professional playing, private study, and other 8
No response 11
None 6

7. What training or preparation for your occupation would you advise that a young student have, other than formal collegiate instruction?

private study 74
professional playing 55
performance 22
experience 33
personal contact 1
exposure 2
observation 4
reading 2
knowledge of all phases of perc
multiple percussion
none especially
giving private lessons 6
depends 2
theory 4
no response 13
ensemble work
public school training
work with people 6
marching instruction
study 4
none 5
summer assistant
student teaching 5
listening 2
training in psychology
workshops
ear training
piano
experience with civic and commercial groups

8. In preparation for the position you now hold, at what type of institution would you recommend that a young student begin his study (for the first 4 years)?

Small college or university	99
Large college or university	53
Music conservatory	14
Other	46
Small or large college or university	7
Any or all of the above	3
No response	3

9. Do you feel that you are receiving an adequate remuneration for your occupation?

Yes 128
No 87

10. Including all income from music teaching, performing, writing, etc., into what salary bracket do you fall?

A. Less than $7000	8
B. As much as $7000 but less than $12,000	105
C. As much as $12,000 but less than $15,000	69
D. As much as $15,000 but less than $18,000	27
E. Over $18,000	6

SALARY IN RELATION TO DEGREE FOR PUBLIC SCHOOL TEACHERS

Chart IV

Salary	Bachelors	Masters	Doctorate	No Response
A	6	1		1
B	74	28		3
C	20	49		
D	5	21	1	
E	1	5		

11. In what other occupation, if any, would you rather be?

No other occupation 151
Other occupation 58
No response 6

12. Would you recommend, generally, that a young person pursue the occupation in which you are now engaged?

Yes 94
No 11
With reservations 106
Other 4

Time and Place

I. PAS at the Midwest: (Dec. 19-22, Conrad Hilton, Chicago).

Friday, Dec. 21, 1973.

8:00 A.M. to 9:45 A.M. - Executive Board and Commercial members Breakfast - Private Dining Room No. 1.

11:45 A.M. to 1:00 P.M. - State Chapter Chairmen meeting - Private Dining Room No. 9.

3:00 P.M. to 4:15 P.M. - Annual open membership meeting - Bel Air Room.

6:00 P.M. to 7:45 P.M. - Board of Directors Annual Meeting - Private Dining Room No. 9.

II. Percussive Arts Society National Conference (73-74).

A. Committee: Lloyd McCausland (Chairman), Gary Burton, Roy Burns, Joel Leach, Mervin Britton, Martin Zyskowski, and Scott Higgens.

B. Dates: Tuesday - Wednesday, March 26-27, 1974.

C. Location: School of Music, California State University at Northridge, California. There will be bus service provided from the MENC-Anaheim to Northridge. Motel information and rates will be announced. These is also limousene service from the area to the airport.

D. Refer to the "Challenge" in this issue for additional information.

III. Percussion Clinic - DePaul University - Room 518 - Chicago, Illinois.

Tuesday December 18, 1973, 10:00 A.M. to 2:00 P.M.

Clinicians:

Henry Adler
Al Payson
Bob Tilles

Percussion Material Review

by Sanford Siegel and Mervin Britton

J-21557 Solo for Snare Drum (unaccompanied), Robert W. Buggert, $2.50; M. M. Cole Publishing Co.

A section requiring independent control is included in this difficult rudimental style solo.

SIX ADVANCED ETUDES for SNARE DRUM, G. David Peters, $7.00; M. M. Cole Publishing Co.

These difficult unaccompanied etudes present a variety of performance problems that are even more challenging because of constantly changing meters, rhythmic groupings, changing accent patterns and frequent dynamic contrasts.

MULTIPLE DRUM CADENCES Set Number 1, Schinstine & Koons, $3.50; Southern Music Company, San Antonio, Texas 78292.

This collection of drum cadences is arranged for snare drums, tenor drums, double drums, triple drums, cymbals and bass drum(s). A roll-off, cadence-signal and cadence-halt are included in addition to eight 2/4 cadences.

FUNK-TIONAL ROCK Vol. 1, Tony Caselli, 32 pages $3.50; Teejay Publications, Chicago, Illinois.

Designed for the intermediate or advanced drummer, various standard ride-cymbal and hi-hat rhythms used with the patterns in this book provide hundreds of binary bass drum--snare drum combinations. It is not a "read-through" book, but requires intensive practice to achieve the author's purpose.

FUNK-TIONAL ROCK Vol. 2, Tony Caselli, 32 pages $3.50; Teejay Pub.

This volume adds two tom-toms, two ride cymbals, hi-hat, and left hand buzz-roll to the notated binary rhythm patterns. The Forward and "Playing Procedures" on the first pages are the same as in volume 1 with the added suggestion that the performer should work on volume 1 first.

GET YOUR FILLS TOGETHER, Sonny Igoe, 96 pages $5.00; Sonny Igoe, P.O. Box 202, Emerson, N.J. 07630.

Young drummers interested in stage-band interpretation will find this book helpful. It is a much needed, though often neglected,

systematic guide showing how to fit short fills with off-beat accents in ensemble performance. This well formulated step by step approach includes several simulated drum parts which illustrate the various ways that fills and accents are indicated in actual written parts.

WILLOW, WILLOW for Flute, Tuba and Three Percussionists, Paul Chihara, Sole selling agents: C. F. Peters Corporation.

The percussion instruments needed to perform this difficult quintet include six timpani (three pedal) and four roto-drums. Amplified bass flute is preferred for the solo part, but a conventional flute is acceptable. In several places the percussion parts are strictly notated, but the total composition is mostly improvisatory. The percussion parts are important enough to make this piece appropriate for a percussion recital.

RHYTHM AND COLORS, OPUS 19A, Marcel Farago, $8.50; M. M. Cole Publishing Co.

Standard instruments including four tom-toms and vibraphone are needed to perform this intermediate sextet. Many of the parts in the three movements are written in unison style.

MOTIF for PERCUSSION, James H. Latimer, $7.50; M. M. Cole Publishing Co.

A single motif is the basis of this septet. The motif is introduced as a solo in several of the instruments and then is developed in the course of the piece. Using standard instruments, this is an appropriate performance piece for a high school ensemble.

MUSIC for Flute, Viola, Guitar and Percussion, William Sydeman, $5.00; C. F. Peters Corporation.

Each performer will find his instrumental technique challenged along with the problems of ensemble in this difficult quintet involving two percussionists. Performance problems in the composition include difficult rhythmic groupings, constantly changing meters and a short polymetric section. This c. 13 minute selection is appropriate for graduate or faculty level performance.

RHYTHM + NUMBERS = RHYUMBERS, G. Allan O'Connor, $7.00; M. M. Cole Publishing Co.

Beginning ensembles can get early experience with controlled improvisation in this quintet. The piece is ABA form. The opening section is a non-metric quintet for claves and small gong. A change of instruments leads into a fully notated "B" section. The players again change to different instruments for the "A" closing section.

PRELUDE and FUGUE in MINIATURE, Matthew Hopkins, $8.00; M. M. Cole Publishing Co.

This easy quintet uses standard instruments which should be available for a junior high school ensemble. The Prelude is in 6/8 meter with some use of syncopation and cross rhythms. The Fugue is in 4/8 meter and it utilizes shifting accents. This short composition could be used as a training piece for a beginning ensemble.

CIRCUS for Percussion Quintet, Stanley Leonard, $4.50; Volkwein Bros., Inc., Pittsburgh, Pa.

A circus is pictured in sound in this intermediate ensemble. The movements are: Introduction, Trapeze, Lion Tamer, Cannonball, Monkey Cage, & Finale. Standard instruments make this descriptive piece accessible to college ensembles and good high school groups.

SYMPHONY for PERCUSSION, José Serebrier, Score $4.00, Parts $.75 each; Southern Music Publishing Co. Inc., 1740 Broadway, New York, N.Y. 10019.

Five players and a large compliment of instruments--all standard--are needed for this difficult composition. The first movement opens with an Adagio introduction followed by a section marked "Congo-Allegro comodo", and closes with a return to Adagio. Movement II is a multiple percussion solo. The final movement includes a cadenza for drum-set. Duration c. 9 minutes.

ADORAMUS TE CHRISTE for marimba quintet, Giovanni Palestrina, arr. Jonathan Fincher, $3.50; Jonathan Fincher, Music Dept., Arizona State University, Tempe, Ariz. 85281.

Score and parts for this transcription are neatly notated on large-staff easy to read manuscript. This piece could be included to balance a recital program at any performance level. The quintet may be played on four marimbas, but one of them must be a 4 1/3 octave instrument.

ANTITHESIS, A Work in Two Movements for Marimba Quintet, Richard E. Voorhaar, $6; Richard Voorhaar, Music Dept., Arizona State University, Tempe, Az. 85281.

Composed specifically for marimba quintet, this piece helps fill a serious gap in percussion literature. It is a difficult but rewarding composition requiring five instruments including two 4 1/3 octave marimbas.

KROMA II, Roger Harris, $? Composers Autograph Publications, P.O. Box 7103, Cleveland, Ohio 44128.

The instrumentation for this quintet is Bb trumpet, large suspended cymbal, tambourine, snare drum and timbales. This two movement piece includes some improvisation for all players, however, the trumpet is the predominant instrument.

COLLOQUY for Percussion Ensemble, Paul Steg, $23.00; M. M. Cole Publishing Co.

An ensemble of at least 8 performers is divided into four sections classified by the types of sounds required to perform this difficult selection. The rhythm and dynamics are strictly notated on single line staves with relative pitches indicated by their position above or below the line. Exact pitches and choice of instruments are left to the discretion of the ensemble, and a table is included in the score to aid in the selection of instruments. In performance, the piece offers a wide range of possible tonal colors.

PRELUDE, First Movement of Suite for Percussion, Philip Faini, $5.00; Accura Music, Box 887, Athens, Ohio 45701.

A young ensemble should find this composition for nine players somewhat interesting and within their technical ability. Two pitches on the orchestra bells is the only keyboard requirement. The major challenge will be in putting together the interwoven repetitive parts.

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130 Carol Drive
Terre Haute, Indiana 47805

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