

# Walking and Talking with Our Hands

## Hand Drumming and Group Process in Substance Abuse Recovery

BY ED MIKENAS

There is a cave painting in Zimbabwe that depicts a woman giving birth surrounded by people clapping and dancing. Strikingly, the group is accompanied by what appears to be a swarm of bees (Huffman, 1983). Ancient peoples recognized and revered bees, certainly because of their sting, but also because of their collective sound and their ability to make honey. It is the notion of the *swarm* (Young, 1991) that caught my attention and caused me to consider this metaphor in the context of the recovery process.

Research shows that the first “specialist” to develop in the hunter/gatherer groups was the Shaman (Norbeck, 1961). It was the Shaman’s responsibility to take care of the emotional well being of the group. His primary tool in accomplishing this formidable task was the frame drum. The drum was used to create a soundscape that altered the consciousness of the Shaman, enabling him to travel to other dimensions. There he could receive advice on how to treat the situation and obtain the assistance of power animals.

Because of the phenomenon of entrainment, it is unlikely that the Shaman was the only person whose consciousness was affected by the regularly formatted beating of the drum. Rather, it seems very likely that the whole community was affected by the repetitious drum sounds, and that they helped to create with their ancillary consciousness the result that would unfold from the Shaman. In my view, the Shaman directed the collective unconscious energy of the group and caused it to *swarm*. Drumming manifested a synergistic event that would not otherwise be possible.

In my work with substance-abuse groups, it occurred to me that the use of drumming and the swarm effect might offer a faster way to get people involved in the recovery process. I recalled that the limbic system, an important part of the environmental brain, helps us connect learning and memory with feelings. I thought that if people in recovery could be given opportunities to experience strongly positive events during recovery, their retention of new information would be greater and hence more effective. This confluence of ideas led me to consider the notion of teaching people in recovery to play hand drums and also to use the learning process with hand drums as a metaphor for various aspects of recovery. This wedding of concepts has opened a door, revealing a new way of facilitating groups in recovery.

The swarm is a good metaphor for the way group conscious-

ness takes shape, becomes organized, and creates a unique energy and purpose of its own. Examples that readily come to mind are birds migrating, bees defending their hive, and ants invading a picnic area. At these moments, the creatures move together with a common purpose, and all these acts of swarming have to do with the survival of the group.

It is possible, through entrainment and the vehicle of drumming, to create a group situation wherein the natural outcome of the activity is an enhanced state of well being for all those present. Some useful metaphors emerge from this.

In the language of recovery, we talk about a Higher Power. In entrainment, objects vibrating at a lesser rate start to vibrate at the higher/stronger rate, synchronizing with the “higher power” vibrations. Allowing a group of people in recovery an opportunity to experience entrainment while drumming brings a higher power into the room. The “swarm” is experienced as something that is greater than one’s self. One does not have to “think” it or “imagine” it; one feels and experiences it.

Research shows that engaging in a drumming activity for a minimum of 13 minutes produces a qualitative change in the brain-wave state (Arrien, 1993). The brain changes its activity in the

presence of sustained drumming. In addition, the body likes brisk, repetitive activity and rewards us with endorphins and our second wind. This means that if clients are involved in drumming as a group process, their brain states will change together and the good feeling will be experienced by the entire group. Everyone will experience the shift of consciousness simultaneously—the swarm effect—because it is a physical phenomenon that happens in spite of the belief systems of the clients.

Traditionally, substance abuse recovery begins with “90 groups in 90 days,” the amount of time it can take for the new client to develop the insight and commitment that are essential to following through with treatment and actually achieving recovery. It takes a while before most people are ready and willing to open up emotionally, and it can take most of the 90 days before many are able to express their feelings—a critical step, as substance abuse is commonly understood as a “disease of the feelings.” Sometimes this happens just as the insurance money is running out. And a considerable number of clients drop out before any real insight or commitment takes place.

Now, instead of sitting silent in a recovery group, unable to

**“It is possible, through entrainment and the vehicle of drumming, to create a group situation wherein the natural outcome of the activity is an enhanced state of well being for all those present.”**



*"Close ties with The Cleveland Orchestra, a stimulating, supportive and friendly atmosphere, together with outstanding practice and performance opportunities, create an ideal environment at CIM for aspiring professional musicians. CIM students are exposed to all facets of timpani and percussion as well as a complete orchestral repertoire, and they traditionally find rewarding placement in the highly competitive musical field."*

*Richard Weiner  
Principal Percussionist  
The Cleveland Orchestra*

# cim

CLEVELAND  
INSTITUTE  
OF MUSIC

David Cerone, President

BY ANY MEASURE. EXCEPTIONAL

The Cleveland Institute of Music is a leading international conservatory that is distinguished by an exceptional degree of collaboration between students and teachers.

The members of the percussion faculty at the Cleveland Institute of Music include (left to right) Paul Yancich, Principal Timpanist, and Richard Weiner, Principal Percussionist of The Cleveland Orchestra.

Bachelor of Music  
Master of Music  
Doctor of Musical Arts  
Artist Certificate  
Artist Diploma  
Professional Studies

For further information, contact  
William Fay, Director of Admission  
Cleveland Institute of Music  
11021 East Boulevard  
Cleveland, Ohio 44106  
(216) 795-3107  
Visit our web site at [cim.edu](http://cim.edu)



say anything about their feelings because they don't know how they feel, clients can quickly learn to "talk the talk" with their hands. They can be helped to feel the feeling, "walk the walk," and be on the road of recovery sooner. They can have a new set of experiences with hand drumming that can be understood in the language of recovery, and that produce real change from the first encounter.

The learning begins right away. As one person gets an insight or learns something new, the whole group learns it simultaneously. For example, one person who is leading decides to stop the group. From then on, all members of the group know it is permissible to stop at the leader's signal.

Furthermore, the learning is automatically reinforced and integrated via the limbic system, which helps us connect feelings with memory and learning. These connections are made possible with neuropeptides, the "informational substances that coordinate almost all physiological and emotional processes on a cellular level" (Glassey, 2001a). If clients are given opportunities to experience strong, positive physical events during recovery, the presentation of new information will be more thoroughly linked to more parts of the body. "Feelings and motor patterns develop together where the feelings are 'fluid' born chemicals whose emotional chemistry and muscular behavior are linked" (Glassey, 2001b).

Drumming can be defined as the making of patterned, repeated behaviors with the body and the mind simultaneously. I submit that whatever recovery information is presented during this activity will be integrated into the body as well as the mind. With the addition of drumming, recovery becomes a mind-body event.

And there is quite possibly another, even more important benefit. Research has demonstrated that bass tones are able to bypass the Reticular Activating System and stimulate all areas of the brain simultaneously (McCleary and Moore, 1965). It is possible, then, that the cerebrospinal fluid, the main carrier of neuropeptides, will, via sympathetic resonance and entrainment, move and circulate more effectively, bringing the chemical messages of recovery more quickly to all parts of the body. As the originators of these bass tones, hand drummers can build their own informational recovery loops through the production of regularly formatted rhythms.

A skilled therapist can guide a group consciousness through this experience, and once the dynamic is established, the group will be able to function with minimal assistance from the therapist. Recovery can take on a life of its own. The therapist is not "doing it for" the group; rather, the group members more quickly develop a real sense that they are doing it for themselves, an experience that reinforces in complex and subtle ways the "talk" of individual choice and initiative as critical to the recovery process. At the same time, hand drumming is a way of leveling the field, so to speak. The activity is one that few have had previous experience with, so clients start out on equal footing. The trap of solipsism and ego dominance is easily avoided. It is obvious to everyone that the synergy is a *group* event.

## NUTS AND BOLTS

I want the process of learning to drum to be fun, because I'm looking for that limbic effect. So I start out with simple moves: bass tones played in the center of the drum with an open hand.



# OBERLIN

The Oberlin Conservatory of Music  
*A tradition of excellence*

Intense and stimulating, the percussion program at Oberlin stresses the development of technique and musicianship through the study of solo literature and orchestral repertoire – from Bach and Beethoven to Cage and Crumb.

Professor and Program Director Michael Rosen, a full-time resident teacher and performer, is dedicated to careful and rigorous instruction in an undergraduate studio small enough to ensure that each student receives individual attention and frequent opportunities to perform.

Please visit [www.oberlin.edu/percussn](http://www.oberlin.edu/percussn) for more information.

The Oberlin  
Conservatory of Music  
at Oberlin College

Office of Admissions  
39 West College Street  
Oberlin, Ohio 44074  
440-775-8413

[www.oberlin.edu](http://www.oberlin.edu)

Michael Manderer  
Director of Admissions

I keep the number of times we do each activity the same for each hand so that clients have to work both sides of their brains equally. I'm using the clients' own hands to re-develop inter-hemispheric connectedness. They learn about bass tones and edge/open tones, and then learn combinations of those two tones, so that the mind is adding on little bits of information all the time. Just as a therapist accepts his or her clients where they are, I do the same thing by accepting the clients' drumming abilities as they are and building from there. This is the beginning of clients learning to "talk the talk" in drum language.

After these warm-ups, I introduce African rhythms because they contain bass tones and edge/open tones reviewed during the warm-up time. Then I add a slap tone. African dances typically include three rhythms, so I work with each one until the group is comfortable playing all three rhythms at the same time.

Next, I add Afro-Caribbean technique. This technique, taken primarily from conga drumming, uses a new move called "heel-toe," which is a rocking motion with the base of the palm (heel) and the fingertips (toes). This motion is typically done with the non-dominant hand. I ask everyone to raise the hand they write with and put their other hand on the drum. This becomes their "heel-toe" hand. Many of the Afro-Caribbean moves, and specifically *Tumbao*, use heel-toe to start, which means that the non-dominant hand is leading the activity. I teach beginning *Tumbao* as "heel-toe-slap, heel-toe-open-open" or "left-left-right, left-left-right-right." The non-dominant hand leads and the dominant hand supports with either slaps, bass, or edge/open tones.

This regimen activates early on the side of the brain typically associated with creativity, wholeness, and our sense of well-being. I explain this order to people in recovery to demonstrate why it's good to lead with your non-dominant, spiritual side and support all this good work with your strong side—instead of the other way around.

Once the group gets this far, I add moves to create a full *Tumbao*, which is executed on two drums. A little explanation is required here. For several years I had been teaching drumming groups with people sitting in a circle, each person playing his or her own drum. This is useful initially because clients can feel safe by focusing on what they are doing on their own drums. Providing two drums for each client is not an easy thing for obvious reasons. So, I developed a more socially interactive form of *Tumbao*. I tighten up the circle of drummers so that each of us can comfortably reach our neighbors' drums just by extending our arms in their direction. Then I teach the following formula (L and R refer to left and right hand; H T S O and P, respectively, refer to heel, toe, slap, open, and palm—the kind of move the hand is making):

**Todo junto en Tumbao**  
**The Full Tumbao**  
 arranged for recovery groups by Ed Mikenas

Heel-toe-slap-toe, heel-toe-my-drum  
 L L R L L L R R  
 H T S T H T O O

Heel-toe-slap-toe, heel-toe-both-drums  
 L L R L L L R R  
 H T S T H T O O

Heel-toe-slap-toe, heel-toe-my-drum  
 L L R L L L R R  
 H T S T H T O O

Heel-toe-slap-that-drum-bass-open-open  
 L L R R R L R R  
 H T S O O P O O

Left-handed clients should reverse hand movements. Also, they can turn their chairs around so that there isn't any arm interference with right-handed players.

The first sequence (HTST HTOO) is basic *Tumbao* with the addition of a toe sound after the slap. The second sequence, HTST HTOO (both drums), requires the right hand to reach over to the neighbor's drum and play an open tone on "both," then move back to one's own drum for the word "drum." The third sequence is identical to the first. The fourth sequence requires the right hand to make a slap tone on the owner's drum, then immediately go to the neighbor's drum and play edge tones on the words "that drum." The left hand then plays a bass tone on the owner's drum, and finally the right hand comes back to the owner's drum to play "open-open." This completes one cycle of *The Full Tumbao*.

Next, I add *clave* to the mix. This is a Spanish word that means "key," "cornerstone," or "code." *Clave* is special because it contains two measures of rhythm that are sonically binary; i.e., the second measure is the rhythmic inversion of the first, so that the sounds in the first measure are silences in the second measure. Similarly, the silences in the first measure are sounds in the second. Here is *clave* using eight counts per measure (x's represent the beats).

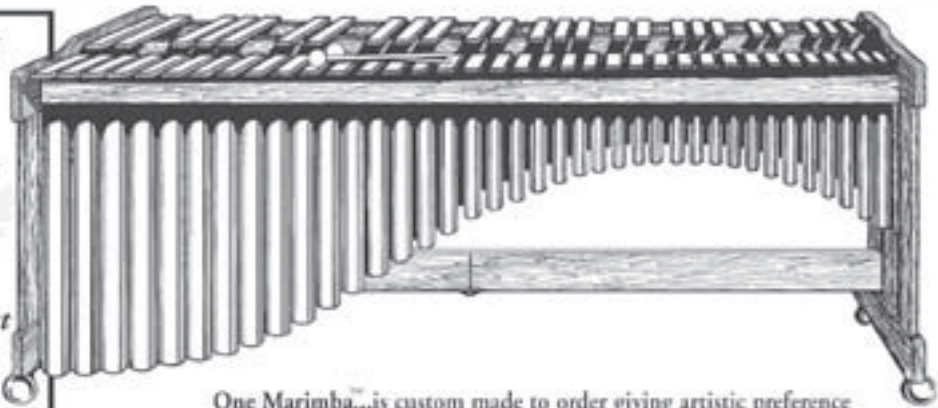
"Play Mu – sic,  
 x o o x o o x o  
  
 It's Fun"  
 o o x o x o o o

*Clave* creates a syncopation that helps the music swing. It can be played on drums or simply clapped. The importance of adding *clave* is that it creates its own pulse in the brain, above and beyond the pulse felt when playing *Tumbao*. It is very difficult for beginning players to track this pulse cognitively while also playing *Tumbao*. Hence, *clave* must be felt, by-passing the cognitive parts of the brain. The body is playing *Tumbao* while the mind is pulsing *clave*. This layering of rhythms causes the mind and body to operate in new coordinated ways, one reinforcing the other.

While this looks and sounds like a lot of information to remember, my experience is that many recovery groups can execute *Tumbao* in the first 90 minutes. Several valuable things are at work here that are directly related to the recovery process. First, clients are encouraged to speak the words that accompany the rhythm of *Tumbao*, thereby "talking the talk" and getting used to speaking in group from the very beginning. The words relate directly to what one's hand movements should be

"For me, when all is said and done, sound is the determining factor for marimbas. Although I've been impressed with the many improvements in design and construction of marimbas over the past few years, it is the sound of the Marimba One - rich, dark, open and sonorous - that sets it apart from other instruments. Marimba One's high level of professionalism and pursuit of excellence sets a benchmark that more percussion manufacturers should aspire to."

Daniel Druckman,  
New York Philharmonic  
The Juilliard School



One Marimba...is custom made to order giving artistic preference for voicing, choice of tuning standards, and frame configuration.

One Marimba...gives you the choice of a wood frame or an adjustable height metal frame, hand selected Honduras Rosewood bars, and resonators in rich burgundy, traditional black or a lustrous gold.

One Marimba...leads the industry in design innovation.

One Marimba...  
**marimba one**®

Toll Free (888) 990-6663 (U.S. only) • (707) 822-9570 • Fax (707) 822-6256  
E-Mail: [percussion@marimba1.com](mailto:percussion@marimba1.com) • [www.marimba1.com](http://www.marimba1.com)

in the same way that the Twelve Steps of Recovery indicate where one is in the process.

Second, the activity is fun, which makes the limbic connection. The drumming occurs in a group setting, utilizing the swarm effect in which clients have a simultaneous experience of something greater than themselves. This experience is mutually reinforced for everyone, and is tied in a positive way to the new information learned in recovery.

Third, walking with the hands is likened to "walking the walk" of recovery. This kind of "walking" exercises both sides of the brain in a pulsative manner, making new neural connections. These newly formed connections develop patterns in the brain, associated with the new information of the recovery process, which are connected to the body by way of the circulating neuropeptides, thereby increasing the likelihood of clients' retaining and integrating these new patterns into a healthy lifestyle.

By learning to drum together, a recovery group can quickly experience the healing power of a communal activity to which all contribute as healers. In my experience, participants feel and express pride, joy, and even reverence in the presence of a power they have invoked and created together. They become the modern heirs of ancient group rites of healing and change. When the hands walk and talk, the change is real and lasting.

## REFERENCES

- Arrien, Angeles. *The Four-Fold Way: Walking the Paths of the Warrior, Teacher, Healer and Visionary*. New York: HarperCollins, 1993.
- Melinda C. Maxfield summarizes her 1991 doctoral dissertation in Appendix E, p. 159 ff.
- Glasse, Donald J. "The Metaphysical Physiology of the Cerebrospinal Fluid." 2001a, p. 1, [www.healtouch.com/csft/soul.html](http://www.healtouch.com/csft/soul.html).

Glasse, Donald J. "Body Work and Neuropeptides—the Molecules of Healing." 2001b, p. 1, [www.healtouch.com/csft/bodywork.html](http://www.healtouch.com/csft/bodywork.html).

Glasse is citing works by Rolf, Travell, Barnes, and Upledger.

Huffman, T.N. "The Trance Hypothesis and the Rock Art of Zimbabwe."

In J. D. Lewis-Williams, ed., *New Approaches in Southern African Rock Art*. The South African Archeological Society. Goodwin Series, IV, June 1983.

McCleary, R. and Moore, R. *Subcortical Mechanisms of Behavior*. New York: Basic Books, 1965.

Norbeck, E. *Religion in Primitive Society*. New York: Harper and Row, 1961. p. 101. Cited by Michael Winkelman in *Shamanism: The Neural Ecology of Consciousness and Healing*. Westport, CT: Bergin and Garvey Publishers, 2000, p. 6.

Young, Dudley. *Origins of the Sacred: The Ecstasies of Love and War*. St. Martin's, 1991, p. 185 ff. Young's eloquent discussion includes bees as one of many examples of *pneuma*, or sacred energy, influencing the development of prehistoric human consciousness.

**Ed Mikenas** directs Day Services for the City of Lynchburg, Virginia, teaches double bass at Radford University, and developed the Drumming on the Edge of Leadership Program for the Waldron School of Social Work. He has a Masters Degree in Music from the Manhattan School of Music and is certified as a substance abuse counselor (CSAC). His work with drums and recovery has been referenced in the *American Journal of Public Health* (April 2003, Vol. 93, No.4) in an article by Dr. Michael Winkelman titled "Complementary Therapy for Addiction: 'Drumming Out Drugs'." Mikenas is an active studio musician, producer, and performer and also offers training and workshops that combine drumming, wellness, and leadership. **PN**