

# HARMONIOUS RESONANCE: EXPLORING THE SONIC LANDSCAPE OF MUSIC

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## ABSTRACT

The present paper highlights the distinction of terms NOISE and SOUND and bearable rhythmic or harmonious sound; Music. In general, meaning of noise is considered as unpleasant, loud, or disruptive to hearing. It can be produced by many ways- man's vocal cord, running engine, a loudspeaker, machine tool and so on. From scientific point of view, there is no difference between noise and sound, as both are vibrations through a medium, such as air or water. The difference arises only when the brain receives and perceives a sound. Sounds can be used to communicate, warn, navigate and as a form of entertainment. Noise is an unwanted or unpleasant sound. Thus, all noises are sounds while all sounds are not noises. People may perceive sounds and noise differently. Sound is a crucial aspect of our everyday lives. Most of us communicate verbally, and it's hard to understand body language alone. This makes sound the primary source of information. Words help us to be clear and hearing a voice can already tell a lot about the message. The aim of this research paper is to analyze while concentrating on both the advantages and disadvantages of listening to and interacting with sounds and music. Without sound, music would not exist and would be nothing. All sound is used to create music. The opposite is untrue, though. Not every sound has a musical quality.

**Keywords:** Music, Noise, Sound, Hear, Air, Water

## INTRODUCTION

Noise, Sound and Music, are the three different words. Science is the only subject which has solid base to prove something, give logical reasons to answers which, when, why and so on. In science, the definition of sound is the mechanical radiant energy that is transmitted by longitudinal pressure waves in a material medium (such as air) and is the objective cause of hearing. Thus, word sound itself represents mechanical radiant energy. Both noise and music are combinations of sound waves at various frequencies. With a defined dominant frequency, music's component frequencies are rational and discrete. There is no clear dominating frequency in the noise component frequency, which is random and continuous. According to certain theories, the harmony of sound in multiple dimensions, including time, space, and frequency, is what makes music aesthetically pleasing (Brattico et al., 2017). According to this point of view, musical sound is balanced so that listeners can distinguish relevant musical information in a unique way. Contrarily, noise is generally more uncontrolled and less restrained. As a result, it carries a lot of negative implications that apply to both subjective evaluations and auditory descriptions. Furthermore, there are three main uses for the term "noise": (1) noises that may be extremely loud; (2) undesired sounds; and (3) statistical processes that result in random and uncorrelated events and sounds.

Unpleasant sound, which is known as noise, is avoided by human beings. Our ears can tolerate a limited range of sound. Sounds below 70 decibels are safe, while sounds above 70 decibels are harmful. Prolonged exposure to sounds louder than 85 decibels can damage hearing. Thus, unwanted sound or noise not only damages human physically but gives

exposure to intense levels of noise which can cause stress and personality changes. Noise is also known to be a factor attributed to violent reactions.

The term sound is a type of energy made by vibrations. As the object vibrates, it causes movement in surrounding air molecules and these air molecules bump into the molecules close or align to them, to vibrate them also. So, if sound is an energy, this energy is also the ability or capacity to do the work. A pleasant, harmonious, bearable sound, rhythmic with adding up flavours of proper lyrics turns a sound not only into a good music but a Great Music. When human beings listen a sound in the name of music with their interest and choice it influences their mood swings. Music even builds their mood on to do whatever they want according to their capacities or abilities.

## **MUSIC**

It's an art of sound that expresses ideas and emotions in significant forms through the elements of rhythm, melody, harmony and instruments. The written signs represent the sound of music. Music provides a sound track for our lives. It can invoke feelings and inspire us to move, sing and dance. Therefore, in order to theoretically explain this music consumption, it makes sense to investigate young adults' attitudes towards loud music. In reality, music is more complex than just the structure of sound. The psychological effect of sound, which is seen as a multisensory experience, is more significant. According to this perspective, music can be examined from the perspective of its auditory, tactile, or motor induction properties. It is also "felt" in addition to "heard." Music thus has a base with in science. Sound is produced when something vibrates and those vibrations are brought to the ear as sound waves with it's mathematical, varied in pitch, volume, tempo, and rhythm. The origin of music itself is very difficult to determine because in all probability, it is likely to have begun with singing or clapping or beating the hands on different surfaces, rolling the hands for which there is record. Music and sound affect upon our body and mind and we can react to both either positively or negatively. Much depends, in this regard, on the frequency spectrum and the level of the sound stimuli which makes it possible to set music apart from noise.

## **IMPORTANCE OF MUSIC IN HUMAN BEINGS**

Music stimulates the brain which in turn helps with pain relief, reducing stress and memory. Harvard research has shown that relaxing music may lower blood pressure and heart rate after physical exertion. Music can raise someone's mood, get them excited, or make them calm and relaxed. Music allows us to feel nearly or possibly all emotions that we experience in our lives. There are endless possibilities in music. Benefits of music are given below:

- Music: a language to communicate with Universe
- Key of Creativity
- Makes education more easy and enjoyable

- Has Spiritual powers
- Creates one's mood on and fills with emotions
- Helps to relax body and mind
- Food for Soul
- Connects people or society
- Controls the emotions
- Provides peace and sense of satisfaction
- Boosts positive vibrations in the air
- Has remedial effect to control temper, blood pressure
- Supportive in Meditation
- Kids respond and learn quickly while learning rhythmically
- Music has healing capacity in form of Mantras and Chants

## **NOISE**

Noise is described as the annoying sound that disturbs the mind and body. Since the start of the twentieth century, the term "noise" and the concept of noise itself has been widely used and discussed in Western music. In the context of electroacoustic music, it has taken on a variety of interpretations. Sometimes, these interpretations have been found confusing. But gradually, it has evolved to indicate something very specific. Science and technology advancements have given rise to multiple definitions for noise, each with a different level of concreteness. Noise now refers to a sound that is made up of random time fluctuations or a wide frequency spectrum. It is also known as "acoustic noise" in the context of acoustics. When Cowell mentions the noise which is present in all musical tones, he specifically mentions the noise, which includes the assault of a bowed string instrument, the "breathiness" of a flute, etc.

These sounds are regarded as residual in the context of signal processing, meaning that they are differences that cannot be directly represented. Both a stressor and a distraction can be found in background noise. A reduction in background noise at work appears to mitigate the detrimental consequences of psychological job stress, according to Leather et al. In the past, noise has been viewed as an annoyance by the public, and numerous publications have documented the detrimental consequences of this undesired, extraneous sound.

- Noise has a negative impact on sleep quality and productivity.
- Noise has a negative influence on alertness and cognitive function.
- Irritability and a decline in focus.

- Stress can cause high blood pressure.
- Hearing loss and damage to the ears.

## CONCLUSION

Depending on the pitch, loudness, amplitude, and frequency of the sound wave, there are many different kinds of sounds. However, all of them are not pleasing to the ears. Sound can take the forms of melody and noise. What satisfies our auditory senses is music. It varies from person to person and depends on various circumstances. Unwelcome, upsetting sound which is excessively loud and interferes with our ability to hear is referred to as noise. The lines dividing musical sound from noise can occasionally be hazy. For some people, what is considered music may be considered noise for others, as it varies from person to person. Our perception of objects, both visual and auditory, are subjective. A person who likes loud music will enjoy it, but the same cannot be said for someone who prefers calm or classical music. Pop music will be like a noise to a person who likes calm and soothing music. The concept of noise becomes fairly subjective in certain situations. Even in a room where people are conversing with one another, there is always a noise. If pupils in a classroom converse with each other while the teacher is teaching, that is also considered as a noise. However, voices from people are not necessarily considered noise. When anything is heard by others and is undesired or upsetting, it is classified as noise.

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