
MUSIC AS THE BASIS OF BIOLOGICAL AND ANTHROPOLOGICAL CONSTANTS

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Annotation

Music is a special form of culture that has its own meaning, a set of images, mechanisms of influence on a person and society. Influencing all the structural and semantic foundations of society and personality, it specifically affects the psycho-physiological state of a person. Because of this, music acts as a biological and anthropological constant, which transforms it into a sense-forming element of the environmental friendliness of the existence of the individual.

Keywords: music, form of culture, musical ecology, anthropological constant.

Music is the most complex polymorphic, polyfunctional energy formation, the essence and impact of which depend on many components. This transforms it into a special form of culture, which has its own meaning, a set of images, mechanisms of influence on a person and society. It is included in the system of human coordinates, which it transforms into the energy-informational components of modernity. The presence of music in all spheres of human existence allows us to consider it as an indicator of thinking, activity, age, health status of a person and humanity. It permeates all spheres of human life and allows you to establish its place as a quality, a powerful spiritual and biological core, on which all human life is strung.

Music closely interacts with human health, maintaining, strengthening or destroying its optimal state. Numerous studies confirm that a person is a sounding microcosm and each direction of music plays a certain role in setting it up for inclusion in forms of life. Because of this, music acts as a biological and anthropological constant, which transforms it into a sense-forming element of the environmental friendliness of the existence of the individual.

The problem of the relationship between music and health has long been noticed by philosophers and doctors. There have been many attempts to describe the influence of music on human health. It can be said with confidence that there is not a single philosopher and physician who has not tried to analyze this visible and very tangible connection between sound, melody and health. If health is understood as a mental or mental state, then this connection is obvious and does not require proof. Now science has got the opportunity to correlate these dependencies, based on the wave theory of the existence of nature, society and personality. Since music in its essence is a pronounced wave structure, then the personality, as a microcosm, is subject to this influence to an extreme degree.

The data of many researchers give reason to say that the impact of music begins even before birth. Malyarenko N.V. (1985) in the course of her research revealed that it is advisable to influence the formation of personality from the prenatal period. It turned out that the fetus perceives certain music depending on its development. So, in the first weeks of existence, he responds better to spiritual music. His reaction is more in line with the music of the religion in which his parents were brought up. At 4-7 weeks, folk music is considered the most acceptable, as it puts into the child ideas about the national

characteristics of his culture, mentality. At 8-17 weeks of development, he responds very well to classical music, favoring the music of Mozart and Bach as the most intelligent composers. If we compare this with the specifics of the formation of the fetus, then it turns out that it is during this period that the main number of intellectual cells is formed, the so-called "explosion of neurons", an overabundance of brain cells, half of which are not used by a person and, as a result of stagnation, atrophy (10). If you fill them with information during this period, then you can drastically reduce the time for teaching a child elementary truths, the basics of mathematics, chemistry, geography, and other knowledge that requires mechanistic memorization. Subsequently, classical, melodic music, selected according to special programs, is well perceived. They have already been created and used in the world as programs for prenatal education of babies. Rock music, jazz and a number of others are not perceived at all by the fetus, causing him great anxiety, stress, an extremely increased heart rate, and other negative positions. M. Lazarev (10) revealed that a powerful intellectual, spiritual and aesthetic development of the fetus is possible under the influence of music. The "Sanatal" center he created provides data that children who have undergone prenatal musical education get sick less, or almost do not get sick, their teeth grow earlier, they start walking earlier, their intellectual potential corresponds to the highest indicators. Studying at school is practically not a problem.

Music is now used by many doctors and psychologists to relieve stress, cure various diseases. It was revealed that the brain has its own melody and in a healthy state differs from the patient, in a calm state from an excited one. But for the first time he noted the features of the impact of music on health by Democritus, who believed that listening to music can be cured of infectious diseases.

A.S. Dogel (2) with the help of various devices established an increase and slowdown in blood circulation, a change in the pulse wave, changes in internal secretion, in striated muscles, which occurred depending on the perception of various components of music - sounds of different heights, major and minor modes, consonances and dissonances, ascending and descending movement of melody, tempo, rhythm, dynamics, simple and complex harmonies. I.P. Pavlov and V. M. Bekhterev showed that this happens due to the response reactions of the organism, its central nervous system. Bekhterev V.M. in particular, he emphasized that the establishment of the causes and mechanisms of the influence of music on the body gives knowledge of how to cause or weaken an excited state.

PN Anokhin believes that sound vibrations perceived by the hearing organs affect the human condition, affecting a certain area of the subcortex of the brain. He notes that minor musical combinations require more energy from the body than major ones. This conclusion confirms the empirically established fact that "a conditioned reflex to minor combinations is developed faster than major ones" (2). It follows from this that the skillful use of melodies and rhythms can be a factor regulating various pastimes.

Currently, many studies are underway aimed at identifying the influence of weak and superweak fields or radiation. A number of studies indicate that the acoustic hologram (energy-informational holographic matrix) of a person is the main mechanism for implementing the genetic development program. The concept of the dual nature of man is no longer in doubt: one of its components has a wave nature. A person's own microwave radiation carries information about the state of the body.

In 1998, I. Rozin and V. Bogdanovich co-authored a method for studying the impact of works of art, especially music, on the human body using infrared spectroscopy. The method allows you to read and take into account the qualitative and quantitative parameters of the impact of a work of art on the body with an objective assessment of the latter. They allow you to exercise control over the process of interaction between the subject and the object, make it possible to fix it and save it for a long time. For

example, by taking a picture of a person being tested, it is possible to carry out extended psychosomatic and somatic diagnostics with the simultaneous selection of allopathic or homeopathic remedies. By letting a person listen to one or another work, and then, having listened to the latter's singing, one can not only make a fairly clear diagnosis, but also develop a treatment method. Moreover, the studies presented on the basis of the clinic of the Military Medical Academy of St. Petersburg indicate that accurate and clear homeopathic nosodes and autosodes can be made from the singing and drawings of the test person.

Thus, the proposed methodology makes it possible to draw a number of extremely important conclusions and practical steps, in particular, to translate empiricism into an exact science; carry out diagnostics of psychosomatic and somatic conditions; carry out initial correction; accurately select allopathic and homeopathic remedies to control the entire process of correction and treatment. (Rozin I., Bogdanovich V. Study of the process of art-therapeutic influence by methods of infrared spectroscopy. St. Petersburg, 2000).

At the same time, the Scientific Research Institute of Music Therapy was established in St. Petersburg, in which they are purposefully engaged in the study and treatment of music. These data are so interesting and significant that it is advisable to give them in sufficient detail. Its founder is a music therapist R. Blavo (St. Petersburg). The music therapy albums created by the author present compositionally complex music recorded using modern technologies, taking into account the content of various treatment programs. R. Blavo's compositions provide for such mechanisms of the therapeutic effect of music therapy as catharsis, emotional release, affect correction, increased availability for conscious experience of psycho- and sociodynamic processes, increased social activity of patients, acquisition of new means of emotional expression, optimization of conditions for the patient to assimilate new relationships, installations, vital singing (in particular, through the development of aesthetic needs).

He developed indications and contraindications, method formula, material and technical equipment and requirements for conducting music therapy procedures.

The effectiveness of the use of Rochelle Blavo's music was tested by the method of clinical and clinical-physiological tests on the basis of the following research and clinical institutes. SSMU conducted a study of the influence of Blavo music on the morphological composition of peripheral blood and blood platelets in 47 volunteers of senior students. Age surveyed 21-28 years. All subjects had no complaints at the time of the music sessions and were considered practically healthy.

The studies were carried out according to the blood test scheme, which was taken from the pulp of the fingers before and after music therapy. In the study of the morphological composition of blood by smears, the following changes were revealed:

1. Blood eosinophils decreased after a session of music therapy in 80% of the subjects, and increased in 20%. Moreover, what is especially important, all these fluctuations in terms of absolute quantities did not go beyond the normal fluctuations of this indicator.
2. Blood lymphocytes: the total number decreased in 83.3%, and increased in 16.6%. A more detailed analysis revealed that the blood of all subjects approached the ideal formula of a healthy young man.
3. Platelets. The platelet is a key cell for maintaining blood microcirculation. It turned out that after a session of music therapy, the number of platelets increased in 63.3%, decreased in 27.2%, and the number of platelets did not change in 10% of the subjects.

4. Monocytes. After a session of music therapy, when counting monocytes on blood smears, it turned out that in 58% of cases the number of monocytes increased, and in 25% their number decreased, in 17% this indicator remained unchanged.

The results obtained were compared with the indicators of the blood formula in 2 control groups of students listening to the music of P.I. Tchaikovsky and hard rock music. A comparative analysis showed that after the music of Blavo the total number of lymphocyte cells increased, but after the music of P. Tchaikovsky it remained unchanged, as well as after rock music.

Similar studies were carried out in Samara, Moscow, St. Petersburg on groups of patients aged 8 to 70 years with various diseases, including days with high geomagnetic activity. In almost all cases, there was a persistent stable improvement, which lasted quite a long time. After systematic music therapy, the results were fixed for several years.

The conducted studies have shown that the musical compositions created in the NNI of Music Therapy and Traditional Medicine by the doctor R. Blavo have a high potential for emotional impact on the mental and somatic state of a person. The mechanism includes a wide range of forms of auditory correction of homeostasis, normalization of the affective sphere, and optimization of cognitive processes.

Clearly pronounced reactions were registered, indicating the participation of the immune system, which can be judged by positive changes in the leukocyte formula. The dynamics of the number of platelets indicate the normalization of the blood microcirculation system.

Considering the impact of Blavo music on the state of hemodynamics in patients with elevated LD, it can be concluded that it has a positive effect on patients with arterial hypertension.

The adaptive effect of Ruschsl Blavo's compositions was established in observations on two groups of people, fundamentally different in psychological characteristics and living conditions: athletes and prisoners. In groups of athletes, in the process of listening to music, the time for restoring sports form, gaining mental and physical comfort, and self-confidence was significantly reduced.

In the conditions of institutions of the system of execution and punishment, music had a positive effect on the psychological climate in small groups, performance indicators improved, and the number of violations of internal regulations decreased.

The music of R. Blavo can be used both as an independent and in a complex of therapeutic procedures... Thus, the recommended musical compositions can be considered as a method that has a general adaptive effect, which has a noticeable effect on the stabilization of hemostasis, the affective sphere, and vegetative-vascular functions.

The study of the relationship between music and a person makes it possible to assess this state and diagnose changes in the electromagnetic circuit (aura) by the influence of radiation from the outside, including the frequencies of the sound musical range. One of the laboratories, the laboratory of "Slavic rhythms" performed by the orchestra "Boyan" (conductor People's Artist of Russia and the USSR, Professor Poletaev A.I.) uses methods for assessing the influence of specific musical works on the state of the energy-information holographic matrix (aura) before and after listening (4). The experiments carried out give the following data:

When using the technique of aurography on biologically active points, there is an alignment of deformations at the level of the 4th and 5th energy centers (chakras "anahata" and "vishuddha"), which indicates the "feeding" of the body with positive energy and a positive therapeutic effect;

When using a technique that registers the own radiation of the energy centers (chakras) of a person before and after listening to the "Slavic rhythms", which allows, by computer processing, to register and highlight the main characteristics of the information and control signals of the body, it was revealed that the values of these characteristics shift towards increase. This also indicates the energy "feeding" of the body.

It is especially important to emphasize the need to "feed" the national music, because the frequency characteristics of the genomes of composers-"receivers", for example, the Chinese, will differ from the frequencies of the genomes of composers with Slavic roots.

The studies of Bulgarian scientists have proved that if less than 60% of music with national roots sounds in the electronic media, theaters, concert venues, then such an ethnic group loses its immunity. In a recent interview with "Parliamentskaya Gazeta" (No. 24 of February 7, 2003), the wise Confucius is quoted: "The right music can govern the state." Now these wonderful words can be confirmed with the help of instruments.

It is known that not only Eastern, but also Proto-Slavic cultures knew well and mastered the methods of diagnosing and treating various abnormalities in the body with musical works. So, the problems of articular diseases, sexual disorders were treated with clearly built, to a certain extent, marching music, performed, as a rule, in bass against the background of drum accompaniment. This, as it turned out, activates the lower energy centers and brings them to a normal state (Belovtsev A. Music of the Slavs - music of health. M., 2001.)

A significant number of positive results made it possible to create and widely use the data obtained in practice, in particular, when creating rehabilitation centers in the Northern Sea Fleet for guides or cosmonauts. Recommendations on the use, in particular, of recordings of "Slavic Rhythms" performed by the "Boyan" orchestra are appropriate not only for rehabilitation centers, but also for preventive purposes, preventing nervous breakdowns.

It is known that "brain waves" are electromagnetic waves of low intensity with a frequency of 1 to 30 Hz (oscillations per second) emitted by the human brain. Thus, frequencies of 1-3 Hz (delta waves) are important for all healing processes and support the functions of the immune system. The next range of 4-7 Hz (theta waves) increases the ability to memorize, learn, inspire to dream, imagine fantastic pictures. The range of 8-12 Hz (alpha waves) corresponds to a state of feeling of well-being, comfortable relaxation and the ability to think calmly and accurately without feverishness and agitation. In the range of 13-30 Hz (beta waves), a person is in a waking state.

Thus, by selecting records from the repertoire of the "Boyan" orchestra, as well as other musical forms, one can (and should) bring one's spirit, soul and body into a harmonious state. (Gordina L. "Boyan Orchestra and the recovery of a person" M., 2000).

The well-known researcher Don Campbell, summarizing the results of numerous Western researchers, came to the conclusion that calm classical music improves the functioning of the human brain, lowers blood pressure and activates the body's immune system. He strongly recommends listening to classical music for fifteen minutes a day for those who experience stress overload in their work. First of all, this concerns politicians, businessmen, lawyers, surgeons and journalists. As established in the course of numerous experiments, calm music leads to a decrease in the amplitude of electromagnetic waves of the brain. This has a calming effect. At the same time, the work of the left and right hemispheres is synchronized, which dramatically increases the ability for intellectual activity.

Studies have also shown that under the influence of classical music, important changes in the composition of the blood occur, the amount of hormones that cause an overstrain of the nervous system is sharply reduced. At the same time, the concentration of interleukin-1 protein in the blood increases, which is one of the most important elements of the body's immune defense system against viruses. (D. Campbell. Health comes to the music of Vivaldi. M., 1999). These positions are also joined by the energy concept of music, which has always been known to mankind and is now expounded by V. Buslaev (V. Buslaev. Music-energy and human development. Orakul, 1999, p. 28). Features of music have a serious impact on the formation of not only musical, but also the physiological culture of a person and people. The latest and, at the same time, the most ancient data confirm that music not only invigorates, heals, depresses, but also develops certain traits of a person. It is known that sound is a special category with extraordinary strength and power, which is capable of creating and dismembering a form. Not coincidentally, the Bible opens with the famous phrase "In the beginning was the Word, and the Word was God, and the Word was GOD." That is, sound is that instrument, that wave, which creates the form. Moreover, this division is associated not only with the genres of music, its thematic focus, but also with the instruments used, each of which has not only its own sound, but also has pronounced functional accessories.

The question of the instrumental impact of music has been worked out by M. Dolgushina, who believes that the specifics of the instrumental impact of music are being studied by many scientists, these studies are becoming extremely relevant at the present time, when the world is oversaturated with sounds and the latter become the main source of human fatigue and depression (6). Modern information, superimposed on ancient knowledge, gives interesting indicators. The instrumental impact of music manifests itself in the following way. Percussion instruments affect the lower energies of a person and have the ability to strengthen or weaken his will to live, energy, desire to move, etc.

Wind instruments are focused on the formation of the emotional sphere. They can increase or decrease the reserves of sexual energy, stimulate or dissipate it, etc. The mental (intellectual) sphere most of all corresponds to keyboard instruments, which are most clearly manifested in pianistic, piano sound. They allow you to clarify, build a mental series, streamline it and enter it into a fairly strict form. Stringed instruments have a completely different sound structure. They directly affect the heart chakra with the energy of love, compassion, sensitivity, etc. Strings, especially violins and cellos, guitars, balalaikas, etc. are oriented towards the development of compassion. Vocal music affects all energy centers. But most of all, on the throat chakra, which is responsible for the interaction of people, influence on them, submission to one's opinion. Intuitive and cosmic development is influenced by the sounds and works performed by the organ - the most voluminous and multifunctional sounding instrument, a monumental organism that creates a whole musical sounding world and introduces a person into another dimension.

The analysis of the impact of the instruments is, of course, not complete. Instruments such as accordion, button accordion combine organ sounds with a special ethnic touch. The new, synthetic sounds that are now appearing make the process of musical influence on a person completely limitless.

Music, like no other art, can bring the body into a certain state.

But not all types of music are beneficial. So, rock concerts should be used very carefully. The fact is that power tools emit extremely low sounds that are not perceived by ear, but are well perceived by the body. They, reinforced by the most powerful sound, have a destructive effect on the body. So, according to numerous data, it is known that within 10 minutes after being at such concerts, a person cannot

remember the multiplication table, his name, you can put any program into it, which is often done at concerts. In these processes, calls to use drugs, calls for unmotivated aggression, indiscriminate sex, etc. are superimposed on the sound. It is no coincidence that in all countries, concerts of rock musicians are accompanied by reinforced police and police squads, as there is a high criminogenicity and criminal suggestibility of listeners. This is not at all about abolishing all rock works, but health is too important a factor to turn a blind eye to these data, known throughout the world.

According to some reports, a number of ancient chants, mainly from early Catholicism, enhance the activity of oncological cells.

At the same time, biologists have found that many types of music have a pronounced healing effect. Bell ringing has long been considered a means of suppressing viruses. In Rus', during the plague epidemics, it was known that where the bell rings 4 times a day, there were no epidemics.

Laboratory data give convincing arguments that classical music, namely the music of Grieg, Mozart, Tchaikovsky, suppresses the action of microbes, and, in particular, staphylococci. Up to 40% of microbes of this direction die from their products. That is, the activity of the organism increases and is able to localize their action. This is a very important fact, since staphylococci are known to be extremely resistant microorganisms, which are extremely difficult to cancel.

At the same time, music can also have an analgesic effect. In this case, it affects the so-called "Pachin's bodies", located in the nerve bundles of the skin, in which nerve pain endings are also localized. These vibroreceptors pass in the same bundle with pain receptors. They perceive from 16 to 200 hertz vibrations and can neutralize the effect of pain shock, since when music is perceived, competition is created between them, as a result of which the effect of pain stimuli is weakened or disappears. In addition, acting on the central nervous system, music, in particular, cheerful, simply distracts a person from the problem of pain, he does not fix attention on it.

According to S. Shamorjan, the human voice, of course, has an extremely pronounced healing effect. It is able to evoke a variety of emotions and moods, to a certain extent change the composition of the blood and directly affect life expectancy. It is known that opera singers, singers performing melodic works, as a rule, have strong, good health, live longer and better.

Singing, especially melodic major music, treats broncho-pulmonary, cardiovascular diseases due to the action of two systems. Firstly, it is the sound itself, which tunes the cellular metabolism to the correct young rhythm of work, and secondly, vocals, especially their own singing, give very special chemical reactions. In this case, inhalation becomes 3-5 times shorter than exhalation, as a result of which carbon dioxide accumulates in the body, changing all the reactions of the body in the optimal direction. In this case, singing is akin to yogic breathing, hiking in the mountains, breathing according to various methods, including Strelnikova. Singing allows you to achieve this effect much faster and better, since an emotional mood is also connected to it, enhancing these purely therapeutic effects.

Thus, we can say that music has a pronounced healing, healing and preventive effect, which humanity has tracked, measured and used throughout the entire period of its existence. Now such an era of the development of society has come when these data are summarized and are widely used in practice.

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