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Nietullaev Rustam Asanovich
Nukus branch of Uzbekistan State Institute of Arts and Culture

Teacher of the Department of Technogenic Art

rustam.niyetullaev@gmail.com

https://orcid.org/0009-0001-7111-9231

MUSICAL SOUND AND ITS PROPERTIES

Annotatsiya

Ushbu maqolada musiqiy tovushlar va ularning xususiyatlari, turlari va musiqa asboblarining chiqaradigan tovushlari haqida malumot berilgan.

Kalit so'zlar

tovush, musiqa, balandlik, qattiqlik, tembr, cho'zim, past, baland.

Abstract

This article provides information about musical sounds and their properties, types, and sounds emitted by musical instruments.

Keywords

sound, music, pitch, hardness, timbre, length, low, high.

The world in which we live is full of various sounds. For example: howling, tapping, rustling, creaking, and other similar sounds are all sounds of real reality. These are called noisy sounds. The singer's voice and the sounds emanating from musical instruments - rubab, flute, chang, violin, piano, oboe, trumpet, and others - are called musical sounds.

All sounds are distinguished by their high and low or long and short duration of sound, as well as their inherent colorfulness. The difference between noisy and musical sounds is that each musical sound has a clearly defined pitch. Noisy sounds do not possess this property. The main means of music, that is, the means of expression, are musical sounds. However, noisy sounds are also widely used in modern music. The sound system serves to express musical thought and embody artistic images. The character of each musical sound is determined by four main features. These are pitch, hardness, timbre, and duration. The loudness of the sound depends on the vibration speed of the oscillating body. The faster the vibration, the louder the sound is heard, and vice versa. Thus, sounds are divided into high, medium, and low by pitch. High sounds can be described by such words as "elegant," "gentle," "ranging," "crystal." The soprano voice part in choral works mainly encompasses high notes. The violin, flute, and flute also emit loud sounds. Low sounds are more often described by words such as "thick," "rough," "deep," "soft." Musical instruments such as the trumpet, double bass, and bassoon have low pitches. The middle notes are characteristic of the choral voices of the alto and tenor, and of the instruments of the cello,

clarinet, valtorna, rubab, and dutar. Words like "soft," "thick," "like a human voice" can be used for them.

The loudness of sound depends on the amplitude of the body's oscillations. The wider the amplitude of oscillation, the louder the sound is heard, and vice versa. The degree of hardness (resonance) is called dynamics. The duration of sound depends on the duration of the body's oscillations. Real time is measured in seconds, minutes, hours, etc. Time in music is measured by the duration of a specific sound. In music, each sound, in its duration, is organized with a certain degree of precision with the preceding and following sounds, entering into a relationship determined by time. Based on this, a clearly organized time-dependent structure characteristic of music emerges.

The timbre of a sound is its colorfulness. The fact is that any sound, especially musical, has a complex structure. The sound source (body) oscillates as a whole, creating the fundamental vibrational velocity, i.e., the low-pitched sound that is most audible. This sound is called the fundamental tone. However, at the same time, half of the total length of the body, one-third, one-fourth, one-fifth, etc., also oscillate. The vibration speed of each part creates its own corresponding sound. Such a second, third degree sound louder. Because the shorter the length of the body, the higher its vibration speed and the higher the pitch of the resulting sound. These additional, structural tones are called overtones or harmonics. In the resonance of the main tone, the ratio of overtones in terms of loudness, their presence or absence, emphasizes the individual quality of the sound, its dissimilarity to other sounds. For example: we can distinguish the ringing of a bell from the ringing of a rattle without seeing it, or the timbre of our mother's voice sounds "different" to us among many voices. These four qualities are certainly manifested in each sound, as well as in the combination of a number of sounds that express musical thoughts and images.

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