

**Voice and movement in circle with body percussion**  
**Facilitation in learning observed in voice BAPNE® method and in**  
**circlesongs teaching**

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**ABSTRACT**

The proposal of this study reported here by Elisa Pezzuto, currently post graduate student in ethnomusicology, and by Alberto Quarello, teacher and manager of the vocal department of the voice BAPNE® method inside of BAPNE® method, is about music education; this study highlights how the use of a choral activity called circlesinging can help giving, in a really short time, the comprehension of many technical factors both in vocal and musical field increasing at the same time the rapidity in learning and enhancing the attention level using specific exercises to stimulate the development of multiple intelligence on the basis of Howard Gardner theory. The scientific basis in wich this argument has been observed is provided by the direct experience of Alberto Quarello, who led many workshops about this since 2006 until now meeting and working with more than five thousand people with deeply different backgrounds. Because this study is essentially about choral didactics, it is also fundamental the contribution of the musicological and ethnomusicological research about the analysis on the development of musical intelligence.

**Keywords:** bodypercussion, voice, multiple intelligence, voice BAPNE, circlesinging.

## **1. INTRODUCTION**

The use of the vocal in association with the movement is a basic element for the rhythmical- musical didactics trial and there is an interesting parallel in many occasions of choreutical and musical activities of oral ethnic traditions in the african area. This research has the aim of pointing out the importance of the rhythmical-musical-vocal educatin through out the practice of the circlesinging and of the body percussion. Both elements are very rarely analysed in academic environment. In this situation we intend to put the foundation for a first process of theorization of the “Voice BAPNE®” approach (in the BAPNE® method). This didactics method based on the combination of the disciplines aforementioned increases the learning capacities and stimulates multiple intelligence on the basis of Howard Gardner theory.

## **2. CIRCLESINGING DEFINITION**

The practice of “singing in a circle” is an activity of most part of oral tradition based communities. The geographic aerea of pertinence is very is very extensive and this is why we choosed some exemples to examine:

1. Central-American Area: musical-vocal-choreutical activity in the Haitian Voodoo possession ritual
2. African Area (north-eastern): possession ritual music in Somalia

The actual use of the term “circlesinging”, that can be a synonymous of circlesong, is linked to the person of Bobby McFerrin. In 1997 he gave the name of “Circlesongs” to one of his music albums wich contains eight pieces composed by an organic of twelve voices with an improvisational main matrix. In the Voice BAPNE□ framework the teacher Alberto Quarello uses the practice of the circlesongs as a common place to apply different subjects of research as the vocal physiology, the psicology, the neuroogy, the biomechanics, the ethnomusicology and the pure musical research.

### **2.1 Some musical - dancing activity analyzed by the ethnomusicological research**

As we already said, in the voice BAPNE method we work in circle most of the time, this is one of the principal links between this kind of work and some dancing-musical practices in many cultures that were observed by the ethnomusicological research. Here we are going to analyze the main structures that the voice BAPNE method has in common with

some musical activities in some possession rituals from Haiti and Somalia. In the Haiti area, analyzing the musical- dancing activity in the Vudù rituals, we saw how the function of the circle (created by dancers, chorists and percussionists) is constantly maintained and it is opened just in few moments (as in some short solos done by a dancer or a couple of dancers), it is also interesting the connection between the facilitator in the voice BAPNE activity and the priest in the Vudù rituals: infact in the Vudù worships the priest is in the center of the circle and he has a coordination function for the rite: with a little rattle (asson) he gives signals for rhythmical, dancing and vocal changing, so this function has a good parallel with the actions of the facilitator (coordination of rhythmical-vocal changes and of the movements); furthermore it is necessary to underline the constant compresence of singing and dancing during the whole rite (dancers sing all the time sostained by the choir just for a more powerfull sound). Talking about the possession worships in Somalia, we analyzed in particular the Mingis rite (inside of the Zar ritual): we can see how the structure of the circle is constantly present also here, this rite (a healing rite to chase “Jinni” spirits) is done in a tent (more and less four meters for five) where the partecipants are in circle, the essential part of the rite is the musical activity in which the Calaqad (the priest) and he’s assistans sing for the sick (in an antiphony or in an alternate structure), after this phase there’s a dancing-musical part that is a sort of natural consequence of the precedent phase and it starts when the sick begins to dance untill he is in a trance state; in this case too it is important to underline the constant presence of the circle singing activity component, also sustained by a female choir (in circle around the sick person) that help the execution of the ritual singing, clapping, dancing in some parts and shouting phonems like “you-you”.

### **3. BAPNE® METHOD**

The BAPNE® method is an association of bodypercussion techniques and verbal pattern, it was created by the Prof. Francisco Javier Romero Naranjo and it aims to develop multiple intelligence (related with Howard Gardner theory) through out the basics of musical activity.

- Biomechanics

The biomechanical plans and axes are the basis in the structuring process of the BAPNE method exercises; Infact all the exercises combines these different plans in order to stimulate the use of all cerebral lobes.

#### - Anatomy

The BAPNE® method stimulates the dissociation capacity of the extremities (upper from lower, through some specific practice) and it associates at the same time the use of the language, so that each of these elements can be completely independent from the others.

#### - Psychology

From the point of view of the psychological research and its possibilities of application there are many studies on the body percussion starting from different perspectives:

1. In the fields of psychophysiology and psychobiology the use of the body percussion results to be very useful for manifesting one's personality and it helps as a coadjuvant in different specific therapies.
2. In developing the musical gesture as a social tie and for its musical influences and the musical feeling that it can generate.
3. The body percussion relating with the cognitive and evolutive theories.
4. From a behaviorist perspective the didactics pursue a strategy of support through the principles of rewarding. In the BAPNE method the teaching takes part in an interrelation based teamwork. It develops so that each participant has the sensation of being as important as the others and that everyone is an active subject. This is the starting point of a teaching-learning process that gives a very natural feeling about making mistakes while working in progress. The teamwork is also a way to easily obtain a relevant level of complicity and empathy among the participants.

#### - Neuroscience

The neuroscience study helps to explain the activation process of the cerebral lobes that are involved during the exercises for the multiple intelligence: in the BAPNE method the activation of different lobes is happening all the time because the practice obliges to keep a wide and prolonged concentration.

#### - Ethnomusicology

The ethnomusicology research points out that in many different cultures the body percussion activities have always been part of very important moments for the society with a strong aggregation function. This method is known and widespread in musical didactics contexts and in the generic pedagogy for its results at increasing the level of attention. Moreover the BAPNE method is giving a great contribution to scientific research in the field of dyslexia, of Alzheimer and Parkinson disease.

#### **4. THE VOICE BAPNE® METHEOD**

Prof. Francisco Javier Romero Naranjo and the master Alberto Quarello alias Albert Hera have been working for the last two years to a common research that gave birth to the Voice BAPNE® method. Here the voice, on a choreutical level through the Circle Songs structure, the body and the body percussion technique , to relate the elements, take advantage of their whole potentials. The prosodic vocal accent with a very prcise movement are the first elements to create a functional link between the Voice and the Body in the construction of the Voice- BAPNE®; later all of these turns into separation, mostly on a kinesthetic level. What makes the Voice BAPNE® a peculiar method is the cognitive stimulation of the multiple intelligence as for Howard Gardner theory, on the basis of pedagogical elements from biomechanics, anatomy, vocal phisiology, psichology, neurology and ethnomusicology. The method application provides the use of a wide range of exercises both in the circle and in the couple with the “mirror” function. Here the motional aspect and the vocal aspect are directed to destabilize the proprioception of ones singing voice so that it is possible to deconstruct the mechanisms brought by a binding vocal technique (as long a sit concerns the artistic use of the voice). This research comes from the PROEL method developped by Dr. Alfonso Borragan who obtained a good quality of vocal emission thank to the destabilization of the postural balance. The Voice BAPNE® applies the concept of destabilization on the VAK (visual, auditive, Kinesthetic) didactic model instead of working on the postural balance.

##### **4.1 Didactics application fields**

Here we are going to analyze just one of the multiple didactic fields of application in which the Voice BAPNE® founds its research. This area comes from a first study of musical application and this is why we are going to examine just this field, excluding other scopes (as neurological, cognitive, psichomotor).

##### **Musical field**

- A. Tone
- B. Deep knowledge of ones vocal extension
- C. Comprhension of the rythmical pulsation both in the voice and in the body percussion
- D. Inceasement of the quality and the range of vocal timbre
- E. Amplification and comprehension of the use of polyrythm

- F. Comprhension of the theoretic musical aspect (transcription) starting from a musical performance
- G. Development of the creative processa and of the mnemonical capacity for musical patterns

## **5. THE MULTIPLE INTELLIGENCE OF HOWARD GARDNER IN THE VOICE BAPNE® METHOD**

### 5.1 Multiple intelligence description

The multiple intelligence concept appears for the first time in 1983 thanks to the psychologist Howard Gardner research that is published as a first description on the paperback “Frames of mind” and afterward he deepens his study and writes the book “Forma mentis” (1987, 2013 second edition). The main concept of his theory is the estreme belief that the intellectual capacity of an individual is never related just with one’s intelligence in a numerical evaluation (“QI” evaluation of intelligence quotient). Each person has a limited range of human abilities and it is possible to distiguish and classify them into eight areas. It is very important to point out that each person in its subjective experience tends to developpe some of these areas more than others but this does not exclude the possibility of nurrishing ang increasing the less stimulated areas with a proper didactic stimulation and some specific exercises. At Harvard University Gardner and his collegues have been studing the implications of this theory in the didactic field on the learning process and the class work, with the goal of developping a more personal teaching and evaluation for each individual.

### 5.2 Multiple intelligence classification

#### **1. Linguistic Intelligence**

The Languistic intelligence is the ability of being effective both in the written and spoken language. The main capacity for this field of intelligence is the appropriate use of the syntax, of the sentence structure, of the phonology, of the semantics (even the sensitività for subtle language meaninings). This intelligence is related with the capacity of explanation, teaching, convincing and with meta-linguistic analysis.

#### **2. Logical-mathematical Intelligence**

The logical- mathematical intelligence provides a strong attitude for understanding and relating with the experiences through a logical numerical mind organization. When this

intelligence is particularly developed there is a considerable ability for creating and managing abstract models, for mental inductive and deductive processes, for applying a scientific way of thinking in the problem solving area and a certain easiness for complex calculation.

### **3. Spatial Intelligence**

The spatial Intelligence is the capacity of perceiving the outside environment in a visual way tank to an internal re processing that transform the element that we acquired. This intelligence gives a very high sensitivity for the colours, the lines, the shake and generally for the space perception; it contributes to the sense of direction, to the capacity of seeing and representing with drawings and it gives a good visual memory.

### **4. Musical Intelligence**

The musical Intelligence is the capacity of creating and managing and storing musical patterns with an extreme easiness. This Itelligence gives the ability of distingushing and being specific about the timbre, the rythm and the melody- harmony of the musical elements.

### **5. Bodily-Kinesthetic Intelligence**

The bodily-kinesthetic intelligence is connected with the ability of using the whole body and the single parts in a very conscious way (ex. handycrafts ). This intellicenge includes many specific body capacities as coordination, strength, flessibility, speed and the art of ex pressing ideas and feelings through out the use of the body (artistic use of the body as the dancers). To be specific this intelligence comes out in preprogrammed movements or in mimetic abilities.

### **6. Intrapersonal Intelligence**

This intelligence is expressed by the capacity of understanding oneself , of recognizing ones own abilities and what one is able to do, of recognizing one's feelings, intentions and desires. The intrapersonal kind of intelligence allowes to structure a detailed mental perception of who we are and to channel our emotions in way that is appropriate to the external environment. It gives a pretty high consciousness of our range of emotions and it connects the emotional- spiritual side with the rational one.

### **7. Interpersonal Intelligence**

This intelligence gives the capacity of perceiving and interpreting other people feelings, thoughts and intentions. This can include the ability of catching the meaning of the

other person facial expressions, vocal inflections and gestures and the spontaneità of properly managing the answer to all of them. The main qualities that are furnished by the interpersonal intelligence are a very good non verbal communication and the skill of creating and maintaining a synergy in communication and cooperation in the group.

### 8. Naturalistic Intelligence

This kind of Intelligence has been included after the first edition of the book “Forma mentis”. Howard Gardner relates it with a peculiar sensitivity for the natural world aspects. It manifests itself through a tendency of being in communion with the nature and the capacity of recognizing and classifying the natural objects thanks to a special feeling for the flora and the fauna. By now this intelligence is mostly applied in the field of ecology and environment care.

#### 5.3 Voice bapne® exercises for some kind of intelligence stimulation

Now we are going to try to give a detailed explanation for some exercises that are practiced in the Voice BAPNE® method to stimulate some kinds of intelligence. At first we will analyze the Spatial-Visual Intelligence. Alberto Quarello has noticed more than once

The diagram illustrates exercises for Spatial-Visual Intelligence. It features two human figures: the top one is associated with a star symbol and the label '+TA+', and the bottom one with a spiral symbol and the label '+TO+'. To the right, a musical staff shows a note on the 'Do' line and another on the 'Re' line. Above the grid is a bell icon with a musical note and the number '70'. The central element is a 4x4 grid with a checkerboard pattern of stars and spirals.

★	🌀	★	🌀
🌀	★	🌀	★
★	★	🌀	🌀
🌀	🌀	★	★

lacks of attention related with the spatial-visual attention that had an influence both on learning and performing. Quarello has defined some specific exercises with the aim of awakening the Spatial-Vocal and Visual-Vocal elements thanks to a long research process of didactics.

#### Exercise n.1 “ The rythmical-musical square”

##### Intelligence:

Linguistic, Musical, Interpersonal, Bodily-Kinesthetic

##### Practice

##### The exercise runs through three levels:

Level 1: Interpersonal and Kinesthetic

Level 2: Interpersonal, Kinesthetic and Linguistic

Level 3: Interpersonal, Kinesthetic, Linguistic and Musical

**Use of this exercise in the vocal didactics :**

This exercise allows to work on three levels

Level 1: Comprehension of many rythmical aspects (of increasing difficulty) through the body percussion

Level 2 : Comprhension of the vocal accent (TA/TO syllable) in relation to the motor coordination

Level 3 : Comprehension of the variation of vocal intonation (on two notes) in relation to the movement and the ccoordination of both aspects.

**Benefit of this exercise in the learning process :**

Psycomotor stimulation through the crossed lateralità (level 1), language stimulation using the phonemes and the association of phonemes and movements, visual learning stimulation, system stimulation and lecture direction ( lt/rt – rt/lt – a/b – b/a- from the beginning/ from the end ).

**Exercise description :**

The exercise takes place with a group of participants. They will make a row in front of the screen where the video will show the musical square. The first step is about suggesting a constant sense of rythm by using a metronome (70 BPM suggested speed) ; the second step is the body movement built on the quarters (using the metronomes) moving to right and then to the left, once the motor of the exercise has a shape they will go through the three levels. In the level one the impulse of the upper limbs is linked with a each figure drawn in the square and this is done on right and then on the left at each quarter so that the body builds a crossed movement. In the second level the voca accent comes with the two phonemes TA/TO. In the level three we find a considerable increasement of difficulty: the level two is executed living to the phonemes the Do RE notes. The exercise can even expand (with higher level of difficulties) using an 8x8 square with two more symbols.

**Final consideration :**

This Voice BAPNE® exercise increases the general learning capacities. As long as it concerns the visual system it is proved that it is very useful to stimulate some aspects that

helps the healing process of some learning disorders (DSA) as dyslexia. The BAPNE®

**INTERVALLI DI TERZA**  
**VOICE-BAPNE**

1

**GRUPPO A**

1 3  
ta to  
do mi

1 3  
ta to  
do mi

1 3  
ta to  
do mi

**GRUPPO B**

1 3  
ta to  
do mi

1 3  
ta to  
do mi

1 3  
ta to  
do mi

7

1 3  
ta to  
do mi

method has been used in this field for years with great results.

### THIRD INTERVAL EXERCISE:

#### Multiple Intelligence

Logical-mathematical, language, musical, interpersonal, bodily-kinesthetic

#### Biomechanics

Horizontal plane (upper part and lower part), sagittal plane (right side, left side)

#### Learning process:

Imitation

**Practice of the exercise:**

Level 1 : Logical- mathematical, Kinesthetic, Interpersonal Intelligence

Level 2 : Linguistic, Kinesthetic, Interpersonal Intelligence

Level 3 : Musical, Kinesthetic, Interpersonal Intelligence

**Use of the exercise for the vocal didactics :**

Level 1 : Comprehension of the musical interval using numerical values to the degree fees

Level 2 : Comprehension of the vocal accent ( TA / TO ) and its relation wit the motoric coordination

Level 3 : Comprehension of the third interval

**Exercise function in the learning process :**

The exercise gives a psychomotor stimulation on two different biomechanical planes: the horizontal one (upper and lower) and the sagittal one. The learning process is stimulated even on a visual level (reading of the score and call response) and on an auditive level (singing the tonic interval- third interval). The exercise trains the mnemonic capacity.

**Exercise Description :**

The participants are divided in two sections A and B (males/ females if possible) and they are disposed one in front of the other as if they were facing a mirror. Starting from the pentagram transcription they have to find their motoric coordination (Intro Level). On the first level the A group reads the score and the B group tries to respond keeping the coordination and the numerical impulses under control, after that they play the inverted roles. On the second level the communication turns from numerical to syllabic and the execution is the same of the first level. On the third level the exercise acquires the musical aspect through the use of the third interval in association with the motor system.

## **6. CONSIDERATIONS**

The aim of the exercises for the musical learning process is the ear-training. The Voice BAPNE® method manages the auditive education and the stabilization of the third interval in the vocal by using the movement and the pulsation through a bodily comprehension. There is even a mnemonical advantage that comes from the association of the vocal and the body (accent use). The neuro-scientific research proved that this kind of exercise by stimulating the mirror neurons facilitates (and accelerates) the learning process.

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