

MODERN SOUND ENGINEERING – ACHIEVEMENTS AND CHALLENGES

Kasimkhodzhaeva A.A.

*Kasimkhodzhaeva Aziza Abduzhabbarovna – Teacher,
DEPARTMENT OF MUSICAL SOUND ENGINEERING,
BATYR ZAKIROV INSTITUTE OF NATIONAL POP ART AT THE STATE CONSERVATORY OF UZBEKISTAN,
TASHKENT, REPUBLIC OF UZBEKISTAN*

Abstract: *in the XXI century, a huge number of professions are a fusion of technology and art. Moreover, almost all industries – be it architecture, medicine, accounting – today have their own supporting electronic program. Musical professions are no exception here. Specialists who own a profession that stands at the intersection of art and technology are in great demand these days, and musical sound engineering is one of such professions.*

Concerts, public events, TV shows, radio shows, cinematography, dubbing processes and, of course, recording studios – in all this, the role and contribution of the sound engineer are among the most important.

The article highlights the achievements and some problems of modern sound engineering.

Keywords: *recording studio, electronic musical instrument, music and computer technologies, information technologies in music, musical creativity, musical project.*

СОВРЕМЕННАЯ ЗВУКОРЕЖИССУРА – ДОСТИЖЕНИЯ И ПРОБЛЕМЫ

Касимходжаева А.А.

*Касимходжаева Азиза Абдузжаббаровна – преподаватель,
кафедра музыкальная звукорежиссура,
Институт национального эстрадного искусства имени Батыра Закирова при Государственной консерватории
Узбекистана,
г. Ташкент, Республика Узбекистан*

Аннотация: *в XXI веке огромное количество профессий являются слиянием техники и искусства. Причем практически все отрасли – будь то архитектура, медицина, бухгалтерия – на сегодняшний день имеют свою поддерживающую электронную программу. Музыкальные профессии здесь не исключение. Специалисты, владеющие профессией, стоящей на стыке искусства и техники, в наши дни пользуются огромным спросом, и музыкальная звукорежиссура-одна из таких профессий.*

Концерты, публичные мероприятия, телешоу, радиопередачи, кинематограф, процессы дубляжа и, конечно же, студии звукозаписи – во всем этом роль и вклад звукорежиссера являются одними из самых важных.

В статье освещаются достижения и некоторые проблемы современной звукорежиссуры.

Ключевые слова: *студия звукозаписи, электронный музыкальный инструмент, музыкально-компьютерные технологии, информационные технологии в музыке, музыкальное творчество, музыкальный проект.*

Artistic recording is a young art. It appeared at the intersection of musical, as well as literary-dramatic performance and sound transmission techniques. A sound director with technical and acoustic tools acts as an "interpreter" of the author's ideas and the performer's intention in the transmission of various sounds - orchestra, voice, musical instruments, noise effects. Its main task is to preserve the emotional impact of the work.

It is necessary to pay attention to the role of the sound director in separate music recording studios. Usually, when we listen to a recording, we remember with gratitude the names of the composer and performer. But few people remember that there is a third author on this CD - the sound director. Despite this, many music lovers listen to the audio recording, which begins to spread among the masses, and it also becomes a sound document that demonstrates the artist's skill. Therefore, the field of sound direction is steadily developing and its role is constantly growing.

Sound recording is a special kind of performance art... The work of the conductor is one of the components here, along with the work of the sound director. The performance goes through two stages - first, many takes of the work being recorded are recorded, and then, with the help of special music programs and the talent and skill of the sound director, the musical work is recreated from these takes.

The human ear has an amazing feature of signal selection. You can, for example, hear (consciously choose) the sound of one of the orchestra's instruments. But in order to select one of the components of sounds through a microphone, you need to bring this microphone closer to the sound source at a certain distance and direct the axis of sensitivity precisely. In addition, it is necessary to balance this microphone with other microphones in order to maintain a natural ratio. Thus, maintaining the natural timbre of each sound source (instrument or voice) and their mutual balance is the first task of the sound director.

Works of different genres, different eras and styles always require an individual sound direction solution. The symphonies of I. Haydn, G. Berlioz, and D. Shostakovich cannot be recorded in the same conditions and with the same tools. Transmitting the style of a musical piece in an appropriate acoustic environment is a serious aesthetic task, which requires the sound director not only to skillfully master the technique, but also to restore the musical taste, the atmosphere of a live concert sound characteristic of this composition. That is why it is important for a sound director to study at music universities, to constantly listen to the best examples of sound recordings and to go to concerts.

The sound director, who is a direct participant in the musician's creative work, his assistant, should enter into the performance plan of the recorded piece, understand the performer's strengths and weaknesses, and the way he produces sound on a musical instrument. It is a very difficult task to create the lack of audience energy - comfort, freedom of performance, which is characteristic of a live concert. Being not a judge, but only a benevolent listener - a performer or a hafiz can make you want to play the piece again. In a truly creative environment, even the greatest artists feel it's their duty to listen to their sound directors' thoughts on phrasing, tempo, and performance. In addition, such creative communication is important and necessary for them, because the sound director in the studio evaluates the performance as his first listener.

The contribution of the sound director in revealing the artistic and aesthetic aspects of the images of the musical work and delivering it to the listener is indisputable. His creative participation in the process of recording the work is clear, especially considering that the recording process is the last link in the realization of the composer's and performer's intentions.

Today, there are many devices for recording, processing, and playback of sound. The technical possibilities of modern sound direction are really huge. Complex editing, giving various effects, equalization - all this is done without any difficulty in today's sound director. But only 60 years ago, it was a process of recording audio material using only two or three microphones. There was no equalization process at all, so the quality of the recorded work directly depended on the correct location of the microphones and the characteristics of the sound carrier.

Modern sound recording is a complex process that requires not only technical training from the sound director. He should know all the joints of the electroacoustic tract, knowing all the characteristics of the microphones, he should choose and place them correctly, he should know perfectly the aspects and characteristics of sound production of any musical instruments. At the same time, it is important for the sound director to be able to quickly solve certain difficulties in the process of work. Because the long wait of a large number of orchestra performers leads to their exhaustion and, as a result, negatively affects the quality of the performance. In such situations, the sound director needs patience and the ability to suppress excitement, calm the performers and bring everyone back to a normal working state.

The scientific and technological revolution that marked the beginning of the 20th century brought not only new mechanisms and methods of obtaining material benefits to people's lives, but also opened the way to many new types of human activity. Many professions, which were previously unknown, became popular among the masses, because they met the current requirements of the society of that time. One such form of human activity is sound direction. Originally, a person who deals with sound and sound recording was called tonmeister. This German professional name came to us from Germany and was used for anyone involved in recording. However, after the opening of the State Broadcasting and Recording House, specialists began to be called sound directors. Today, sound direction is one of the most promising areas of creative activity, because the constant modernization of technology and software provides almost unlimited opportunities for the author's ideas and their implementation. However, a few notable trends in modern sound direction can be distinguished. The first trend is consolidation. In the late 1990s, software had strict boundaries. Sound editing was done in some programs (for example, Sound Forge or Cake Walk), musical phonograms were created in Cubase, Pro Tools, audio and video editing was done in Pro Tools or Nuendo. By the beginning of the 11th century, there were popular programs such as Ableton, FL Studio, Studio One, Samplitude, and others. Soon after, Reaper and Audacity (the first freely distributed software on the Internet) appeared.

The programs listed had different functions, tools, and specific goals. However, over time, the functionality became more and more universal, the interface became more and more similar, and the purpose was completely washed away. All audio recording products available in the audio industry today work very well with phonogram recording, audio and video editing, and audio editing. It should be noted that many programs, such as Pro Tools, have unique features that are not available in other similar programs. In addition, it should be noted that during this period there is a slight stagnation in the development of software products in the field of sound recording. For example, all updates released for various software products in the last five years are for security and interface licenses only. Fundamental changes in the structure of virtual recording studios have not happened for a long time. In addition, over time, the equalization and mastering process has become almost completely automated.

On the one hand, it became possible to use sets and various combinations created on the basis of settings already established by well-known sound directors in the software product, simplifying and speeding up the process of phonogram equalization. But on the other hand, it almost destroyed the individuality of the created works. The low level of specialists and the violation of the laws of acoustics during the construction of the studios led to a decrease in the quality of the product. This, in turn, did not affect the general musical taste of the listeners. This is a matter of the same musical direction, because this trend is especially noticeable in the field of recording musical phonograms. Unfortunately, low-quality production can also be found on radio stations, television, and the Internet.

Also, as a trend in modern sound directing, we can observe that sound directors' interest in the tools and technical devices of yesteryear has been increasing over the years. An experienced, "trained" ear recognizes modern sounds well and even knows which manufacturer belongs to the instrument bank. That's why the best recording studios try to buy vintage instruments and used equipment in order to give uniqueness to their recordings. Another trend is the significant expansion of the duties of the sound director in all areas of sound direction. Now, for example, when working in some radio stations, sound directors are responsible not only for the technical component of radio broadcasts, but also for the musical design of broadcasts. In television, most sound directors are involved not only in recording and processing sound, but also in selecting musical embellishments, noises, and other design elements. It

should be noted that the situation in the film industry is somewhat different. Here, sound direction is following the western development path that has been introduced for a long time, that is, the labor process has been distributed. On the one hand, this greatly facilitates the work of each participant of the process, on the other hand, it is required to be able to perfectly manage many people working on the same project and to clearly understand the final result.

Of course, the sound director's personal influence on the final product should also be considered. Knowledge, skills, musical and aesthetic taste, as well as internal culture, which should have such a specialty, must fully meet the requirements of the modern film industry, television or radio broadcasting. If the sound director does not have the necessary tools in his arsenal to solve certain tasks, then the final product will not be noticed by at least the target audience. In the worst case, the mismatch between the visual and audio lines creates a negative public reaction, the viewer feels the inauthenticity and falseness of the sound image offered to him.

Several conclusions can be drawn from the above. Sound direction is a very young field of human activity and certainly has a creative direction. It should also be taken into account that the active technical development of this direction opens almost unlimited possibilities for influencing the audience in film and television. However, not only technical equipment, but also the sound director himself has a great influence on the quality of the final product.

In addition, it should be noted that the unification of software and the large number of non-professional personnel in the field of specialization significantly reduce the quality of dubbing of cinema and television films. Of course, there are various educational institutions where you can get the basic knowledge of working with any desired sound. However, technical training, knowledge of recording equipment and software alone does not guarantee that you will become a professional in the future.

After all, sound directing is not only a technical, but also a creative profession. Studying musical literature, including music theory and history, learning to analyze phonograms by listening to the curriculum is very important in the formation of aesthetic taste among future specialists. Also, future sound directors need to have a great desire to work on themselves, because the field of sound work is one of the fields of science that is constantly developing and innovations are always happening.

References / Список литературы

1. *Bobby Owsinski*. The Mixing Engineer's HandBook, 2013.
2. *David Gibson*. The Art of Mixing: A Visual Guide to Recording.
3. *Филлип Ньюэлл*. Звукозапись: Акустика помещений. – СПб., Корона принт, 2004.