



MUSIC AND THE ARTISTIC RHYTHM - PSYCHOSOMATIC IMPLICATIONS

FRĂȚILĂ MARIANA¹, VELESCU OCTAVIAN¹, COJOCARU DANIELA¹, VELESCU ILIANA¹

Abstract

Aim. The aim of this paper is the study of rhythmic phenomenon in relationship with humans through art and movement in general.

Methods. The methods used have focused on description of the rhythmic phenomenon in general, and then analyze it in various areas from exact sciences to the arts and gymnastics. On the other hand, our intention was to observe the psychological impact of the rhythm on those people who interact with these arts.

Results. The results indicate a constant presence of rhythmic phenomena in the mentioned areas and show that rhythmic phenomenon in association with music or dance can change the moods of certain patients.

Conclusion. The conclusions state that rhythm is an integral part of our lives, from the natural physiological, presented under the form of breathing or heartbeat up to the psychological factor influenced by listening to a certain type of music or performing rhythmic exercises or looking at a fine art object.

Keywords: rhythm, movement, musical rhythm, rhythmic gymnastics, psychosomatic emotional impact.

Introduction

The notion of rhythm is a concept and a complex phenomenon that over time in different historical periods (from ancient times until now) has preoccupied many experts from different areas as art, aesthetics, philosophy, literature, science and even economy. Etymology of the word rhythm is derived from ancient Greek and involves the idea of movement, as succession of phenomena and processes of the material and the spiritual world (Giuleanu, 1986).

As defined in the Explanatory Dictionary of the Romanian language, the rhythm is understood as timing of movements, activities or processes, a regular repetition at certain intervals of the same moments.

Various considerations or definitions about rhythm involve simple or complex meanings that reflect on one hand, concerns, character, direction of some researchers of specific historical period (for example an ancient logical thinking), and on the other hand, the evolution of this concept and understanding its determinant principle or element in a particular domain (artistic, technical, economic, medical, etc.).

The rhythm is the phenomenon of evolution in time and organized succession of all the activities, processes and events in nature, society, physical and mental life of people (Giuleanu, 1986).

In ancient Greece, Heraclitus (576-480 BCE) considered that the rhythm represented moving. Everything is moving he said movement in space or changing in time (Edgar, 1954) and from The Laws of (665 A) Plato we find that the order of movement is called rhythm (Giuleanu 1986). In

order to be considered a rhythmic movement it must be organized and conducted by certain laws and not by chance.

Regarding the arts, the organization must determine the effects on higher levels to produce: affective states to impress human, to enthuse (Giuleanu 1986).

Methods

The rhythm in arts

At the artistic level the rhythm is manifested in various arts such as poetry, music, dance, painting, sculpture where it acquires the importance of an expression element that determines finishing of the artwork. It is capable of shaping the message, the meaning or content.

At the same time, it can become a primary mean of expression, which can communicate images, emotions, impressions, feelings, ideas. In this direction the rhythm may even become an element of personal expression, being subjective, having the power to highlight the author's own attitudes or moods who through his artwork passes them to the audience.

Goethe says that anyone who invents a new rhythm make blood to circulate in our veins as a whole new way. He owns our pulsations, or enables them calm their course (Giuleanu, 1986). Artistic rhythm can be understood, therefore, as the time course and succession organized on high level - aesthetic, creative, emotional - of elements of expression specific for each art (Giuleanu, 1986).

The rhythm in Fine Arts

In art the rhythm is defined by certain specific

¹ Department of Music, Theatre and Plastic Arts, Faculty of Arts, University Ovidius from Constanta, ROMANIA

E-mail address: velescudo@gmail.com

Received 11.10.2015 / Accepted 14.11.2015



methods, depending on the nature of each art expression. The universal character results from finding the rhythm in those arts where the presentation of artwork is not a subject of temporal deployment.

Thus, it appears in the visual arts like painting, architecture and sculpture where it can be considered as a periodic repetition of architectural elements or decoration, or as a suggestion rhythmic movement with the help of color, light and shadows, surface lines and volumes in the plastic arts (Giuleanu, 1986). Here the rhythmic phenomenon manifests itself rather under the temporal synthesis form which is achieved through nerve impulses in the viewer's mind ordered in a single image, which in nature occurs in an ongoing sequence of events.

Rhythm in sciences

The ideas that come from the exact sciences such as mathematics, physics or astronomy highlights rhythm as an integrated element of mechanical movement. It is seen as a gradual progress, gradual action, faster or slower development of an activity conditioned by certain factors.

This implies the idea of periodicity or cyclicity, existing in almost any natural phenomenon such as the movements of the stars, the seasons, day and night. Based on these models, the mechanisms built in the technical field are themselves dependent of periodic movements from the clock pendulum or metronome beats to the organization of public transport or daily rhythm of a society in general.

In philology the rhythm is analyzed through poetry which is organized as a symmetrical and regular succession of accented and unaccented syllables of a verse. Depending on accented and unaccented syllables the ordering can establish a specific rhythmic cadence.

In rhetoric, rhythm and tempo of speech are often defining elements. Demosthenes, Plato, Aristotle believed that the rhythm of speech accompanied by an appropriate intonation can affect a text message. At the same time, tempo or rhythm of speech are often specific elements of language being different from one language to another. For example, Italian or French language has an accelerated fluency opposed to German or Russian.

Studies in areas like philosophy and psychology reveal the concepts of prominent representatives Hegel, Wundt, Mach, etc.

Referring to the rhythm, they attribute to the rhythmic phenomenon a character of periodicity. It is, therefore, considered that rhythm is the basic core of an artwork, and at the same time, the

rhythm is conferring organic unity of parts of an artwork.

The philosopher Jean Jacques Rousseau (1772-1778) known for his concerns in the field of music and didactics describes rhythm as the difference resulting from the slow or fast motion, the length or shortness of time...(Giuleanu, 1986).

Rhythm in music

Musical rhythm is the result of two physical properties of sound. Directly, it is determined by the duration of sound (the time existence of sound) and indirectly by the intensity which organizes through accents the sequence of durations. Rhythmic accents (of duration or division) are those that hold the key to individualizing rhythmic structures thus identifying several categories grouped according to the number of items in bisyllabic, trisyllabic or by type in binary, ternary or mixed formations.

Quintilian (sec. I - II. E.N) defines the rhythm from a musical perspective starting from the ancient Greeks considerations as being made by beats arranged in a certain order forming an organized ongoing phenomena and processes in time. Hugo Riemann (1849 - 1919), a major German musicologist, approaches rhythm as a combination of three distinct elements: proper rhythm, musical meter and tempo.

Vincent d'Indy (1851-1931) suggests another interesting definition of rhythm being considered as the order and proportion in space and time (Giuleanu, 1986). Friedrich Schelling (1775-1854) attributed several meanings of musical rhythm believes that everything that can be called truly beautiful in music or dance It is primarily due to the rhythm and that it is "music in music" (Moos, 1902).

Jean Jacques Rousseau goes further integrating the periodicity of musical meter succession in defining the musical rhythm considering that rhythm associated durations of sounds is called today measure (Giuleanu, 1986). There is a new approach in which the developments meter is seen as a defining element of rhythm. The rhythmic events are organized in its view, based on constant pulsations which organized the deployment of elements of musical discourse.

In our country, Victor Giuleanu (1914 - 2007) one of the most respected theorists in the musical field, starting from the definition of the rhythm in art considers the musical rhythm as: the time course and organized succession on a higher level - creative, aesthetic, emotional - of sounds in the musical work of art (Giuleanu, 1986).

Rhythm in dance

Music and sport are not the only experiences that our body takes advantage for obtaining



pleasure. There are other rhythmic and harmonious movements that give us the sensation of floating or flying, dance, for example (Luban-Plozza, Iamandescu, 1997).

In dance, the rhythm is manifested by the timing of steps and body gestures. The area most interested in this aspect is gymnastics whose objectives are clearly stated through a series of physical exercises aimed at educating the body aesthetics, rhythm and musicality (Niculescu, 2012). The elements that make up the means of gymnastics are systematized on several groups of exercises giving birth to various sports branches such as artistic gymnastics, rhythmic gymnastics and acrobatic gymnastics (Niculescu, 2012)

Artistic exercises are characterized by dynamism, rhythmicity, spectacularity, according to music and include: variations of dance steps, artistic jumps, pirouettes, waves, balance items made with or without portable objects (hoop, ball, ribbon), cultivating beauty, expressiveness, specifically skills, the musical education and aesthetic.

The evolution of these exercises has led to the emergence of competitive new branches such as: rhythmic gymnastics and sports aerobic gymnastics (Niculescu, 2012)

In this sense, cohabitation between music and dance is more than necessary, because one of the defining elements of gymnastics is considering the widespread use of musical accompaniment for the encouragement rhythmic expressiveness and movement (Niculescu, 2012).

Like any discipline, gymnastics has an evolutionary course. The permanent development of content has led to the emergence of new exercises causing the occurrence of distinct branches within the same discipline. General gymnastics can be classified in basic gymnastics, competitive gymnastics and applied gymnastics (Niculescu 2012).

Rhythmical gymnastic

Competitive gymnastics has a strongly contest character based on a rigorous selection according to the motor capacity divides itself in several directions.

We find here beside artistic and acrobatic gymnastics, the rhythmical gymnastics which is a sport exclusively female sport branch that became an Olympic discipline in 1984 (Los Angeles). This includes individual and group exercises free only in domestic competitions in the children category, and portable equipment (hoop, ribbon, ball) performed on the support of a musical accompaniment. Here, one of the defining characteristics of movement in the exercise relates to temporal characteristics represented by rhythm - which consists of

alternating the parts or phrases of movement and tempo - that indicates the number or quantity of movements performed per time unit (Niculescu, 2012).

In general, the movement is defined by time points that are considered both rhythm and tempo. Rhythm in gymnastics represents repeated temporal sequence of the parts, and the tempo is frequency of motion actions per time unit, being related to intensity and speed (slow, moderate or fast movements) (Niculescu, 2012).

Results

From the physiological perspective rhythm can be defined as periodicity of a movement, a process or activity and therefore a factor regulator of the most economical energy consumption controlling all activities of the human body (Giuleanu, 1986). According to Karl's Bücher (1847-1930) conception in the activities carried out by the human body there is a binomial rhythmic component corresponding to the concept of rhythm assimilating also the element periodicity.

It is considering various actions such as: lifting and lowering, tension and relaxation, insertion and extraction.

There may be actions of the human body that evolve gradually at a constant rate without the binomial component such as, for example, the heart rate. Moreover, walking, talking, even yawning correspond to an individual own rhythm (Luban-Plozza, Iamandescu, 1997). Every human being possesses its own rhythm, his rhythmic profile which can be developed individually (Luban-Plozza, Iamandescu, 1997).

As a way of motion organizing, rhythm becomes a reality in which man can feel protected. Thus, musical rhythm is an expression of our whole being.

Psychologically we can establish a close relationship between the numbers of musical elements and the rhythmic principles. Thus, the rhythm can serve to create a climate of intense tension (Luban-Plozza, Iamandescu, 1997).

The musical pedagogy takes into account the links that exist between musicality and sense of rhythm. In this area Emile Jaques-Dalcroze (1865 - 1950) did pioneer work creating a rhythmic gymnastics which aims to make its students to live music in more intense way, giving them the opportunity to improvise (Luban-Plozza, Iamandescu, 1997).

Listening to music has generally only benefits. Music touches the sphere of the unconscious that are inaccessible to education, as it is commonly understood, but preference for quality music not only considers education but especially intelligence.



Professor Iamandescu conducted the first studies of music therapy in Romania in the Department of Medical and Psychosomatic Psychology from the University of Medicine and Pharmacy "Carol Davila", and cooperated in this regard with various prestigious institutions in the country and abroad (<http://www.parohia-waldkraiburg.de/files/documente/muzica-prof-iamandescu.pdf>).

Rhythm and its psychosomatic implications

Rhythm awakens the instincts, melody the emotions and harmony the intelligence (Iamandescu). The rhythm, either alone or supported by noise pushed to extreme are able to cause moods close to drunkenness and ecstasy (Luban-Plozza, Iamandescu, 1997).

Between psychosomatic implications of rhythm we can distinguish besides the influences on the fetus or infant, or the joy of the rhythm and movement, clues of growth of psychomotor performance. There are known in this sense intention to introduce the rhythmical music in American industry to increase efficiency in assembly departments (Luban-Plozza, Iamandescu, 1997).

While listening to dancing music we think our foot adhere spontaneous rhythm and a very rhythmic music can lead groups of people which can be pushed into a true "musical action" (how are the endings of rock concerts resulting destructive actions) (Luban-Plozza, Iamandescu, 1997).

Discussion

The emotional and psychosomatic impact

The ability of music to influence the psyche was the subject of hard analysis conducted by distinguished researchers with medical, psychological and musical training. Their studies show that music with frequent changes of rhythm can cause frequent extrasystole. However, the acceleration of musical passages can lead to rhythm disorders in the sense of a extrasystole ventricular tachycardias (Răpițeanu, 2010).

In some experiments, researchers found that when hearing a relaxing piece of music, with slow tempo, physiological parameters like blood pressure or heart rate and breathing may decrease. Many variations of heart rate and respiratory rate they were correlated with the music tempo (Răpițeanu, 2010). Consequently, joyful music pieces with fast tempo have a mobilizing character and have a positive emotional impact due to their stimulating effect.

Similarly, slow music with the character endearing, nostalgic, can induce states of calm, relaxation and tranquility building predominantly

positive moods, by reducing the emotional impact and psychosomatic symptoms.

Dense musical moments with sudden changes of intensity rhythm or timbre causes negative emotions and psychosomatic symptoms like: startles, tension, sweating, headache, tingling (Răpițeanu, 2010).

There is a match between the character or personality features of people and the type of music they prefer to listen. Thus, vigorous people, full of vitality prefer music with a fast paced, dynamic with a mobilizing impact.

People with a temper love music with fast rhythm, with complex harmonic structures, with rich orchestration and frequent changes of intensity and timbre. In addition, symphonic music with harmonic character It has favorable effects in subjects with depression or anxiety, changing the mood and inducing a positive affective state (Răpițeanu, 2010).

Conclusions

Rhythm is a part of the movement. It was the subject of several investigations in various fields starting from observing natural phenomena, science or arts, medicine, philosophy and psychology.

The rhythm broadly defined as the organizing specific elements of expression it is met mainly in the temporal arts like music, dance, and poetry. In poetry, it is found in alternation of the accented syllables with unaccented; in music by organizing rhythmic formulas; and in dance by exercise the body gestures.

However, the rhythm can be seen in arts with a spatial implications as painting, sculpture, architecture. Here the idea of rhythm is induced by some periodicity of the artwork components. Music appears as a support for different forms of dance working together in training the rhythmic skills of those who have accessed this art. It is a always present element in performing rhythmic gymnastics exercises exploiting the relationship between music and body movements.

All these manifestations of rhythm in arts have echoes on the psyche directly responsible to the organization rhythmic influences. More research revealed that music has a number of psychosomatic effects to the listeners. This was demonstrated by observing favorably change of subject moods after listening to slow music or improving production results in the assembly spaces after subjects heard a rhythmic music.

Rhythm is an integral part of our lives, starting from the physiological nature where exist as breathing or heartbeat to the psychological factor influenced by listening to a certain type of music the performance of rhythmic exercises or look of a fine art object. The presence the rhythm defined as



a movement is undeniable in the real world which ultimately means life.

Aknowledgements

Thanks to everyone who helped me to realize this material, which I have provided bibliographic materials and web sources.

References

- Edgar W, 1954, Le rythme musical - Etude psychologique, Paris, Ed. Presses Universitaires de France.
- Giuleanu V, 1986, Tratat de Teoria Muzicii, vol. II, Editura Grafoart, București.
- Luban-Plozza B, Iamandescu IB, 1997, Dimensiunile psihologice ale muzicii – Introducere în muzicoterapie, Editura Romcartexim, București, p. 33
- Moos P, 1902, Moderne Musikästhetik in Deutschland – Leipzig, Hermann Seeman Nachfolger.
- Niculescu G, 2012, Gimnastica de bază - Curs în tehnologie IFR, Editura Fundației România de Măine, București, p. 23
- Răpîțeanu C, 2010, Impactul emoțional și psihosomatic al muzicii simfonice la pacienții hipertensivi în Revista Practica Medicală – Vol. V, Nr. 2(18), An 2010, p. 102 la http://pm.medica.ro/articles/2010.2/PM_Nr-2_2010_Art-6.pdf
- <http://www.parohia-waldkraiburg.de/files/documente/muzica-prof-iamandescu.pdf>