

## Systems of Natural Drumming: Stone, Gladstone, Moeller

*Editor's Note: This paper was one of the Scholarly Paper Presentations at PASIC '92 in New Orleans.*

**W**ITHIN THE ARENA OF percussion, there is a methodology which presents a "natural" means of playing: George Lawrence Stone, Billy Gladstone, and Sanford Moeller were all teachers and performers in the early to mid-1900's who represent this natural drumming tradition. It is the author's intention to relate the methods of these gentlemen to modern percussion performance.

George Lawrence Stone (1886-1967), who resided primarily in Boston, Massachusetts, performed in the Boston Symphony Orchestra, John Phillip Sousa's Concert Band, and the Grand Opera of Boston (Hannum 19). He was also the Principal of the Stone Drum and Xylophone School, Drum Editor for the *International Musician* from 1946 to 1963, President of the National Association of Rudimental Drummers for 15 years, and eventually the manager of his father's drum factory (19). As a student, Stone studied percussion with his father, George B. Stone, Frank Dodge, Oscar Schwar, and Harry A. Bower (19). An example of the techniques that Stone learned from these teachers can be found in *The Bower System for Percussion* by Harry Bower. This text distinguishes two basic strokes, one emphasizing arm motion and another emphasizing wrist motion (Bower 15,16). The Bower system also taught that for every stroke, the shoulders, elbows, wrists, and fingers should be free to move to different degrees depending upon the tempo and the dynamic level (14). Thus, as a young player, Stone was taught to use free, continuous movements in playing all the basic percussion instruments.

Stone was respected as a successful performer, as well as for his published works and his teaching. *Stick Control*, *Accents and Rebounds*, and *Mallet Control*, are some of his very popular

method books. Among his students were Sid Catlett, Vic Firth, Lionel Hampton, Gene Krupa, Joe Morello, and Ted Reed (Hannum 20).

There are three basic principles in Stone's system of natural drumming. Foremost is Stone's statement found in *Stick Control*, that "Control [of a drumstick] begins in muscularly relaxed action (4)." In other words, Stone's first lesson was simply to make a drum stroke by using comfortable, loose movements. He felt that arm and hand muscles would not be tense if a person attempted to use as little effort as possible in producing a full tone. Stone's second principle was that for every drop of the stick, there is an opposite rebound to be accepted: in other words, there's a reaction for every action. In his book, *Accents and Rebounds*, Stone uses the analogy of comparing a drumstick to a rubber ball (16). He suggests that in bouncing a ball, one doesn't stop it after each bounce. Instead, continuous movement of the arm and hand is used to keep the ball in motion. Likewise, one could use a similar motion in making successive strokes for playing situations. Stone emphasized this by telling students that if they stopped the stick after each stroke, tension would stiffen the muscles and prevent relaxed, controlled movement (Morello P.I.). The third principle in the Stone approach is that all of the upper body hinges, the shoulders, elbows, wrists, and fingers, should be free to move when needed for various dynamics and tempos (Morello P.I.). Stone believed that one should not keep the arms still and rely solely upon wrists or fingers in general playing. He taught a composite movement for a basic stroke: one in which all of the hinges move together.

The strokes in Stone's system consist of an arm stroke, a wrist stroke, and a finger stroke, each of which is made primarily by the arm, the wrist, or the fingers (Morello P.I.). In the arm or full stroke (see illustrations at right), a combination of forearm turning and wrist

motion is used. The right wrist stroke is made primarily with wrist motion as well as slight elbow movement. In the traditional grip left hand, Stone explained that the wrist turning and the hand moving vertically produced the wrist stroke. As for the finger stroke, the right hand uses the fingers moving to and from the palm with the wrist moving slightly. In the traditional grip left hand, the fingers can help the wrist move the stick also. To produce accents, Stone demonstrated what he called a straight-forearm throw (Morello P.I.). This is a stroke where the pivot point exists in the center of the forearm and the elbow moves in and out when making successive accents. This concept is an excellent example of using motion to avoid tension.

Two other areas of importance in Stone's system are grip type and instrument positioning. First, Stone had no bias against matched grip as some teachers did in the mid-1900's. In the Jan. 1948 issue of the *International Musician*, Stone stated, "We hold our left drumstick differently from our right because our forefathers did so... They did this because they were marching drummers and their drum, suspended by a shoulder strap, naturally hung at an angle as they marched (Stone 32)." Therefore, Stone taught that regardless of the grip being used, a player needs to position the instrument so that a flat impact of the stick on the drum head can be made. With the traditional grip, this idea would then make one consider tilting the drum at the same angle as that of the left stick whether or not one is on the field or in the orchestra hall. Confirming this, Stone said, "...in order to accommodate this parade handhold... he must tilt his orchestra drum to the same slant as that of his parade drum (32)."

"Billy" Gladstone (William D. Gladstone, 1892-1961) was born on Dec. 15, 1892 in Rumania as William David Goldstein, and immigrated to the

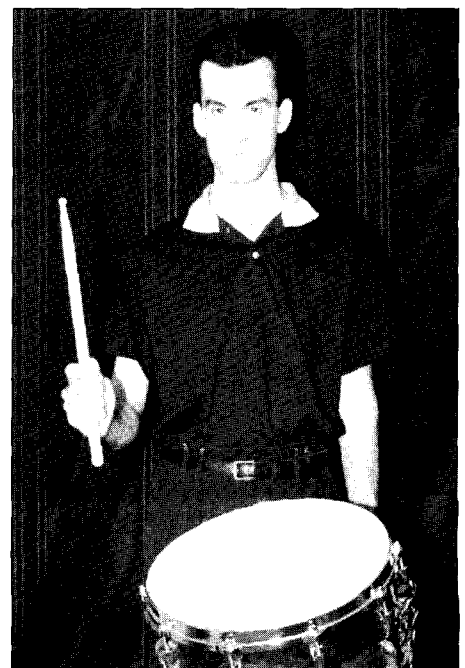
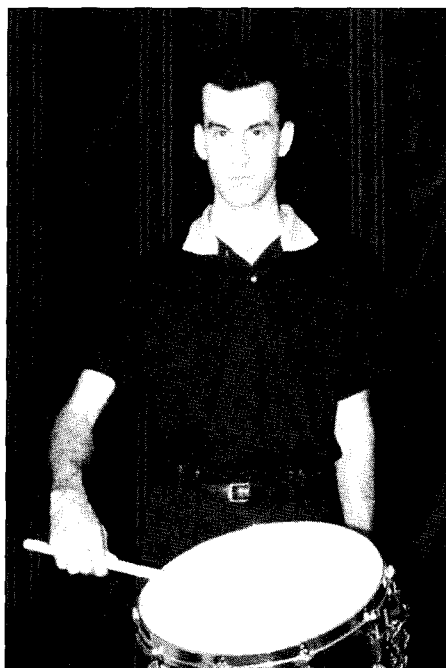
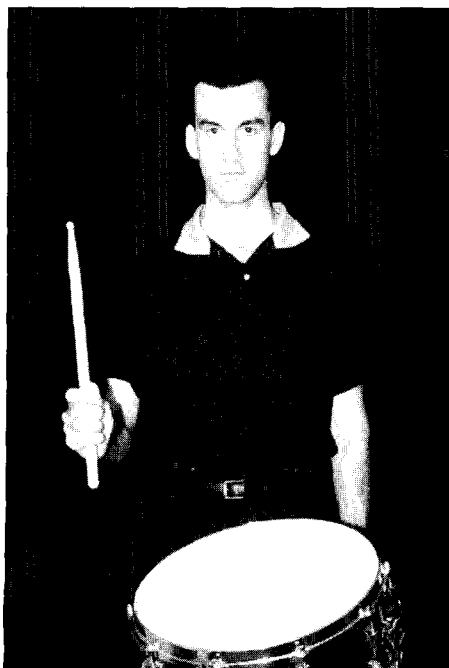
United States at age 11 (Reed 21). Having played baritone horn at age 7, Gladstone was also known as a fine pianist, and played all of the primary percussion instruments as well (Reed T.I.). His performing career began in the late 1920's, but blossomed in 1932 when he began performing at Radio City Music Hall under conductor, Erno Rapee (21). In the 1950's and early 60's, Gladstone played Broadway's *Plain and Fancy* and *My Fair Lady*. As a private teacher, some of his students were Shelly Manne, Joe Morello, and Ted Reed (Chapin T.I.). Interestingly, Gladstone was also a well-known inventor; with about 40 inventions to his credit (Reed 23). He created the electrically-lighted baton, the illuminated tongue depressor, a snare drum tension device allowing tuning of top and bottom heads to take place from the top, and the famous Gladstone circular practice pad. He also made drumsticks, mallets, and very exceptional sounding snare drums which were customized for many of the great artists of the day.

Gladstone, having spent much more of his time performing than teaching, had a system of natural playing that, in principle, seems very similar to the Stone system. A basic idea of his was to bring the hands back in a continuous movement as opposed to starting and stopping the sticks for every stroke (Morello P.I.). Another similarity is noted by Ted Reed when he states, "...[Gladstone] believed it impossible to drum with just arms and wrists. He felt the fingers had to be involved (Reed 89)." Thus, like Stone, Gladstone taught that all of the upper body hinges were to be freely active in making strokes. Nevertheless, Joe Morello says that Gladstone placed greater emphasis on the relaxed fulcrum point and stick grip as a third point to his system (Morello T.I.). He showed Morello that for general playing, the sticks should be loose enough so they could be heard resonating in order to get a full tone.

A facet of the Gladstone system that is distinct from Stone's basic ideas is stated by Ted Reed: "...the action of the

arm, wrist, hand, and fingers in Billy's drumming system closely related to the action of the piano key striking the rod, which strikes the hammer, which in turn strikes the string (Reed 89)." Essentially, this meant that Gladstone used a flowing motion from his shoulders to his fingers that could be likened to a wave moving throughout the arm. Gladstone's stroke system also consisted of arm, wrist, and finger strokes (Morello P.I.). However, his basic arm stroke used forearm turning and wrist motion with more of an open fulcrum that allowed one to "catch the bounce" (Soph P.I.). This meant that one would allow the stick to come back after a down stroke and catch it in the rebound. Joe Morello's first lesson with Gladstone consisted of learning how to make a stroke in the right hand with the stick doing half of the work (Mattingly 46). Another distinction is in the finger stroke where Gladstone thought of finger motion on the sticks to be like a piano hammer striking a string (Reed 89). The fingers tap the sticks and the sticks

### The Stone Full-stroke



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strike the head. Finally, Gladstone said that accents should be considered as very relaxed strokes at a louder dynamic level (Morello T.I.). He challenged his students to play them with as gentle and loose a motion as possible.

The third individual, Sanford A. Moeller (1879-1961), was born in Albany, New York (Chapin P.I.). As a child, Moeller played piano, not picking up the drumsticks until he was a young man. He studied drumming with several people, one of whom was August Helmick, a drummer in John Phillip Sousa's Band. Moeller played all of the primary percussion instruments as well. Shortly after his service in the Spanish-American War, he moved to New York City and played vaudeville shows with the late George M. Cohan. Moeller went on the road with Cohan in 1925, and while traveling he met with jazz and rudimental drummers (Moeller 89). As a result of observing these players, he analyzed the similarities of their techniques and several years later, after much thought and experimentation, Moeller began to codify these natural components of drumming. His students began calling his notes and exercises

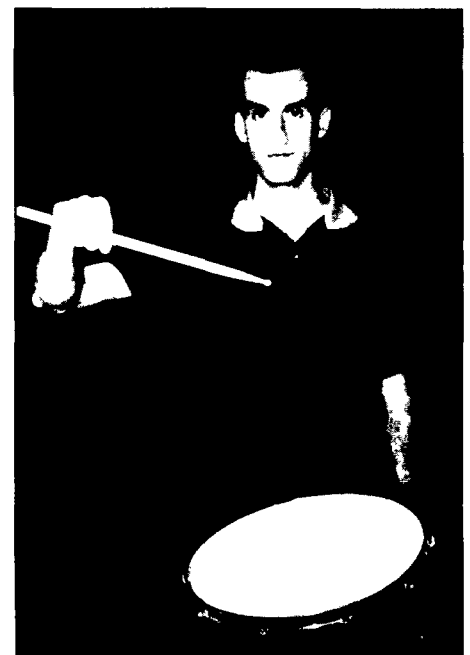
the "Moeller Method" or the "Moeller Technique" (Chapin P.I.). Some of the basic fundamentals of Moeller's teaching are found in his text, *The Moeller Book*. As a teacher, Moeller had his own shops in Queens and in Mt. Vernon, New York where he taught privately and made colonial style drums and sticks (Chapin T.I.). Among his students were Jim Chapin, Thomas Andrews, Frank Ippolito, Gene Krupa, and Allen Paley (Chapin P.I.). From 1933 to 1955, he taught and composed music for bugle, fife, and drum units in New Rochelle and in Mt. Vernon (Andrews T.I.).

The basic foundation of the Moeller system is to play with natural relaxed strokes in wave-like motions (Chapin P.I.). Moeller's basic full stroke, the premise of this system, can be likened to cracking a whip or throwing a baseball. This, in a concise form, is what Moeller observed in the best players of the day. The faster or louder they played, the more wave motions they used. Moeller then decided to break the motions into parts and teach them very slowly. This allowed his students to develop a very fluid, natural technique more quickly. The second cornerstone for Moeller was

that a player should be free and relaxed from the head, neck, and shoulders, to the arms, wrists, hands, and fingers. This allowed a player's motions to be uninhibited. Third, Moeller taught that the sticks should move within the hands so that the body wasn't very involved. This is similar to Gladstone's idea of discovering what the sticks can do by themselves. The fourth cornerstone was the idea that a composite use of all "levers" is required for good technique. In other words, Moeller showed that a percussionist should develop the use of arms, wrists, and fingers just as any good pianist or conductor would. For example, a player would not use only the fingers or the wrists without assistance from the arms in general playing (Chapin P.I.).

There are three types of strokes that Moeller taught his students: the full or down stroke, the up stroke, and the tap, or single stroke (Chapin P.I., Andrews T.I.). Jim Chapin states that the full or down stroke is one that is made by raising the stick as if preparing to crack a whip and then striking downward with the same analogy in mind (see illustrations below). The player should let the

### The Moeller Full-stroke



stick rebound off the surface and bring the hand back with it. Thus, the complete Moeller down stroke looks like a wave. The up stroke is simply a stroke that is made while the wrist/arm unit moves upward (see illustrations on following pages). Moeller usually taught this after one mastered the down stroke so that the two could be combined to show the student how one motion can produce two beats. The Moeller tap, or single stroke is one that is made primarily from the wrists and the fingers and comes straight off the surface. Taps in general are thought of as strokes occurring between down and up strokes. For instance, Moeller taught a one-handed triplet by using all three stroke-types in the sequence: down, tap, up. He also taught one-handed sixteenth note patterns with the stroke sequence of down, tap, tap, up. As a result, Moeller's students learned to play several beats with one motion by thinking of smaller strokes as rebounds coming from bigger wave strokes, especially at faster tempos (Chapin P.I.).

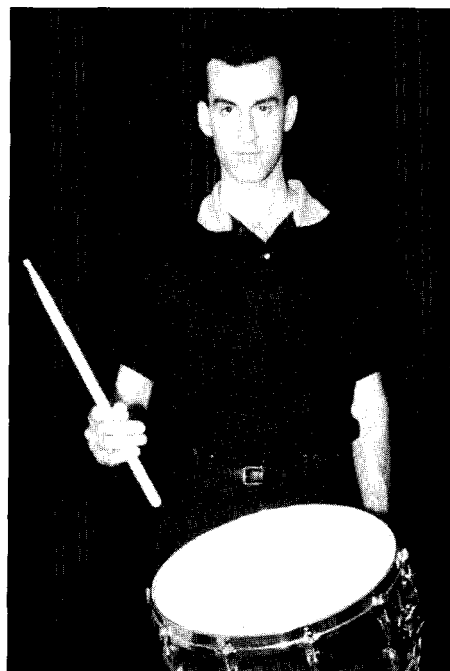
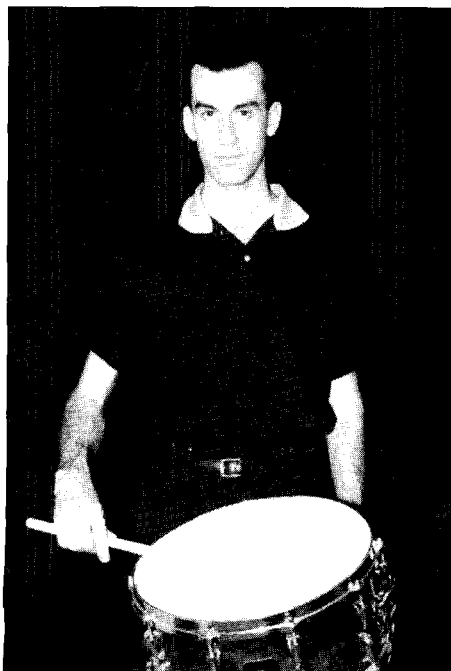
Moeller's accent method is based upon the idea that accented strokes are to be fluid and in proportion to unac-

cented strokes (Soph P.I.). In other words, one ought to be relaxed when accenting, using strokes only slightly larger than unaccented strokes. Moeller taught two types of accent strokes, the first of which was the basic down or full stroke previously explained. The second stroke, called a pull-out, is simply an accented tap stroke that comes up and off the surface immediately after contact (see illustrations on following pages). Pull-out accents are useful in that they allow the energy of the motions to come off the surface making them easier to play than normal downward accents that go into the surface. A common application of this is in developing the secondary weak beat in the two-beat roll, an idea that both Moeller and Stone emphasized in their teaching (Moeller 8-9, Stone A&R 16).

Moeller was very specific in teaching his students about the grip of the sticks claiming that it must "...[allow] a comfortable hang to the arm, preventing stiffness, cramp, and fatigue (Moeller 4)." Jim Chapin states that one should use a flesh hold in both hands, or a stick grip in which the sticks are held primarily by the flesh so that one doesn't

squeeze so hard that the bones take the pressure (Chapin P.I.). In the Moeller system, there are two basic types of fulcrums, or pivot points for the stick that exist in the right hand, or both hands for matched grip (Chapin P.I.) (see illustrations on following pages). For softer dynamics, one could focus the fulcrum between the thumb and the index and middle fingers. For medium loud dynamics, the fulcrum can be between the thumb and the fourth and fifth fingers. As for the left hand in traditional grip, the fulcrum can be in the pocket of flesh between the index finger and the thumb. Chapin asserts that one needs to loosen this hold at different times for varied dynamics and tempos. Using these different fulcrums is helpful because they allow a player to control the amount of stick movement within one's hands according to the demands of the music. Generally, the farther back the fulcrum is in the hand, the more legato a sound will be. The closer the fulcrum is to the front of the hand, the more staccato a sound will be.

In reviewing these three systems, there are five overall similarities. First, Stone, Gladstone, and Moeller taught relaxed fluid strokes and motions as a fundamental technique. Second, they taught a full use of rebounds, producing multiple strokes from one body motion. Third, they taught the use of a natural grip and fulcrum that allowed for free motion of the sticks, essentially, a loose grip that used the natural curve of the fingers. Fourth, they demonstrated the need to use the complete musculature from the shoulders to the fingertips so that the arms, wrists, and fingers worked in conjunction with each other. For example, playing from slow to fast meant that one would depend primarily upon the arms at first, and then use more finger motion as the tempo increased. Finally, they all taught natural body and instrument positioning so unnecessary strain was avoided. For Stone, Gladstone, and Moeller, this is most evident in tilting the snare drum in the same direction as is the left stick in traditional grip.



## Systems of Natural Drumming: Stone, Gladstone, Moeller

The development of a natural drumming technique through an approach that integrates these three systems is the next logical progression to be discussed. A student could begin with the Stone system by learning Stone's full stroke. Combined forearm turning and wrist motion, continuous stick movement, and an open fulcrum are three points to remember when learning this stroke. Secondly, Stone's wrist stroke would follow as a student's motions get faster. Keeping all body joints free to move is especially important at this step in order to avoid tension. Next, the basic idea of producing accents according to both Stone's and Gladstone's approach could be presented so that the student learns to use the same kind of relaxed motion when making louder strokes. Stone's straight forearm throw could also be demonstrated for making successive accents with one hand. As basic arm and wrist development continues, a student can also learn Gladstone's idea of a finger stroke where the fingers tap the stick and the stick taps the surface as in the movement of a piano hammer striking a piano string. To further this fundamental technique, one could now

turn to the Moeller system. First, a student needs to learn Moeller's down stroke by imagining to crack a whip, allowing the stick to rebound after each stroke. Then, when correct motion and form is achieved, Moeller's up strokes could be learned and combined with the down strokes. Secondly, practicing exercises that use tap strokes along with down and up strokes to develop a basic use of wave motions would be necessary. Third, learning Moeller's pull-out accents would be appropriate in order to improve the concept of getting away from the drum and using even less effort to play. Finally, moving the fulcrum to different parts of the hand would be an advanced concept to learn, allowing one to alter the freedom of the stick and the articulation of the sound. Practicing strokes with front-hand, mid-hand, and back-hand fulcrums would develop this skill.

After a student develops the concepts of Stone, Gladstone, and Moeller through this approach on the snare drum, he/she actually has a technique which can apply to the other primary percussion instruments. The ideals of sound, motion, grip-type, and instrument positioning in these three systems of natural drumming all

directly correlate with performing on instruments such as vibraphone, triangle, and tambourine. In his video, *The Drum Set: A Musical Approach*, Ed Soph states, "You sound how you move." This makes perfect sense when applied to other instruments as well as snare drum and drum set. For example, on the vibraphone, a basic parallel is Stone's full stroke where forearm turning and wrist motion combine to achieve a full tone. Another parallel is with the use of four mallets, where the idea of fluid motions in the wrists and arms can help produce full vertical strokes. A second example is the triangle, where one can apply the principle of continuous motion in successive strokes to help produce a legato sound. Another idea is to use arm motion based upon Moeller's system especially in a Latin context. This also works for certain rhythms on the tambourine. In general, using these motions and good musical sense can allow one to make great sounds without unnecessary tension or effort.

In other areas of music, there also exist relationships with the systems of Stone, Gladstone, and Moeller. One of the most significant connections is in the

### The Moeller Up-Stroke

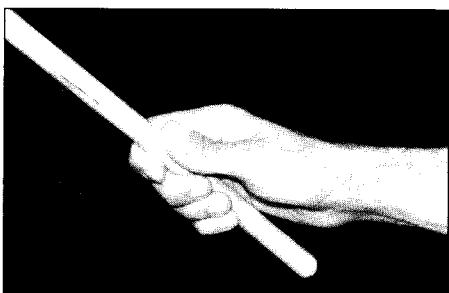


## The Moeller Pull-Out

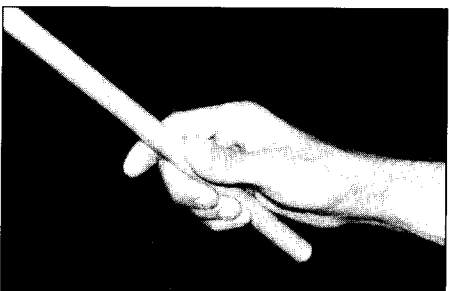


field of conducting. Elizabeth Green in her book, *The Modern Conductor*, de-

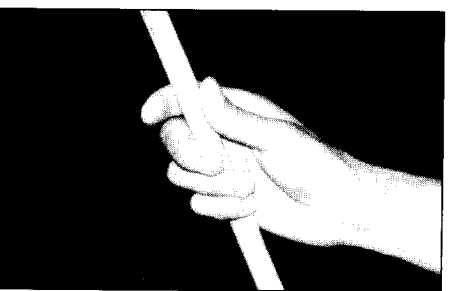
### Front-Hand Fulcrum



### Mid-Hand Fulcrum



### Back-Hand Fulcrum



scribes how one is to conduct legato and staccato sounds. A legato gesture, is to be a "...smooth, flowing connection from [beat-point to beat-point] (Green 47)." The connection here is the use of motions in the arms and hands similar to the wave motions of the Moeller system of drumming. As for the staccato gesture, Green states that one is to produce it by "...flicking imaginary drops of water off the end of the baton (Green 50)." This is the same type of analogy that Jim Chapin uses in teaching quick tap strokes found in the Moeller system. There is a flick in the fingertips and the wrists to produce a staccato sound. Once again, the motion of the baton in conducting a sound is comparable to that of a drumstick in producing a sound. This relationship simply demonstrates a musical agreement between conducting and natural drumming about the kinds of motions that can emulate different sounds.

In conclusion, there is a need for two levels of research dealing with these systems of natural drumming. Foremost is the subject of teaching. There are many teachers and students who are unaware of these and similar approaches, who could benefit from them. As a result, unmusical sounds are produced, injuries such as carpal tunnel syndrome or tendonitis are sustained, and students fail to develop their musical and technical ability. If there was an effort to develop these systems into an accessible integrated approach, then these typical problems could become

atypical. Furthermore, if a teacher presents the similarities of technique on different percussion instruments as was previously explained, then it is logical that a student would be able to perform in different mediums with less difficulty. In other words, the question is, how can these systems directly apply to contemporary orchestral percussion, drum set and vibes, and marching percussion? The second level of research goes back to the medically-related problems of "altered technique." It is suggested that a definitive study be done to determine the physical problems related to several different percussion techniques. Specifically, we could determine the types of strokes on various instruments that may cause damage to the muscles used in playing. Finally, through these two efforts, more teachers and players can make informed decisions about producing great sounds with natural motions.

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