



Percussionist

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(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.

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In this issue

Timpani: The Creation of Silence By Ramon Meyer	41
A Journey to the Source on L'Histoire du Soldat By Morris Lang	48
The Development of Mallet Keyboard Percussion from the late 18th through the early 20th Centuries By Clifford K. Chapman	52
Polyrhythms, What are They? Why Learn Them? By Peter Magadini	62
African Drumming By Allen Brown	64
Practical Mallet Studies By Bob Tilles	73
PAS Board of Directors' Meeting, December 1974	74
President's Corner	76
Letter's to the Editor	77

TIMPANI: THE CREATION OF SILENCE

by Ramon E. Meyer

A timpanist's competence can be measured by four elements of performance: intonation, facility, tone quality, and muffling. The last of these is one of the most challenging to the performer as well as one of the most revealing to the listener, since it involves the judgement of many variables. Taste, musicianship, and understanding of the relationship of the timpani part to the total structure of the music is revealed through the performer's approach to muffling.

Successful muffling is the result of judicious consideration of:

- 1) styles of articulation;
- 2) acoustics of the hall;
- 3) pitch;
- 4) duration;
- 5) tempo and clarity of melodic line and harmony.

Although deciding when to muffle is highly subjective, how to muffle is an objective technique. Regardless of whether the mallets are held thumbs-up, hands-over, or in a modification of one of these positions, the hand position for muffling should be the same. There are two variants of this position and the performer should adopt the one which is most comfortable. The size of the hand and the diameter of the mallet handle will influence the player's choice. The mallet may be held high in the web between the thumb and the forefinger (Ill. 1) or be grasped by the index finger alone (Ill. 2). In both cases the thumb as well as the fingers contact the head allowing the maximum area of head surface to be covered. The use of the side of the hand (Ill.

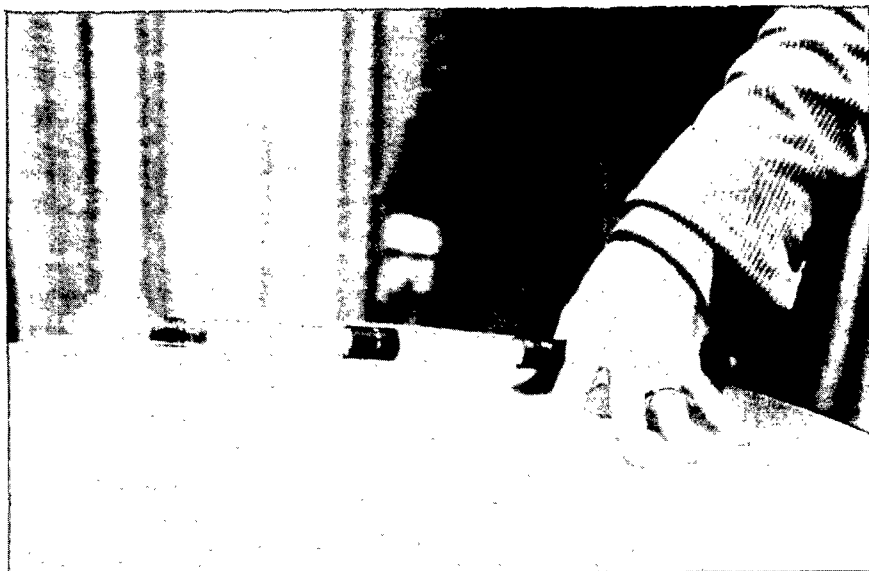


Illustration 1



Illustration 2

3) or the last three fingers (Ill. 4) only partially stops the sound. For maximum effectiveness the hand should be placed on the head approximately one-half the distance between the rim and the center.

Careful practice will turn this objective technique into a conditioned response. Decisions concerning when to muffle, however, demand a continuing evaluation of each of the five topics outlined above.

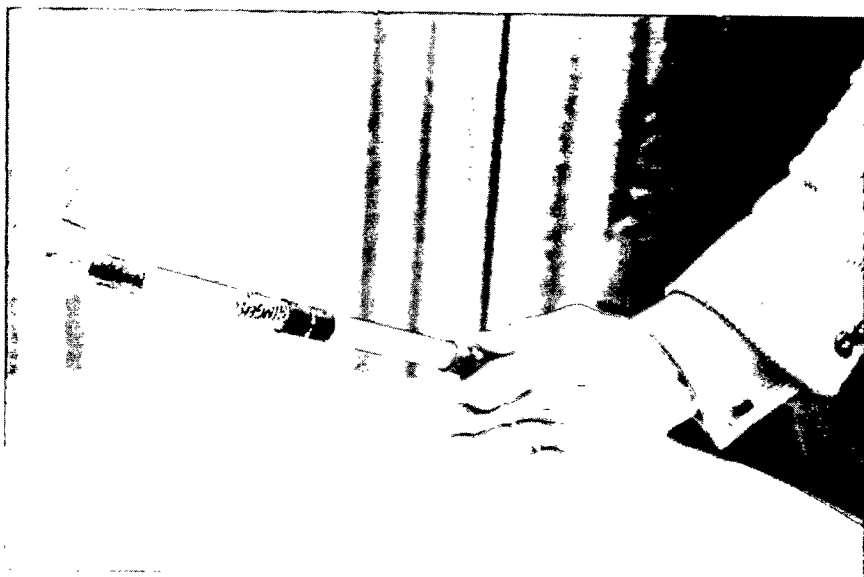


Illustration 3

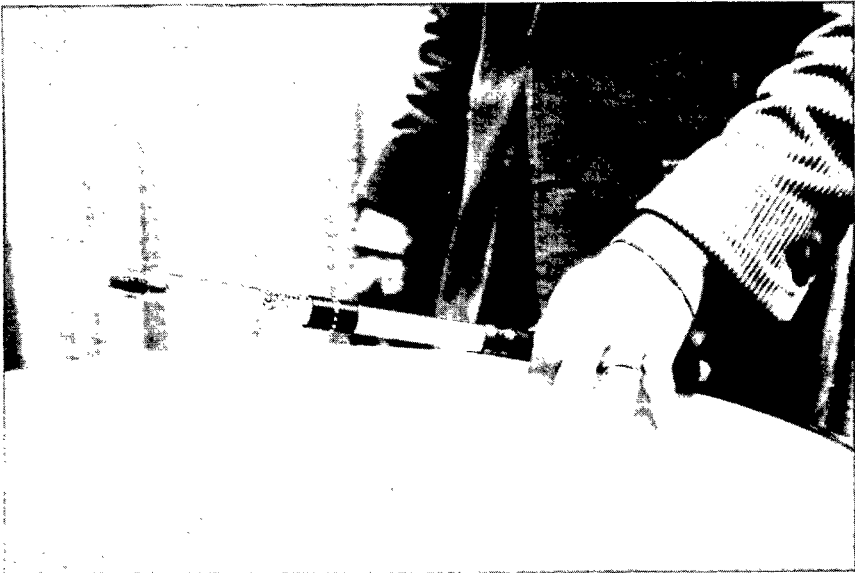


Illustration 4

Styles of articulation: Two basic styles of articulation permeate all music: legato and marcato. There are numerous subtle gradations between these extremes, but the two-fold classification is sound. Elements of both styles occur in most all compositions and all performers, aware of these basic contrasts, make adjustments in their playing to reflect them. Frequently overlooked, however, is the fact that professional performers exhibit in their over-all playing a preference for one or the other of these basic styles. The marcato players tend to emphasize rhythmic impact, to use mallets which promote rapid decay of each sound, and to resort to frequent muffling. Legato players use mallets which promote resonance, emphasize rhythmic duration, and they tend to let the sounds spill over into rests before muffling. Many performers never consciously elect either of these styles, but simply gravitate to one or the other instinctively or through training and experimentation. Since implicit in the term "articulation" is the manner in which each tone is released as well as the manner of its initiation, muffling habits reveal much about the timpanist's basic style of articulation.

Acoustics of the hall: Acoustics of the rehearsal and concert hall should also influence the timpanist's muffling. In a resonant hall with extended reverberation time, frequent muffling will be necessary to keep sounds from blurring together. In halls which quickly absorb sounds, muffling should be minimal so that each sound will have a chance to bloom.

Pitch: Several aspects of pitch and intonation bear a direct relationship to resonance: Resonance is greatest when a head is perfectly in tune with itself; resonance is greatest when the timpani are

perfectly in tune with the rest of the ensemble; and pitches in the middle and lower portions of the range of each timpano tend to be more resonant than pitches in the higher portion. These facts, as well as all others which affect resonance, must be considered in deciding when to muffle.

Duration: Duration is at once the most obvious and most misunderstood of all the elements which affect muffling, since the durational notation of many standard works is misleading at best. It is unwise to categorically assume that timpani should be muffled on rests whenever possible. It has already been noted that pitch level of the drums and acoustics of the hall have a direct bearing on the duration of sounds. In addition to these facts the timpanist must make three other considerations in determining how long a pitch should sound: 1) How the timpani part fits with other instruments playing at the same time; 2) how long the note being played remains an integral part of the harmonic structure; 3) whether the notation represents the actual duration desired by the composer (as it does in most twentieth century scores) or whether its principal representation is rhythmic impact (similar to a part for snare drum). The following excerpt (III. 5) from the Haydn "London" symphony (No. 104, D major) presents the timpani part as it appears in the score, immediately followed by an edited version of the part which has taken into consideration all of the stylistic and technical elements outlined above except the acoustics of the performance hall.

Illustration 5

**Musette
Allegro**

as written
as played*

*represents the point in time and the pitch where muffling occurs.

Fl.
Ob.
Cl.
Fg.
Cor.
Tru.
Tpt.

Fl.
Ob.
Cl.
Fg.
Cor.
Tru.
Tpt.

Fl.
Ob.
Cl.
Fg.
Cor.
Tru.
Tpt.

Fl.
Ob.
Cl.
Fg.
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Fl.
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Fl.
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Cl.
Fg.
Cor.
Tru.
Tpt.

Fl.
Ob.
Cl.
Fg.
Cor.
Tru.
Tpt.

Fl.
Ob.
Cl.
Fg.
Cor.
Tru.
Tpt.

Illustration 5 continued

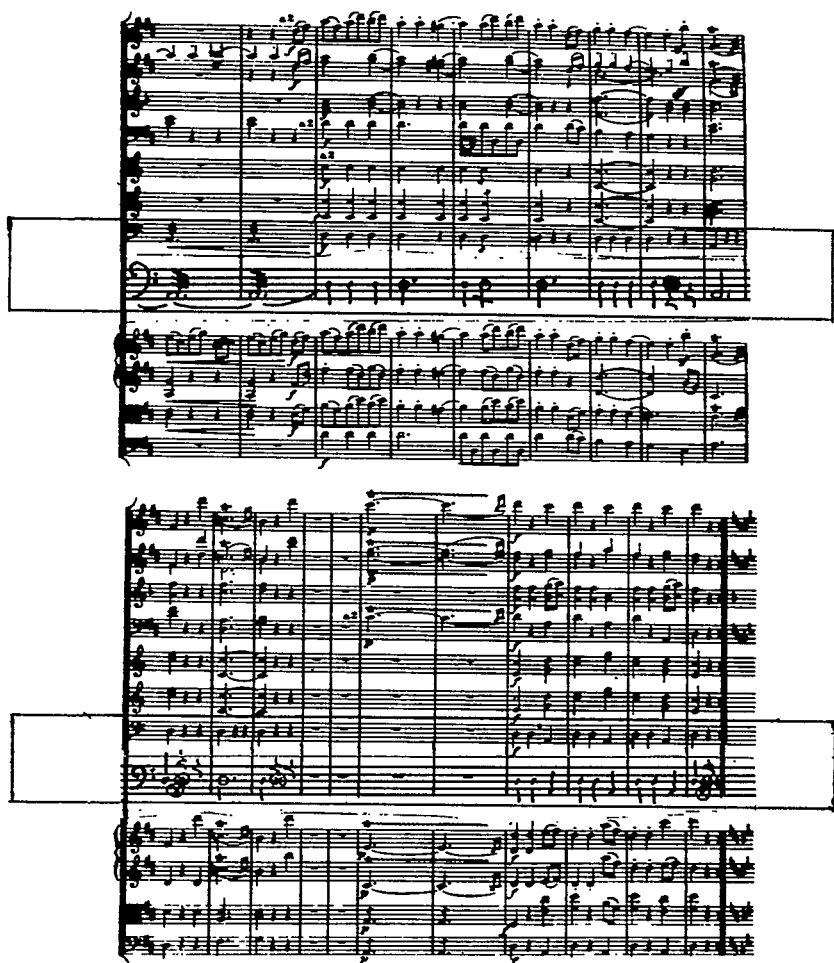


Illustration 5 concluded

Tempo and clarity: Probably the most important decisions which a performer must make regarding muffling are those which influence clarity of melodic line and harmony. For purposes of illustration, assume that the pitches in the following example outline dominant to tonic progressions. Since there are no rests in the passage, one might

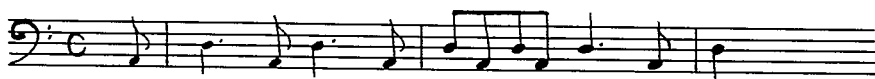


Illustration 6

suppose that no muffling would be necessary. For greatest harmonic clarity, however, the dominant pitch (A) should be muffled quickly, allowing the tonic (d) to continue to sound (Ill. 7). In slow passages of



Illustration 7

a melodic nature, maximum clarity may be achieved by muffling pitches which could obscure the line. Illustration 8 indicates each pitch being muffled at the time the succeeding pitch is played. The practicality of such a procedure will be determined by the tempo.



Illustration 8

When the tempo (or, more properly, the speed of the notes in whatever tempo) is so fast that muffling becomes difficult, great care should be exercised in deciding which drums should be muffled. When playing a passage similar to Illustration 9, some timpanists will instinctively use what brief time is available for muffling to stop the last sound played (Ill. 10) rather than more properly stopping the least important melodic and harmonic pitches (Ill. 11).



Illustration 9



Illustration 10



Illustration 11

Although admittedly an oversimplification, the premiere rule for achieving the greatest melodic and harmonic clarity through muffling may be stated: The first note to be muffled should be the next-to-last note played.

The procedure for muffling is a technique which is a small measure of the performer's facility. Choosing when to muffle is an art which is a large measure of the performer's musicianship. The creation of silence is as much a part of the timpanist's art as the creation of sound.

"A JOURNEY TO THE SOURCE"
ON
L'Histoire du Soldat
by Morris Lang

It was in the nature of a pilgrimage for me: "Pilgrim- one who journeys (usually a long distance) to some sacred place, as an act of religious devotion". A journey into an unlikely "sacred place"; into the town of Winterthur, Switzerland. A country noted more for its secular stability than for its sacred devotions.

The story began some two years ago. The library at Lincoln Center had an exhibit of Stravinsky manuscripts shortly after his death. I thought that it would be a wonderful opportunity to study the score of L'Histoire du Soldat in order to clarify many of the inconsistencies in the various printed percussion parts. Much to my disappointment, the score to L'Histoire was not included in the exhibit, but the librarian was able to ascertain that it was in a private collection in Winterthur, Switzerland.

The following day I wrote a letter to Winterthur requesting a xerox copy of the percussion part. Some time later I received a reply stating that they were unable to supply a copy, but, if I were able to come to Switzerland "I was welcome to examine the score in the offices of the Vogel Holding Co." The letter was signed by a Mr. Balthasar Reinhart. Since most of my traveling has been with the New York Philharmonic, it seemed unlikely that I would be in Switzerland in the near future.

I had originally studied the percussion part as printed in the "Modern School for Snare Drum" by Morris Goldenberg. Aside from the fact that I had never seen some of the sticks that were called for, there were many inconsistencies in the line assigned to a particular drum sound. I consulted three published scores and found them contradictory. Even the two recordings that Stravinsky himself conducted are quite different. Different from each other as well as from others on the market.

In May 1974, I was invited to teach at the Institute for Advanced Musical Studies at Montreux, Switzerland. Aside from the excitement of working at such a wonderful school and living for two weeks in such a beautiful city, I knew that Winterthur couldn't be too far away. As soon as I had settled myself at the Grand Hotel, I had the porter chart my route to Winterthur. It involved changing trains three times, changing languages twice (Montreux is in the French speaking section of the country while Winterthur is in the German speaking section), and a four hour train trip. Although I was concerned about these logistic difficulties, I called the Vogel Holding company to arrange for an appointment.

I easily arranged to be in Winterthur at 2:00 P.M. on the following Tuesday, and, thanks to the efficiency of the Swiss railroad system,

made all of my connections and arrived in Winterthur at 1:30. To my surprise, the Vogel Holding Company was not a music publisher, but a very large, international business.

The morning before I left I learned that Balthasar Reinhart, who had written to me in New York, was the nephew of Werner Reinhart. Werner Reinhart had commissioned Stravinsky to write *L'Histoire* and had aided him through the difficult years following World War I.

"We had to find a wealthy patron or a group who could be persuaded to interest themselves in our scheme. It was, alas! no easy matter. Refusals not always polite, but always categoric, greeted us every time. At last, however, we had the good fortune to meet someone who not only promised to collect the requisite capital, but entered into our plan with cordiality and sympathetic encouragement. It was M. Werner Reinhart of Winterthur, famous for his broad intellectual culture and the generous support that he and his brothers extended to the arts and to artists."*

After settling into a private office, complete with tea and sharpened pencils, I was presented with the manuscript. It was in Stravinsky's own hand and signed "Igor Stravinsky-September 1918". Needless to say, it was thrilling for me to be holding this manuscript that the great master had worked on.

The first thing that struck me was that Stravinsky had written a piano reduction of the score-obviously used for rehearsals. (He later made a version for piano, violin, and clarinet). While I was looking through the manuscript Mr. Balthasar Reinhart came in and was kind enough to spend some time with me. He described the circle of friends of Stravinsky and the conditions that prompted him to write the piece.

Finally, into the score!

I was immediately impressed with the simplicity and clarity of the percussion writing. Stravinsky subsequently wrote that he had actually gone out and purchased the percussion "instruments from a music shop in Lausanne, learning to play them myself as I composed".** It seems then, that much of the confusion about drum sizes, pitch, sticks, and notation is the fault of editors and translators rather than the composer.

Here is a listing of questions that I had puzzled about and the answers that the manuscript provided.

Question: What drums are called for? The Kalmus edition calls for a "side drum with snares, 2 side drums (different sizes) without snares, small drum with snares". The Goldenberg part calls for "tambour and two caisse claires". Which is higher pitched? Does the caisse claire have snares? Why is a separate snare drum called for in the set-up diagram??

*Stravinsky - An Autobiography (1936).

**Expositions and Developments- Igor Stravinsky & Robert Kraft.

Answer: The original score is clear and simple. It calls for bass drum, three different size drums (caisse claire), suspended cymbal, triangle, and tamborine. The caisse claires are "grand taille, moyenne taille, and petite taille"; simply, "large size, middle size, and small size". Only three caisse claires are necessary. The largest drum (grand taille) must have a set of snares for the March Royal at number 14.

Question 2: The line of the staff assigned to a drum does not seem to stay the same, even within a movement.

Answer 2: Within the movement the placement is consistent. (The only exception being four measures after 9 in the Tango. Stravinsky inexplicably places each drum on a separate staff, but he clearly indicates that that same "2 caisse claires" that was used at 8 are to continue.

Question 3: Are the "General Remarks to the Percussionist" that are in the Kalmus and International scores, but omitted from the Goldenberg book in the original?

Answer 3: Yes.

Question 4: In the Soldier's March: Why is the drum, one bar before 1 written on the top line, while at 8 the tamborine is on that line? Does the drum change before 15?

Answer 4: The printed editions are incorrect. The drum is always on the middle line and the tamborine is on the top. Before 15 the drum does not change.

Question 5: In the Royal March: What drum is used at 2 ? Is that really a six stroke roll at 14 ?

Answer 5: The middle drum is called for. Yes, it is six strokes- to be played on the *large* drum with the snares on. The original even had an extra flam.

(I think that the flam was eliminated from future editions because it might slow down the phrase. MAL).



Question 6: In the Petite Concert: What drums are called for one measure before 28 ?

Answer 6: The large size caisse claire and the bass drum. The dynamics in the printed part are incorrect. This is the original.

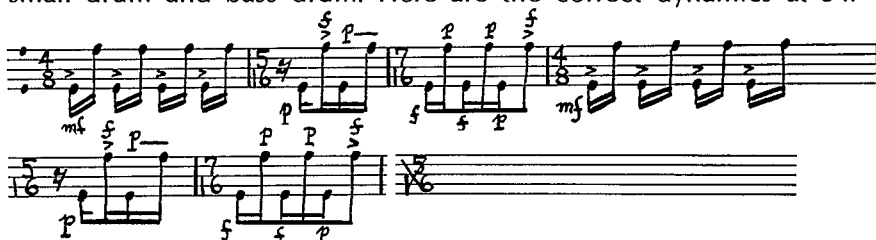


Question 7: In the Tango: Why are the stems alternating up and down? Is there a change of drum at 8 ?

Answer 7: In the "General Remarks to the Percussionist", it explains that the stems pointed down are to be played with a "mailloche" in the left hand and the notes with the stems pointed up are to be played with the "baguette a' tete de capoc". The opening calls for the middle drum and at 8 requires the middle and small drums.

Question 8: In the Ragtime: Why does the triangle suddenly jump to another line one measure before 27 ? What drums are called for at 33 ? What are the dynamics at 34 ?

Answer 8: The jump in the triangle line is a typographical error. At 33 the Goldenberg part is correct. The original calls for large drum, small drum and bass drum. Here are the correct dynamics at 34.



Question 9: In the Devil's Dance: Why are the stems alternating up and down at 4 ?

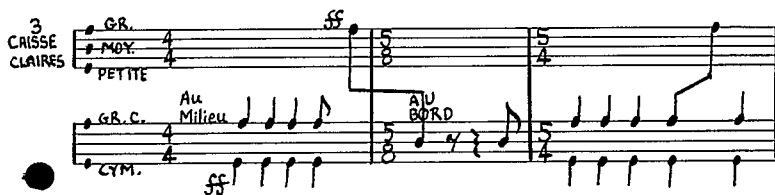
Answer 9: The alternating stems only indicate alternate sticking (R,L,R,L,R,L, etc.)

Question 10: In the Triumphant March: Why are the stems alternating if both hands hold the same sticks? The pitch of the drums seems to be ascending, but the order of the drums shows a descending line.

GRANDE
MOYENNE
PETITE

Should the percussionist maintain the same dynamic during the final solo or crescendo?

Answer 10: Again, the direction of the stems seems to indicate only the sticking. The printed parts are correct. The highest pitched drum (petite moyenne) is on the lowest line. There is neither a crescendo or a diminuendo indicated in the original. The opening of the movement is different than any of the printed parts.*



*This is completely a subjective judgement, but it seems to me, that, perhaps, Stravinsky changed this figure to make it more playable. MAL

It might be of interest to those scholars among the readership that, in this edition (1918) of the score, the Triumphal March begins three measure after 6. If you will notice, the beginning of the movement through three measures after 6 is a note for note repeat that was obviously added later to extend the movement.

My thanks, once again, to the Reinhard family for first, commissioning this great work, and then for allowing me to examine the original manuscript. It was an enriching pilgrimage to the source.

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THE DEVELOPMENT OF MALLET KEYBOARD PERCUSSION FROM THE LATE 18TH THROUGH THE EARLY 20TH CENTURIES

by Clifford K. Chapman

About the Author:

Mr. Chapman received his B.M. and M.M. degrees from the State University College of New York at Fredonia, studying percussion with Theodore C. Frazeur. He has performed with the Erie Philharmonic Orchestra and is presently with the Ann Arbor Symphony. He is currently instructor of Percussion at Eastern Michigan University and is serving as Southeast Regional chairman of the Michigan State Chapter of PAS.

Introduction

The available literature, both musical and scholarly, dealing with the history and development of the instruments of the percussion family is indeed minuscule in comparison to the volume of information on the other standard orchestral families. The reasoning behind this could possibly be based on two premises: 1) the percussion family has become an integral force within orchestral scoring only in the past 200 years, and the players and instruments themselves have been taken seriously within an even shorter time, and 2) the instruments have only recently been standardized, with new inventions and improvements constantly being made. Even with the efforts of composers such as Berlioz, Saint-Saens, and Stravinsky, the percussions have only begun to develop as an individual orchestral and virtuoso force en masse. Composers have often avoided their use or were conservative due to this lack of knowledge, confidence, and understanding of their expressive and coloristic capabilities.

This article deals with only one segment of this family of instruments, and that is the keyboard mallet percussions. They are among the oldest instruments known to man, yet simultaneously are probably among the youngest members of our present day orchestra. It is the purpose of this study to establish a foundation for understanding their origin and development within this orchestral setting.

I. A Brief History of the Development of Mallet Percussion before Die Zauberflöte.

Strange as it seems, pitched percussion are possibly among the oldest instruments known to man, yet they are also one of the newest to be taken seriously in an artistic context. Its use can be traced from prehistoric man to the present, yet the cultures that used it the most, had little effect on direct initiation of its use into western music.

The oldest marimbas or xylophones may have been wooden bells out of the inside of logs and stumps of many sizes and shapes.¹ A new kind of instrument may have been discovered by using sticks of different lengths. Having found that the sound is better when they were left free to vibrate, the early men must have developed the first crude xylophone of two or three tones, later increasing it to five (pentatonic scale).² Evidence of some type of pitched percussion instrument appears in the Bible in the books of "Genesis" and "Job". Here the *ugab* (organ) is referred to but instead of its conventional meaning, a type of marimba from the *ranat* family is described dating about 3500 B.C.³

The marimba, rather than the xylophone enjoys the most colorful history in its development in other cultures than our own. Examples of different types have appeared through the ages with stone instruments from Egypt and Greece about 2300 B.C. to the wood and metal *gender* (g'inder) of Java, 900 A.D. Interchanges between cultures and remote tribes can be traced by the use and development of these instruments. In Africa the Bantus used instruments similar to the Malayan. Curt Sachs explains it thusly:

"1) Bantu marimbas were not developed there but borrowed from their Malayan 'neighbors' and 2) the Ugandan tribe of East Africa beat their xylophones two bars at a time as do their Malayan brethren to the East."⁴

This same kind of exchange of culture did however, finally effect the introduction and development of the xylophone into the European world of music. The Siamese had developed a rather advanced version of the *ranat* (marimba) around 200 B.C., and when the Aryan immigrations of 2000 B.C. began, an earlier form of this must have been assimilated into various other cultures with modifications.⁵ Carl Stumpf asserts that there is a distinct correlation between the music of Siam and that of medieval Europe that leads one to believe this Asiatic theory of the xylophones and marimba's early development.⁶

At this juncture the term "strohfiel" appears as "a very ancient and widespread instrument, found principally among the Russians, Poles, and Tartars."⁷ The implication here is that over the centuries the cross immigration of aryan and orientals has brought this instrument into the eastern European regions, having modified it considerably,

and laying the groundwork for the development of Guzikov's instrument of the early 19th century.

At this point the xylophone has developed into five basic types from the earliest wooden bells to the *strohfiedel*. Sachs classifies them as follows:⁸

- 1) Leg xylophone
- 2) Log xylophone
- 3) Table xylophone
- 4) Bail xylophone (hoop like)
- 5) Trough xylophone

Holbien in his *Simulacres et historices Farces de la mort* (1538) placed the instrument hanging from the neck of an old woman. This type was used in the illustration of the *todenz danze* which was to become the inspiration for the first orchestral use of the instrument. It would be classified as a "bail" xylophone in Sachs' terminology. Praetorius in his *Syntagma Musicum, Theatrum Instrumentium* (1620) mentions a table type of instrument. It was Heinrich Nicolas Gerber (1702-1775), a German organist, who invented the first version of the modern instrument, and called it by its old name *strohfiedel*.⁹ It was harp-sichord-shaped with four octaves, yet was impractical for the times.

He may have gained his interest in developing the instrument from the developments which occurred during the previous century. Up to this point several references have been made to the German term *strohfiedel*, yet it hasn't yet been defined. The true *strohfiedel* or "straw fiddle" was "a range of flat pieces of glass of no settled number tuned to scale, arranged on belts of straw and struck with two small hammers after the manner of a common glass harmonic toy."¹⁰ The idea of using material besides wood appeared throughout Europe. In England either metal or wood was employed and the instrument was called a *marmonican* or *staccatto pastorale*. The dulcimer, a relative of the piano as well, was similar to the *strohfiedel* in that it was:

- 1) played with mallets
- 2) employed a horizontal keyboard
- 3) had resonance boxes for the chamber¹¹

In France this instrument was known as a *tympanon*, in Italy a *tiompano*, in Germany a *hackbrett*, in Hungary a *cembalo* and in England a *dowcimere*. Also about this same time a three octave improved wooden harmonica appeared, known as a *regale a bois* or *xyloorganum*, but none of which reached any true state of prominence in the musical heritage of the times.

The development that brings the xylophone to the foreground is probably the invention of a *rock-harmonican* by J. Richardson. Its resonant quality and range possibilities opened the door for more serious investigation as the 19th century approached its musical apex. From this point on the discussion of the xylophone shall be introduced as it finds its way into the orchestra.

Bells, Chimes, and the Glockenspiel

Bells have been a part of man's life and culture since his early days of pre-civilization. As was mentioned at the beginning of this study, they were the forefathers, in the form of wood and stone, of our present day marimbas and xylophones. The art of bell playing is known as *carrillon* practice. Yet the sounds of bells are many and diverse. They are bells of both definite and indefinite pitch. Here we are only concerned with those that are of the former classification.

The use of bells mechanically and manually was characteristic of Flanders, Northern France, and Holland during the late middle ages. This was where the term *glockenspiel* (also German, *glogglewerk*; Dutch, *Glockspele*; French, *carillon*) was derived.¹² By the 16th century a keyboard was added thus foretelling of two major inventions; 1) the organ *carrillon*, and, 2) the keyboard *glockenspiel* (later the *celesta*). It would be quite easy to expand an entire chapter on bells alone, yet here we are dealing with the development of orchestral instruments, so the next step is the investigation of the instruments that were used to reproduce bell sounds in that context.

The chimes we know of today are used to represent an authentic "church" bell sound, but with a definite pitch. They evolved basically as substitutes for bells, as the latter were too heavy to transport and use in concert situations.

The early instruments were hung on a rectangular rack in one row. The complexity increased in the repertoire, so the instruments were modified by making the sharps and flats a gold color, while the remaining tubes were silver.¹³ A damper was added later as well as the familiar keyboard arrangement so that the player could have both of his hands free for two mallet playing.

The true *glockenspiel* (orchestra bells) was derived from native Japanese instruments (*saron*, *gambang*, *gansa*, etc.) consisting of tuned metal plates. This led to the Dutch invention of the previously mentioned *glockenspiel*, "an instrument that consists of a row of metal plates arranged like a keyboard. These plates are struck with two little rods which have a ball at one end."¹⁴ Handel used such an instrument in *Saul*, only he wrote the pitches a fifth lower than they sound.¹⁵ Bach made use of this device in his Cantate No. 53, *Schlage doch gewünschte Stunde*. This brings its development up to Mozart's time.

II. Mallet Percussion from "Die Zauberflöte" to "Petrushka"; a historical description.

Mozart was alive and composing in an age of musical diversity within a unity of structure and form unsurpassed in any previous age. His introduction of the *glockenspiel* in "Die Zauberflöte", though seemingly insignificant at the time, laid the ground work for a development within the keyboard percussions that would bring to the

foreground the modern concept of xylophone, marimba, chimes, and orchestra bells. He was a noted artist in composing for any instrument, in that when he did so, he made the best and fullest possible use of it. From careful study of the excerpt it becomes quite obvious that he had intended this to be played on a keyboard instrument but today, portions of it, such as the finale to the first act, are considered repertoire for the two mallet instrument (example 1). The virtuosity of technique called for by this excerpt from today's percussionist has its roots in the events that shape these instruments into what they are today.

Chimes at this time had not yet been developed. In their place church bells were used, as in 1791 in Dalayrac's opera "*Camille*", and in 1794 in Cherobini's opera "*Elisa*".¹⁶ Mallet percussion lay in a state of dormancy for 75 years to come, orchestrally speaking, until Camille Saint-Saens employed a xylophone for the first time in his "*Danse Macabre*."

To better understand what is to come in terms of expanded percussion scoring, the symphony orchestras evolution should be examined from Mozart to Wagner. During Haydn's and Mozart's time the orchestra's size was dependent upon its location. As an example, Haydn required only twenty players at Esterhazy, while at the opera houses of Paris, Milan, and Naples, seventy or more players were needed.¹⁷ As time passed, instruments improved, and during the first half of the 19th century, four horns, three trombones, an ophicleide, and extra percussion became necessary members of the orchestra. The increased size of the ensemble was due to the factors of increased use of wind instruments, as well as larger audiences in larger halls with greater frequency.¹⁸ The orchestra concert had left the walls of private palaces and became available to a greater variety of people. The percussionist until the time of Berlioz, however, was still thought to be somewhat incompetent. The drummer received minimum wage, and the librarian was called upon to play *bells*, castanets, and tam-bourine.¹⁹ Berlioz found the percussion situation deplorable and suggested ways of improving as well as reasons for this state of affairs: "But his (percussionist) defect is evidently due to the style of writing of certain composers, who attach so little importance to these instruments that their successors . . . are not able to get anything out of them."²⁰ He helped as best he could by making demands on his percussionists hitherto unheard of, one case in point: the "*Symphonie Fantastique*," (1830). Mallet percussion began its rise in the use of two bells in the "*Witches Sabbath*." He even calls for crotals (antique cymbals) of definite pitch in "*Les Troyens*" and "*Romeo and Juliet*."²¹

Now mallet percussion is beginning to show signs of permanency. Berlioz even mentions the glockenspiel used by Mozart in "*Die Zauberflöte*" and the *glass harmonica* in his treatise on in-

strumentation. The xylophone however, remains unexplored by the composer.

Only six years after the completion of the "Symphony Fantastique", a man came to Paris whose contribution to the use of the xylophone in serious music is invaluable. Micheal Josef Guzikov a Russian, brought with him a wooden harmonica or more commonly termed, "strohfiedel." The following account is from Georges Servieres *Origin of the Xylophone*. (translation by Camille Marcel Sequot, Baltimore, Maryland, 1953, crossreference from Gordon Peters, *Treatise on Percussion*):

"On the 25th of December (1836) Kastner described Guzikov as having first learned to play the flute but that in 1831 a chest infection compelled him to abandon it. Its place was taken by a Jewish instrument used in Russia. In the Ukraine called 'Jerova a Salamo.' He tried improving this *dulcimer* type instrument by multiplying the number of keys, thinning out the ends of the little sticks, placing them in a certain order, and tying them together. He used this wooden *harmonica* in Paris, placing it on a table and attaining an extraordinary facility and power. Its keyboard contained a series of 28 half cylindrical sticks. The lengths varied from one foot to six inches with two little sticks of wood held between the index and middle fingers. This instrument gave a metallic sound you would place between the striking of a bell and that of a glass. The artist (Guzikov), a Polish-Jewish type with a pale face and long beard, drew out of these wooden sticks exotic melodies with a plaintive and tender accent. Before appearing in Paris he traveled and was heard in Moscow, Kiev, Oddesso, Vienna, Leipzig, and Berlin."

Guzikov had two advantages in his favor, 1) he lived in a new inquisitive era, and, 2) he had a virtuoso's gift.²² He influenced the popularity of this "new" instrument in that it appeared in "garden concerts, variety shows, and as a novelty of symphony concerts."²³

Guzikov died in 1837, but he was succeeded, due to the popularity he had created, by several other "virtuosos." Among them were Sankson Jakowbowsky and a Parisian named Charles de Try.²⁴ It is possible that Saint-Saens had heard one of these men in concert, and had read Kastner's "Danse of the Dead" who made definite references to the instrument, which led him to use it as he did within the orchestra. It is generally accepted that his "Danse Macabre" (1875) is the first example of xylophone orchestral literature.²⁵

The xylophone enjoyed increased use among composers following this work in which its implementation helped to elevate the percussionist's role considerably in professional and social stature among orchestral musicians. Reed and Leach in their book, *Scoring for Percussion*, discuss the scoring possibilities of all of the mallet instruments. From these guidelines a comparative analysis can reveal

quite readily what the composer had in mind for the instrument. At this juncture, mallet percussion has a solid foundation in the middle and late 19th century orchestra. The celesta is the only remaining orchestral keyboard instrument yet to be discussed, and its background parallels that of the glockenspiel. The vibraphone and marimba are 20th century contributions after Stravinsky's "Petrushka," and therefore are not applicable.

The Celesta

The glockenspiel of Mozart's "Die Zauberflöte" has been established as a keyboard instrument. Why isn't it possible to simply rename it a celesta? The reason lies in the fact that the celesta is of more delicate nature coloristically and wasn't invented until 1886 by a frenchman Auguste Mustel.²⁶ What brought about this invention was the loss of the fundamental pitch in the older keyboard glockenspiels. The improvements made to compensate for this problem were the use of resonance boxes for each of the tuned slabs, the introduction of a damper pedal, and the simplified piano-forte action keyboard mechanism. A possible ancestor was the glass harmonica, which also used a piano-forte action and had a similar, yet weaker, more "flutey" sound. Ben Franklin invented one type of this instrument in the 18th century.²⁷

Since considerable use of mallet percussion has occurred over the past 90 years, orchestrators have been able to develop guidelines for their use and have become more aware of their musical possibilities. The xylophone as we know it today had not been improved upon until the 20th century, yet several composers managed to build a foundation for the repertoire of this instrument. The orchestral instrument of the late 19th and early 20th centuries was constructed thick wooden bars (usually rosewood) which are tuned specifically to each bar's fundamental and third partial.²⁸ The range is either three or three and a half octaves from c^1 to c^4 , or f to c^4 . The guidelines for scoring the instrument as designated in Reed and Leach's text are condensed as follows: ²⁹

- 1) Doubling melodic lines at the unison or octave-color
- 2) Highlighting individual notes from a motive-color
- 3) Glissandi-color; special effect
- 4) Trills for special effect or color only

The repertoire following Saint-Saens is somewhat sketchy until the time of Stravinsky, but since his contribution, the instrument has become increasingly more important.

The chimes have probably been the most consistent of the mallet keyboard percussions in their orchestral use and development due to their basic function of serving as a church bell substitute. They are generally never written for more than two mallets, and have been used

melodically in soft harmonic and slow moving lines as well as in loud effectual writing such as the "1812 Overture" (Tchaikovsky).

The glockenspiel may enjoy the most use of any of the other mallet percussions more than likely due to its earlier acceptance. The instrument as an excellent power and its coloristic possibilities include melodic and harmonic writing.³⁰ (Oddly enough, Mozart realized this in the Magic Flute, 100 years before the first celesta, and modern orchestral bells).

1) Color for punctuation and high melodies

2) Blend best with metallic sounds

3) Substituted for crotales in many orchestras³¹

As Geiringer stated about the sudden surge of keyboard percussion in the late 19th century: "The *Impressionist* movement which prevailed during the last quarter of the 19th century found new means of expression in instruments which either had not been known before, or, although familiar, had not been employed in this way. The xylophone, the celesta, the tubular bells, castanets and rattle, owe their incorporation into the orchestra to this tendency."³² This tendency is what Stravinsky, and his close predecessors, contemporaries, and successors have, in effect, been associated with.

Appendix

The following is a partial listing showing the historical chronology of the development of keyboard percussion within the orchestra. The dates are arranged according to the compositions themselves, and not according to the composers. The compositions that are marked with an asterisk are the "landmark" examples of mallet repertoire in view of its development. Mozart's "Die Zauberflöte" introduces the glockenspiel as a serious orchestral instrument for the first time. Berlioz's use of bells in the "Symphony Fantastique" laid the groundwork for the development of today's chimes. Saint-Saen's "Danse Macabre" was the example of orchestral literature of a serious nature for the xylophone. The year 1886 is marked especially because of the French invention of the celesta. The final asterisk marks the beginning of the orchestral monuments of Stravinsky, and his extensive use of all the then accepted orchestral mallet instruments beginning with "Fireworks."

DATE	COMPOSER	WORK	INSTRUMENT
*1791	W. A. Mozart	"Die Zauberflöte"	Glockenspiel
*1830	H. Berlioz	"Symphony Fantastique"	Bells (chimes)
1845	H. C. Lumbye	"Traumbuilder"	Glockenspiel
1860	M. DeFalla	"Three Cornered Hat"	Glockenspiel
1865	R. Wagner	"Dance of the Apprentices" from "Die Meistersinger"	Glockenspiel
1867	M. Moussorgsky	"Nite on Bald Mountain"	Bells (chimes)
1870	R. Wagner	"Die Walküre"	Glockenspiel
1870	J. Strauss, Jr.	"Perpetuum Mobile"	Glockenspiel

*1875	C. Saint-Saen	"Danse Macabre"	Xylophone
1876	R. Wagner	"Walweben" from "Siegfried"	Glockenspiel
1876	A. Ponchielli	"La Gioconda" (Dance of Airs)	Glockenspiel
1880	P. J. Tchaikovsky	"Capriccio Italien"	Glockenspiel
1882	R. Wagner	"Parsifal"	Glockenspiel
1883	C.P.L. Delibes	"Lakme" (bell song)	Glockenspiel
*1886	Celesta was invented		
1892	C. Debussy	"Prelude L'Après midi d'un Faun"	Celesta- Glockenspiel
1892	P. J. Tchaikovsky	"Nutcracker Suite"	Celesta- Glockenspiel
1897	E. Dukas	"Sorcerer's Apprentice"	Glockenspiel
1898	A. C. Glasonow	"Raymonda"	Glockenspiel
1905	C. Debussy	"Le Mer"	Celesta- Glockenspiel
1906	G. Mahler	"6th Symphony"	Glockenspiel
1907	C. Debussy	"Daphnis et Chloe"	Celesta- Glockenspiel
1908	G. Mahler	"7th Symphony"	Glockenspiel
*1908	I. Stravinsky	"Fireworks"	Glockenspiel- Celesta
1908	A. Scriabin	"L'e Poeme de L'extase"	Glockenspiel
1909	A. C. Glazonow	"Violin Concerto A minor"	Glockenspiel
*1911	I. Stravinsky	"Petrushka"	Xylophone, Celesta, Glockenspiel
1912	M. Ravel	"Le Mere L'oye"	Xylophone
1913	I. Stravinsky	"L'Sacre du Printemps"	Xylophone, Celesta, Glockenspiel

Bells (Xylophone) **Petrushka** **Igor Stravinsky**
Meno mosso *Ballet Suite* **19**

Handwritten musical score for the Bells (Xylophone) part of Stravinsky's Petrushka. The score is written on seven staves. The first staff is marked with a circled 15 and the tempo 'Meno mosso'. The second staff has a circled 16. The third staff has a circled 18 and the tempo 'Allegro (-c 116)'. The fourth staff has a circled 19 and the tempo 'Allegro (-c 116)'. The fifth staff is marked 'Xylo.' and the sixth staff is marked 'etc.'. The seventh staff is also marked 'etc.'.

FOOTNOTES

- ¹Satis N. Coleman, *The Marimba Book* (N.Y.: The John Day Co., 1926), p. 1.
- ²Charles L. White, *Drums Through the Ages* (Calif.: The Sterling Press Inc., 1960), p. 26.
- ³Gordon Peters, *Treatise on Percussion Master of Music Thesis*, unpublished. (Eastman School of Music, University of Rochester, N.Y. June 3, 1962), p. 178.
- ⁴Curt Sachs, *A History of Musical Instruments* (N.Y.: W.W. Norton Co., Inc., 1940), p.
- ⁵Op. cit., Peters, p. 182.
- ⁶Ibid.; p. 187.
- ⁷George Grove, *A Dictionary of Music and Musicians*, Vol. IX, 5th edition, Eric Blom, editor. (N.Y.: St. Martins Press, 1954).
- ⁸Op. cit., 4, Sachs.
- ⁹Op. cit., 3, Peters p. 267.
- ¹⁰Op. cit., 7, Grove.
- ¹¹Op. cit., 3, Peters p. 186.
- ¹²Ibid., p. 254.
- ¹³Ibid., p. 264.
- ¹⁴Karl Geiringer, *Musical Instruments* (N.Y.: University Press Inc., 1943), p. 233.
- ¹⁵Op. cit., 3, Peters p. 266.
- ¹⁶Ibid., p. 256.
- ¹⁷Sherman Hong, "Percussion in the Orchestra from 1750 to 1850", *The Percussionist*, Vol. VIII No. 4, Summer, 1971. (Indiana: Percussive Arts Society).
- ¹⁸Adam Carse, *The Orchestra from Beethoven to Berlioz* (England: W. Heffer & Sons Ltd. 1948), p. 21.
- ¹⁹Ibid., p. 193.
- ²⁰Frederick Dorian, *The History of Music in Performance* (N.Y.: W. W. Norton Co., 1942), p. 245.
- ²¹Op. cit., 14, Geiringer, p. 312.
- ²²Op. cit., 3, Peters, p. 191.
- ²³Op. cit., 4, Sachs, p. 53.
- ²⁴Gordon Peters, "Motivations of Saint-Saens use of the xylophone in his 'Dance Macabre'", Winter, 1967. (Indiana: Percussive Arts Society), p. 307.
- ²⁵Ibid., p. 306.
- ²⁶Op. cit., 3, Peters, p. 271.
- ²⁷Willi Apel, *The Harvard Dictionary of Music*, "Glass harmonica" (Mass.: Belknap Press of the Harvard University Press, 1948), p. 347.
- ²⁸Kent Wheeler Kennan, *The Technique of Orchestration* (N.J.: Prentice Hall, Inc., 1952), p. 214.
- ²⁹H. Owen Reed and Joel T. Leech, *Scoring for Percussion* (N.J.: Prentice Hall, Inc., 1969), p. 11.
- ³⁰Ibid., p. 11.
- ³¹Ibid., p. 18-19.
- ³²Op. cit., 14, Geiringer, p. 234.

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POLYRHYTHMS

What are they?

Why learn them?











by Peter Magadini









Author of: Musicians Guide to Polyrhythms Vol. I & II and Poly-Cymbal Time.

Let me begin with a clarification of the word polyrhythm:

What is usually meant when one hears a description of the term *polyrhythm* is a misinterpretation of the term *polymeter*. Polymeters are two or more meters usually related mathematically and played simultaneously Ex: ($\frac{3}{4} \frac{2}{4}$) three over two better known as quarter note triplets is an example of polymeter (as well as a polyrhythm.)

The label polyrhythm can apply to any rhythm related to a time signature in the most common way Ex: ($\frac{4}{4}$ $\frac{3}{4}$) eighth notes in 4/4 can be considered a literal translation of the term polyrhythm. Although I have two books published entitled "Musicians Guide to Polyrhythms", I feel it important to point out this distinction in terminology. It is also important not to confuse the concept of polymeter with what is known as odd time signatures. Ex: (5/4, 6/4, 3/4, 5/8, 7/8, etc.) Although it is possible to add a polymeter to an irregular time signature, Ex: (5/4 $\frac{3}{4}$) polymeters are exactly what the

term implies; two, or more meters (time signatures) played against each other. Ex: ($\frac{4}{4}$  → four against two; $\frac{3}{4}$  ← three against two; $\frac{6}{8}$  → six against four; $\frac{3}{4}$  ← three against four; $\frac{5}{4}$  ← five against four; $\frac{7}{4}$  ← seven against four.) It is also important to understand the mathematical relationships of the polymeters. In the first example (four against two) we have the most common polychord in our music, cut time or two to one. In jazz if you are playing in 4/4 and you double the tempo in the 4/4 structure this is called "double time feel" or in essence two to one. Three against two and six against four mathematically are one and one half times faster than the 4/4 or 1-1/2 to 1; three against four is three quarters times slower than the 4/4 or 3/4 to 1; five against four is one and one quarter times faster than the 4/4 or 1-1/4 to 1; and seven against four is one and three quarters times faster or 1-3/4 to 1. These examples are the easiest to deal with when learning polymeters because of their logical mathematical relationships. However, they are by no means the only possible combinations. Ex: (3/4  two against three; 3/8  four against three; 4/4  nine against four; 4/4  eleven against four, etc.).

To understand a polychord the best thing to do is to learn to play one. The one best suited to the study is three against two (quarter note triplets). We can learn three against two sub-dividing triplets in 2/4. Ex: (2/4  subdivide ) In order to do this properly you must have a metronome play the basic rhythm while you play the polyrhythm or at least tap your foot good and loud so you can hear the relationship between the two rhythms. If you lengthen three against two to a 4/4 bar you are now playing six against four. Ex: () Now you have two separate meters and you can extend the rhythmic possibilities of the top meter. This is done exactly in the same manner as most musicians learn basic reading when first learning how to divide the quarter note in 4/4. There are six quarter notes against four quarter notes. Ex. () if you keep the four quarter notes the same tempo, but double the tempo of the six quarter notes you have this. Ex. () eighth notes in six, against four then change the eighth notes to triplets and you have; Ex. () triplets in six against four. Next would be sixteenths in six against four; Ex. () after mastering these polyrhythms you can then mix them utilizing space with added rests. Ex. (4/4 ) Then experiment with improvising in six against four, before long you will find that this polychord will become as natural to you as 4/4. The same technique applies basically to any polychord. May I suggest you look at "Musicians Guide to Polyrythms" Vol. I and II for the procedure of working them out.

The next question is, how do polyrythms and polymeters benefit the musician?

Having taught the concept for several years as well as applying the ideas to my own playing technique as a drummer and percussionist, I have found a number of positive musical advantages to the study. First let me emphasize the fact that polyrhythms and polymeter are not new concepts. If you listen to the music of Africa, India, Java and Bali, you will find that simultaneous meters are and have been played and understood by the musicians of these cultures for hundreds and even thousands of years. Western art music has also had more recent contributors to the art of polymetric composition and improvisation. Listen to Charles Ives, Igor Stravinsky, Elliot Carter, John Coltrane, Elvin Jones. Some of the later Miles Davis recordings with Herbie Hancock and Tony Williams. Many Latin drummers, etc. These artists and many more have made dramatic and effective use of polymeter in their respective work. The question; "why learn polymeters?", can be answered simply: because today's composers demand it and today's jazz is expanding into new rhythmic dimensions that make polymeter and the ability to improvise freely in one time against another an expected technique.

However, I have discovered something I feel to be even more interesting than understanding how to play polyrhythms, and that is the development and improvement of the whole rhythmic concept while learning them. I have observed how musicians through practice, have come to realize the fundamental skills of rhythmic proficiency as applied to all types of music. I have also found that some musicians seem to acquire the ability, while playing, to concentrate on two meters at the same time, similar to a stereo system playing one recording, however, dividing the sound between two speakers.

Consequently I feel the study of polymeters broadens a musician's intrinsic rhythmic ability and increases his insight into the potentials of rhythmic expression.

AFRICAN DRUMMING

Three demonstration pieces that help your students get the feel of this unique art.

by Allen Brown

About the Author

Mr. Brown is a professional percussionist and instructor in the music department of Western State College, Gunnison Colorado.

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Drums are the very foundation of African social occasions. No matter what the festivity may be (such as a wedding, drinking party, or social dance), the drums have a significance unlike any other instrument. Drum technique has become as sophisticated as any in the world, and is interesting not only for its close historical ties with American Jazz, but for its astonishing virtuosity.

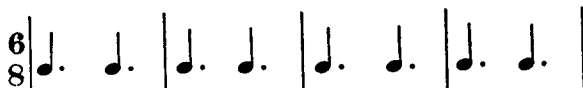
To grasp the essentials of African drumming, two main points must be understood:

1. African drumming is basically harmony—the harmony being composed of rhythms rather than tones. Because of this, the drummer needs at least two drums and many have three.

2. This harmony consists of a number of different rhythms played simultaneously; the important fact to remember is that the main beats never coincide—an idea quite foreign to the American musician.

Here are three typical rhythmic patterns that illustrate the crucial distinction:

1.



2.

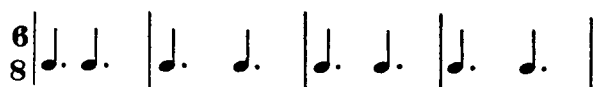


3.



According to the principles of Western music, all of the main beats of the above rhythms must coincide. But if an African heard these rhythms played exactly as they are written, he would think the performance ridiculous.

The African method would cause the second drummer to begin his pattern one count later than the second main beat of the first drummer. The third drummer would begin with the second drummer; however, he would make his main beats coincide with those of the first drummer, producing this:



The result is similar to a "round," but much more highly developed and complex since each part is different. The listener may concentrate on the main beat of the first and third drums, in which case the main beat of the second drum will produce a direct conflict; or he may direct his attention to the second drummer's main beat, in which case cross-rhythms between this and drummers one and three will produce fascinating and exciting effects.

The African conductor, not totally satisfied with the above results, would add one more drummer.



The drummer's main beats would coincide with those of the second drummer, emphasizing the cross-relationships of the entire ensemble. Notice that his rhythmic pattern alternates triple and duple groups, while the patterns of all the others are triple. This combination enhances the total effect to an even higher degree.

The examples cited thus far are of a type of drumming called Ngwayi. Although this form of drumming is prominent in many parts of Africa (especially Northern Rhodesia), many other styles and different kinds of drum ensembles are also common.

The Acholi tribe in Northern Uganda has a dance called Orak. It is

a youth dance enabling boys and girls to meet, much like teenage dances in the United States. The instrumentation is as follows:

Percussion I (1 player)

Two small drums of different pitch, played with two dowel-shaped sticks.

Percussion II (1 player)

One large drum played by hand.

Percussion III

A half section of a large calabash played with 10" beaters made from a number of bicycle spokes taped together at one end to form a handle.

The ensemble produces diverse sounds and cross rhythms, dominated by the calabashes. Here is one of the many rhythmic patterns played by Percussion I:



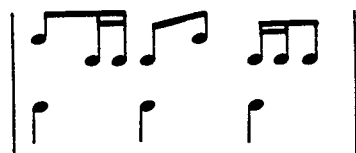
Although this pattern looks similar to 3/4 time in Western music, it should not be considered equivalent to it or played with any metrical accent. The drummer achieves differences in style by varying the placement of notes (on the high or low drum), as in the following:



The pattern for Percussion II is as follows:



The resulting combination is therefore:



This cross rhythm of two against three is just one of many from the Orak. Here is a typical variation:



In this version there are multiple cross rhythms of four (high drum of Percussion I) against three (Percussion II); two against three (between the two drums of Percussion I); and a hemiola rhythm between the low drum of Percussion I and the rhythm of Percussion II.

The calabashes provide an abundance of sound for the dance and are present mainly for this purpose, rather than to provide rhythmic interest.

In many African dances, another drummer of greater importance and musical ability than the rest plays a major role in making the dance successful. This "Master Drummer" provides a strong propelling force for the ensemble by improvising around the basic set patterns.

To demonstrate this idea I have composed Three African Dances.

In the first dance, the rhythmic pattern established and continued throughout is:

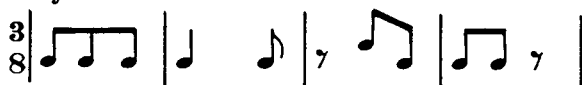
Player 1.



Player 2.



Player 3.



There are no real counter-rhythms (such as two against three) contained in this passage unless one of the players accentuates certain notes through the use of a different pitched drum. For example, player two may play:



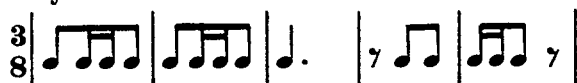
During the first two measures, which would result in a cross-rhythm of three against the two played by player one. However, the part of the Master Drummer is constructed so that his main beats rarely coincide with those of the other three players. If he commences

playing by making his main beats different from the main beats of the others, this increases the possibilities for complex relationships.

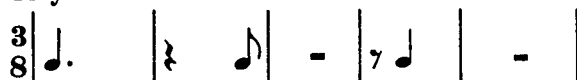
In Dance II the repeated rhythmic pattern played by three players is as follows:



Player 2.



Player 3.



This pattern is somewhat more involved in terms of counter-rhythms than the pattern in the first dance. Player three's part results in three equally spaced beats against five when compared to the main beats of the other players. Also, player one's second, third, and fourth measures give the illusion that his main beats differ from the other players. When the part of the Master Drummer is added to the patterns, a fascinating array of varied rhythms will result, even more complex than in Dance I.

Dance III is much more freely constructed than the first two. Each of the three accompanying players has four different rhythms to choose from—all based on well-known clap rhythms and drum rhythms. The role of the Master Drummer in this dance is improvised; he may, however, employ rhythms from the previous dances as a basis for his improvisations. The combined patterns of all four players should produce an extremely complicated, highly developed rhythmic relationship.

1

Performance Time: 12 min.

Instrumentation:

Player One: Bell (played with stick) and rattle gong block.

Player Two: Drummer No. 1 (2 small hand drums).

Player Three: Drummer No. 2 (2 medium hand drums).

Player Three: Drummer No. 2 (2 medium hand drums).

Player Four: "MASTER DRUMMER" (3 or more hand drums of various sizes).

$\text{♩} = \text{cc. } 80$

1.

PLAY THREE TIMES - -

2.

3.

Repeat this section for the rest of the movement.

Master Drummer: Play each solo twice—in order (1-6) — then make random selection of the solos to be performed (the number of repetitions is left to the discretion of the performer.)

1.

2.

3.

4.

5.

6.

Total duration of Movement I not to exceed 3 min. Movement II should begin upon cue from the Master Drummer.

♩. = cc. 56 **2**

(Drummer 1.)

2.

(Substitute gong (Gong to be played with for rattle.) medium-hard beater.)

1.

2.

1.

2.

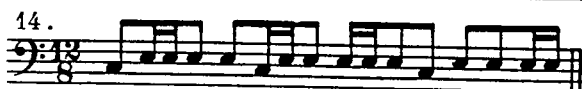
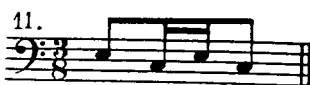
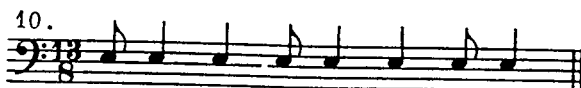
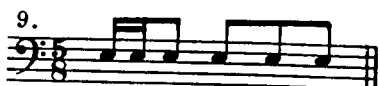
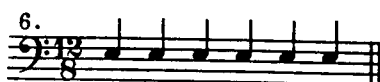
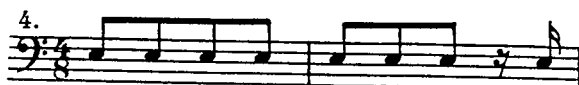
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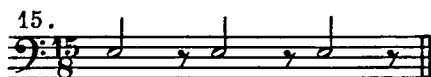
Repeat this section for the rest of the movement

Master Drummer: Construct a solo using the patterns listed below. It is not necessary to use all patterns.



any other combinations of these groupings may also be employed.





Total duration of Movement II not to exceed 3 minutes.
 Movement III. should begin upon cue from the Master Drummer.

3

INSTRUCTIONS for players 1, 2, & 3:

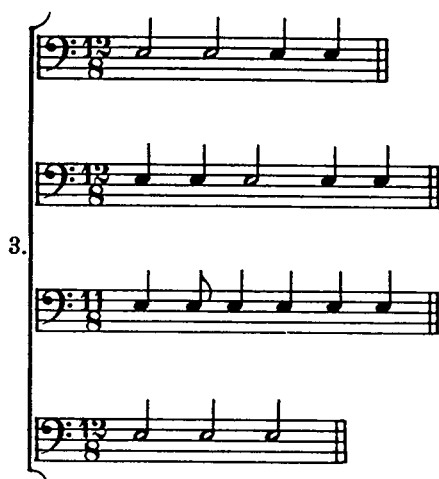
Choose any one of the 4 patterns and play for the desired length of time—then go to another; alteration between patterns also permissible.

ORDER OF ENTRANCES: 2, 1, 3.

(Substitute block for gong)

1.

2.



Master Drummer: Play an improvised solo (which can be based on the rhythmic patterns in the previous movements) constructed as follows:

Simple —————> complex —————> more complex
p ————— *fff* ————— *p*

(cue player 2 if optional conclusion is desired)

OPTIONAL CONCLUSION TO MVT. III.

(PLAYER 1 — OUT)

Drum No. 1 (Player 2) (unaccompanied) — begin improvised cadenza upon cue from the Master Drummer (similar format to the Master Drummer's solo). Cue Player 3 to begin his solo after you conclude.

Drum No. 2 (Player 3) (unaccompanied) — begin improvised cadenza upon cue from Player 2 (similar format to solos of the Master Drummer and Player 2). At the conclusion of your solo cue the other players.

Conclusion—upon cue from Player 3 everyone starts improvising but should confine themselves to alternating between no more than 2 different patterns Fade to end.

Times for Mvt. III:

Introduction and Master Drummer's solo	3 min.
Drummer No. 1 Solo	1 min.
Drummer No. 2 Solo	1 min.
Conclusion	1 min.
<hr/>	
	6 min.

Practical Mallet Studies

by Bob Tilles, Associate Professor of Music
DePaul University, Chicago, Illinois

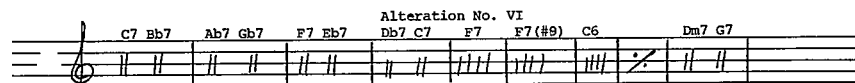
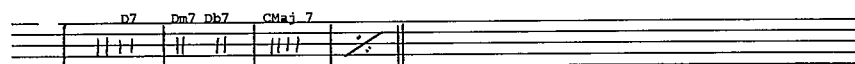
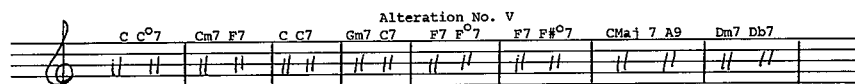
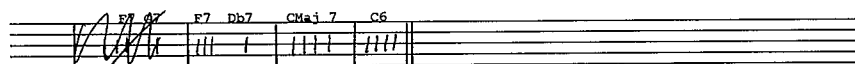
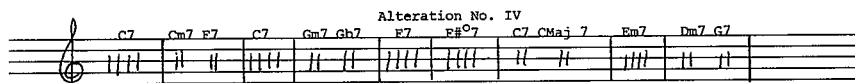
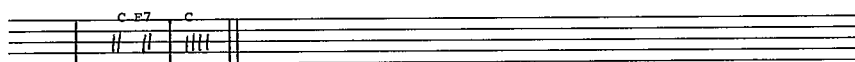
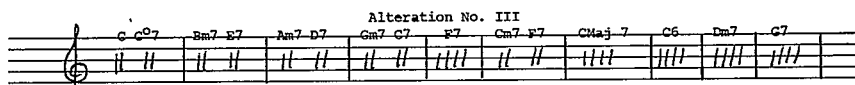
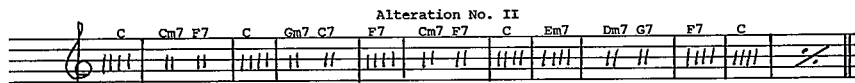
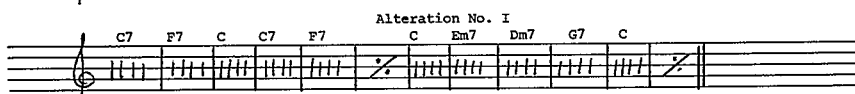
In the last issue of the "PERCUSSIONIST", Basic Blues progressions in major and minor keys were illustrated.

Many possible alterations of these 12 bar progressions are available to arrangers and players.

The progression can be changed by temporary key changes, cycles of 4th's and 5th's, and alterations of the original or substitute chords. Substitute scales will be analyzed in future articles.

Using C as a tonic, the following major and minor blues will show some of the many possible alterations that players can experiment with.

Original Blues in C Major



Abm7 Db7 CMaj 7 C6

Alteration No. VII

C Cm7 Gb7 F7 C C7 Gm7 Gb7 F7 Cm7 F7(#9) CMaj 7 Dm7 Em7 A7(b9)

Dm7 G7 Dm7 Db7 CMaj 7

C Minor Blues

Original Progression

Cm Fm Cm Cm7 Fm7 Cm G7 Cm

Alteration No. I

Cm7 Ab6 Cm7 Gm7 Cm7 Fm7 Bb7 Cm7 F7 Dm7 G7 Cm7 Cm6

Alteration No. II

Dm7 C7 G7 F7 Em7 A7 Dm E7 Am Cm Dm7 G7 Dm7 F7 Am7 D7 G9

Cm6

Alteration No. III

Cm6 F7 Cm6 Cm7 C7 Fm7 Bb7 Fm7 Db7 Cm7 F7 Cm7 Ebm7 Ab7

Dm7 G7 Cm(Maj7) Cm6

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PAS Board of Directors' Meeting December 20, 1974

Present: Gary Beckner, Jim Coffin, Mike Combs, Karen Ervin, Ron Fink, Neal Fluegel, Norm Goldberg, Ron Keezer, Joel Leach, Martin Mailman, Lloyd McCausland, Jackie Meyer, Jim Moore, Gary Olmstead, Jim Petercsak, Dick Richardson, Phil Stranger, Larry Vanlandingham, and Peggy White Shaffer. The following people were guests: Tom Ervin, Allen Otte, Linda Pimentel, Maureen Rooney, and John Shaffer.

Gary Olmstead, President, called the meeting to order. The Executive Secretary's report was presented by Neal Fluegel. It was requested the budget part which is prepared by an accountant, include the accountant's signature. The 1974-75 budget was approved as presented.

Since National PAS does not exhibit at regional MENC conventions, it was suggested that manufacturer members of PAS might display and hand out PAS application blanks at these regional meetings.

Neal Fluegel reported that the 2nd Annual Conference had cost \$525. Gary Beckner added that there were additional costs of over \$600 which were absorbed by several manufacturers.

Board of Directors' nominations:

End of 2 year period:	Vote:
Mike Combs	Retained
Neal Fluegel	Retained
Norm Goldberg	Retained
Lloyd McCausland	
Martin Mailman	
Jackie Meyer	Retained
Jim Moore	Retained
Gary Olmstead	Retained
Phil Stranger	Retained
Larry Vanlandingham	Retained
Peggy White Shaffer	
Marty Zyskowski	

Nominations:

Bernie Fisher	
Harold Jones	
Robert Matson	Elected
Charles Owen	Elected
Mike Rosen	Elected
Robert Schietroma	
Peter Tanner	Elected
Garwood Whaley	Elected
Fred Wickstrom	
James Latimer	

Joel Leach presented an idea of Claire Musser - a 200 piece marimba and handbell orchestra. This orchestra would be in honor of the USA Bi-Centennial. Mr. Musser would like PAS to be involved in auditions of the performers. After discussion, a motion was made by Martin Mailman and seconded by Jackie Meyer, to request that Joel Leach prepare a written proposal. Vote was unanimous in favor of the motion.

Nominations for First Vice-President:

Michael Combs	Joel Leach
Karen Ervin	Charles Owen
Ronald Keezer	Jim Petercsak - Elected

David Levine requested, by letter, \$750 for the scholarship to Tanglewood. A motion was made by Jackie Meyer and seconded by Gary Beckner to decline the request. Motion passed.

States requesting extra Monies:

Michigan (\$200) Motion - Gary Beckner

2nd - Neal Fluegel

Vote - decline

NM, Wash, Mo. (\$50 each) Motion - Jim Moore

2nd - Karen Ervin

Vote - Approve

California (\$150) Motion - Gary Beckner

2nd - Norm Goldberg

Vote - decline

Southland PAS Perc. Conference (\$200) Motion - Mike Combs

2nd - Neal Fluegel

Vote - Approve

Some or all of the \$200 for the Southland Percussion Conference will be returned to the National PAS if the Conference makes money.

Regarding the PAS Symposium, a presentation prepared by Al O'Conner and presented by Al Otte, was discussed. Joel Leach expressed his disappointment in the Board's reaction to requests. A motion was made by Joel Leach and seconded by Karen Ervin to accept and support the PAS Symposium. Vote - Approved.

Due to the need for more Board meeting time, Ron Keezer moved and Karen Ervin seconded the motion to have a Board meeting at NIU during August 10-17, 1975. Vote - unanimously approved.

Gary Beckner encouraged the Society to broaden and include rock, marching percussion, etc. Karen Ervin also suggested contemporary composers and performers. The following people are to serve on a Membership Committee: Karen Ervin, Chairman; Gary Beckner, Larry McCormick, Dick Richardson, and Phil Stanger.

MEETING ADJOURNED.

Respectfully Submitted

Jacqueline Meyer

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President's Corner

I would like to take this opportunity to thank the many individuals and organizations who planned or participated in the recent 1974 PAS National Convention in Chicago. A special thanks is certainly in order for the Conference Committee and its Chairman, Ron Keezer.

To look ahead to future conference plans, the membership should note several important items. First, plans are going forth for a PAS Symposium to take place Aug. 10-17 on the campus of Northern Illinois University. Details will be announced in the publications. We

hope PAS will be able to do a week-long Symposium on an annual basis at various locations around the country. To this end, anyone interested in hosting a future Symposium at his/her College or University should contact PAS.

The short conference idea, which began as a "Day of Percussion" at the Midwest in 1971 and evolved into the present PAS National Conference, will continue under that name. A new committee is already at work on the 1975 PASNC-Midwest. In addition to actually planning the 75 Conference, they will also formulate written guidelines for the operation of the Conference on a continuing basis. These guidelines will be announced in the publications as soon as they are available.

It is the sincere hope of the PAS Board of Directors that the membership will support these activities. We also hope the membership will respond to the national office with comments, suggestions, and criticism of these activities so they can be continually improved and geared to the interests and needs of the PAS membership.

Following is a message from our new First Vice-President Jim Petercsak.

I want to publicly thank the P.A.S. Board of Directors for their "vote of confidence" in electing me First Vice-President and President-Elect of the Percussive Arts Society. I will work closely with the President, Executive Officers and Board of Directors to make our organization the best it can be. Hopefully, working together for our common goals we will achieve an even better society for the future generations of percussion players.

Letters to The Editor

Dear Mr. Fluegel;

First allow me to compliment you on the years of interesting reading that PAS has provided me. The publications have been a constant source of both pleasure and educational value to me.

As for the secondary purpose of this letter, I'll begin by saying that I'm a drum instructor. Naturally, I'm interested in having my students join PAS, and I would like to request some membership application blanks, which would make this much easier. Twenty would be sufficient for now, if possible. Please forward them to the above address at your earliest convenience.

I'm sure that the information available through PAS publications will prove to be an added incentive for many of my students. Thank you in advance for your assistance in this matter, and please relay my wishes for continued success to the officers and board.

Yours truly,
Ronald G. Vaughan

Mr. David Davenport
Percussion Coordinator
University of Kentucky
Lexington, Kentucky 40506

Dear Mr. Davenport:

This letter is in response to your letter to Mr. Fluegel printed in the Percussionist Volume XI, Number 4, Summer, 1974.

I can somewhat understand your disappointment with the changes of percussion instrument manufacture but can honestly say that much of your report is totally unfounded.

We, at Slingerland, as well as the other large percussion companies have strived for better quality instruments over the years and feel we have attained that goal.

Your first complaint (and I sense of most importance to you) is the calf head dilemma. During the past two or three years, good quality calf heads have been virtually unobtainable due to the very small usage of this material in this matter. More often than not, the best of the breed is used on clothing now selling in some of your most expensive clothing chains in the world.

Because of the demand by commercial industry and the high cost of processing of this material, the price has gone beyond reach to supply as a beater head on a musical instrument.

We would be doing no one a favor by supplying lower grade quality calf at exorbitant prices.

Your second complaint deals with advertising claims. In most cases the information supplied by manufacturing companies thru media are correct.

It is possible, however, that the product specifications do not meet the standards of the consumer in practicality. They do however meet all claims as stated. This is exemplified by your breakdown on timpani tuning.

It is possible that the lowest pitched note on any given timpani may seem somewhat "Flabby" or the highest note "choked" but none the less, these notes are obtainable. Your solution of using a larger or smaller kettle for these notes has been in use for many years and will be for years to come.

Your statement concerning "drum corps and our preoccupation with the outdoor band" has me somewhat baffled. The Drum Corps have set the trend for excellence in marching units but remember, the time spent with these units are at least ten fold the average band rehearsal and marching time.

The standard of sound set by these units should in no way be compared to those required of a concert band and vice versa.

Had you attended any of the large Drum Corps shows this year, you would have realized that "flash and shine does not outsell quality and beauty" but only enhances the intricate and well executed program of outstanding musicianship.

I hope **this** state is not irrevocable.

Sincerely yours,
SLINGERLAND DRUM COMPANY
Gary E. Beckner,
Sales Manager

Dear Mr. Fluegel:

The recent letter from David Davenport, percussion coordinator at the University of Kentucky (Summer, 1974), should be emphasized with further comment.

I too believe that so much tonal quality has been sacrificed by percussion instrument manufacturers in the name of a flashy product or more often greed, that professional percussionists should take a stand.

I suggest that as a first step, we develop a code of ethics. It should cover the manufacture, teaching, and performance of percussion instruments, and it should also include some mention of the social context in which performance is rendered.

Sincerely,
Dr. Louis Wildman
Institute for Quality in Human Life
Lester, Washington

Dear Mr. Fluegel:

I have just finished reading the letter by David Davenport in Volume XI, Number 4 of the PERCUSSIONIST. I should like to stand up and cheer, and then shake his hand and buy him a drink. As a member of the percussion section of the Cleveland Orchestra for over twenty years, and as a percussion teacher for even longer I find his complaints to be based upon solid fact. I recently have initiated a percussion program at Cleveland State University, and find that in trying to acquire decent equipment for the school I am up against exactly the situations he describes.

It would appear that the most well-known percussion manufacturers have been taken over business-wise by conglomerates whose sole interest is profit. Granted that in many products today, in all

fields, quality has gone down while prices have gone up, I would think that manufacturers would wish to make items that professionals could recommend, but this is no longer true. However, I must mention that one of our principal plastic head manufacturers, and all of the famous percussion specialty shops in our major cities with whom I have dealt have gone out of their ways to be helpful and supply special orders and quality items. In talking personally with some of the shop owners I find that they are confronted with most of the same problems that Mr. Davenport mentions.

I would write him personally, but the address at the end of his letter is insufficient for postal purposes. I'd like to have him see this letter. If you do not see fit to publish this, perhaps you would be kind enough to forward it to him.

Very sincerely,
Robert Matson
assistant timpani and percussion
The Cleveland Orchestra

To: P.A.S. Membership
From: J. Petercsak, 1st Vice President, P.A.S.
P.A.S. National Conference to be held in Chicago in December 1975.

All conductors and performers interested in participating at the conference are urged to contact the chairman as soon as possible.

Tom Siwe
1010 W. Williams
Champaign Ill. 61820

Fraternally yours,
James Petercsak

We would like to express our appreciation to these outstanding organizations in the music industry for their support of Percussive Arts Society, Inc. and hope they will continue to consider PAS as a worthwhile and stimulating force in the percussion world.

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Percussive Arts Society

(PAS)

PURPOSES OF THE PERCUSSIVE ARTS SOCIETY — To raise the level of musical 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.

BOARD OF DIRECTORS REPRESENTATION CATEGORIES — Professional, College, Public School, Student, Private Teacher, Composer, Drum Corps, Dealer, Publisher, Manufacturer, Distributor, and Members at Large.

PUBLICATIONS — All members receive the journal PERCUSSIONIST (four issues per academic year) and the magazine PERCUSSIVE NOTES (three issues per academic year). These publications contain articles and research studies of importance to all in the percussion field, and serve to keep all members informed of current news, trends, programs, and happenings of interest.

MEMBERSHIPS — Professional \$10.00 (Percussionist)
Individual \$7.00 (Music Educator: non-Percussionist)
Student \$7.00 (Any full-time student at any educational level)
Library \$5.00
Instrument Specialist (Dealers) \$50.00
Publishers \$35.00
Distributor/Wholesaler \$175.00
Manufacturer \$400.00

Note: The above dues rate includes membership in both the National and State Organizations. All memberships are based on a fiscal year, September 1st through August 31st, and are automatically continued with annual billing unless cancelled by member. Please report changes of address promptly.

PAS COMMITTEES — Acoustics of Percussion Instruments; Avant-garde Percussion Music; College and University Percussion Curriculum and Materials; Ethnomusicology as Relates to Percussion; Standardization of Terminology and Notation of Percussion Instruments; Composition Contest; Hall of Fame; Contest & Audition Procedures; Research & Publications.

SPECIAL NOTE TO STUDENTS — All students with an interest in percussion should take advantage of this excellent opportunity to join PAS. Student membership in this organization along with private lessons from a fine teacher should be the goal of every aspiring percussionist.

detach and mail

APPLICATION FOR MEMBERSHIP

NAME _____ HOME ADDRESS _____
CITY _____ STATE _____ ZIP _____
BUSINESS OR SCHOOL ADDRESS _____
CITY _____ STATE _____ ZIP _____
OCCUPATION _____ REMITTANCE ENCLOSED _____

Send application form and remittance to:

PERCUSSIVE ARTS SOCIETY
130 Carol Drive
Terre Haute, Indiana 47805