HISTORY, DEVELOPMENT AND PROSPECTS OF MUSICAL SOUND ENGINEERING IN UZBEKISTAN

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Abstract

Purpose: determination of the historical development of musical sound engineering in Uzbekistan

Methods: observations, system analysis, theoretical knowledge, historical method

Results: Based on the collection of data from music archives, interviews with sound engineers, and direct work in the field of musical art, analysis of the history of the origination of musical sound engineering from its origins to modern trends of the early 20th century to the present day was carried out; the influence of technical parameters of sound equipment on the development and promotion of sound engineering was determined; the prerequisites for formation of sound engineering in various fields of art are considered, creating the basis for the development of technogenic art.

Scientific novelty: The article is the first to present, based on methods, the history of the development of musical sound engineering from the technical to the creative aspects of the profession.

Practical importance: the provisions and conclusions can be used in scientific and pedagogical activities, the historical aspect of which is necessary in the training of specialists.

Keywords: sound engineering; radio; TV; mass performances; sound recording studio; sound technology; education of creative personnel

Preamble

Technogenic art develops creative thinking in a person by synthesizing art and its implementation through technical capabilities. However, it can be noted that the technique of producing a product is also an art form to achieve results. One of them is the profession of sound engineer, whose activity is aimed at the auditory and audiovisual production of a product that combines the creative aspect and technology.

Today, the activity of sound engineering is integrated into all spheres of art and is developing in them. In Uzbekistan, enthusiasts interested in sound and technology contributed to this, conducting experiments in the field of sound recording, as well as modernizing equipment.

Main part

However, I would like to note that the history of the formation of sound engineering in
Uzbekistan begins with the sound recording of the first examples of Uzbek classical music and traditional musical creativity. This is how the first recording of some parts of the Bukhara *maqom* “Shashmakom” was created, performed by *bastakor*, musician Toychi Tashmukhamedov in 1905 in Moscow. From this time on, the process of fixing folk art began. At the same time, in the territory of the Bukhara Emirate, noble people had phonographs, where they were used to record performances by music experts, poets and other folk artists on wax rollers. People needed leisure, which contributed to the development of sound recording. The continuation of sound recording was facilitated by the opening of the first radio station in 1927 in Tashkent. In parallel to this, on the territory of Uzbekistan, composer V. Uspensky began to conduct expeditions to record musical notation, as well as performing techniques. Thanks to these events, the archives of Uzbekistan contain records from the early 20th century. They do not have high-quality sound, but they are an intangible cultural heritage, reflecting the level of musical art, traditions and aspirations of the people, way of life and life.

The construction of radio stations in Uzbekistan in all its regions created a large amount of airtime, which created a demand for attracting *bastakors*, singers, instrumentalists, poets and other artists. Since 1924, the development of art in the field of music contributed to the emergence of musical groups, the development of specialized educational institutions, the development of composing, and performance. Orchestras and musical groups were created at the House of Radio, so in 1933 the Variety Orchestra was organized, in 1936 the Ensemble of Folk Instruments, in 1937 the Orchestra of Uzbek Folk Instruments and others. All their activities were aimed not only at the revival of Uzbek musical art, but also active participation on the air of Uzbek radio, which was inseparable from the radio broadcast. It was the development of radio that contributed to the recording of musical works. At this time, with reduced sound technical conditions, many samples of traditional music were recorded, among them the composer, singer, instrumentalist-performer Yunus Rajabiy, Uzbek singer-*hafiz*, the expert on folk music and *makoms* Mulla Tuichi Toshmuhamedov, the composer and performer Tukhtasyn Jalilovich Jalilov, the singer and teacher Berta Zaurovna Davydova and others.

At the beginning of the development of radio, the technology used was limited in frequency and dynamic range, and had significant operating noise, however, amateur sound technicians, and later sound engineers, tried to study and master, as well as apply various sound recording techniques, while improving the technical parameters of sound recording equipment. It was at this time that the profession of a sound engineer was born, subsequently moving into the creative profession of a sound engineer.

When working on the radio, sound engineers analyze the placement of microphones, the distance from the sound source and notice that when analyzing a recording, the main value is the performance of *bastakors*, *hafiz’s* and others. Gaining experience through analysis of sound recordings, experiments, advice from performers, they understand that depending on the technique and techniques, as well as sound processing, they can obtain a phonogram that reflects the clarity and transparency of instruments and voices. A careful attitude was paid to the performing parameters of sound recording, understanding that this is the basis of the artistic component of sound recording (Khmyrov, A.V. 2021).

With the construction of new radio stations on the territory of Uzbekistan, local musical performers from Karakalpakstan, Fergana, Khorezm, Bukhara, Samarkand, Kashkadarya, Andijan and other regions begin to dominate the airwaves, reflecting the specifics of musical creativity in the region. However, there is no need to talk about the level of sound recording, since there was not enough technology. In 1933, regional radio committees were organized to control and provide radio broadcasts.

In the 30s, with the advent of magnetic tape, a new branch in the development of sound recording began, thanks to which the quality of the material itself improved, using the example of the *makoms* “Baet” and “Ushshok” performed by Mulla Tuichi Tashmukhamedov, recorded in 1937 in the studio at the Aprelevsky Record Factory. New
The use of polymicrophone recording and magnetic tapes.

The accumulated experience of sound engineers over the 20 years of radio existence in Uzbekistan continues its development in the newly created Record Plant based on the technologies and equipment of the Noginsk Record Factory. The opening of the only plant in Central Asia allows us to begin producing first copies of recordings made in Moscow, Western and Eastern Europe, and then to establish sound recordings of works by Uzbek composers, performance of Russian and foreign music, and traditional music by Uzbekistan orchestras. This contributed to the opening of state archives at factories and radio committees, which to this day preserve musical samples from the time of the birth of sound recording. A music library is being created at the State Conservatory of Uzbekistan, which includes recordings of concerts, lectures, conferences, performances, festivals and other events held at the educational institution. The music library of the Institute of Art History at the Academy of Sciences of the Republic of Uzbekistan, which was created in 1928 in Samarkand (2), contains unique recordings of the musical expeditions of V.A. Uspensky, E.E. Romanovskaya, I.A. Akbarov and others, allowing to determine the performing, artistic and technical aspects of the phonogram. Also, at the Tashkent House of Radio there is a music library reflecting the activities of the entire period of radio broadcasting, where the works of sound engineers Okila Valiev, Nabi Khasanov, Mikhail Prokofiev, Yuri Salnikov, Tukhtash Umurzakov, Gennady Kim, Anvar Tadzhiev, Raishodzha Umarkhodzhaev are stored, each of whom most clearly demonstrated his talent and skills in one or another field of sound recording — pop, classical, traditional (ensembles of Uzbek folk instruments, ensembles of dutrists, makoms) (Khmyrov, A.V., 2021).

In connection with the arrival of equipment at the Tashkent Record Factory, the quality and capabilities of sound recording are gaining momentum. Invited sound engineers, who had previously worked on the radio, carry out work to study the technical parameters of equipment and sound recording techniques. Although the vinyl records were not of high quality, recordings of national music were constantly replenished, attracting performers from Central Asian countries, recording folk works of Kazakhstan, Tajikistan, and Turkmenistan.

At this time, the quality of sound recording is improving due to new equipment and its capabilities, which is reflected in sound recording experiments. Recording studios are also being built at the factory. Outstanding sound engineers V. Milogradov, V. Selyutin, A. Selyutin, T. Umurzakov, A. Umurzakov, N. Khasanov and others work here.

During the establishment and formation of the factory, the development and modernization of radio, as well as television, many changes occurred in the sound engineering of Uzbekistan. If until 1971 in the republic all recordings were made only in mono, then later equipment appeared in stereo format, installed in Studio No. 13 of the Tashkent Radio House. Various musical groups, performances and public events were recorded here in stereo format. Soon this technique spreads to all recording studios. Various genres of music are recorded from pop to musical literary and dramatic performances. Sound engineers begin to experiment as much as possible with sound in stereo space, use modern technical sound processing systems, synthesize and implement electronic musical sounds in the creation of new trends in musical art. The sound space in pop art begins to expand and deepen, by arranging instruments in a panorama; orchestras are recorded in a new format, allowing one to feel the entire spectrum of musical instruments as one large organism. New technologies are also used in recording national and traditional music.

The use of sound effects served as a separate process in sound recording. Reverberation occurred by sending sound material through a special room in which the material was played back and recorded with a natural reverberation effect due to the distance of the microphone from the speakers, which was often used by sound engineers.

From this time on, the need for high-quality sound engineers begins. The TV and Radio Company is opening advanced training courses for television workers. Also, the sound engineers from the radio and the Tashkent Record Factory improve their knowledge and skills at the “Melodiya” record factory in Moscow. This
allowed the leaders of the sound workshop to begin to implement the idea of opening a specialty in sound engineering in the field of musical art, cinema, radio and television in educational institutions of Uzbekistan. Thus, in 1991, “Sound Directing” departments were opened in creative universities (Mirzaev, A., 2020), where they began to train specialists in various areas of sound directing. Today, music graduates work in theaters, cinema, radio, recording studios, concert venues, etc. It is they who today are developing the sound engineering of Uzbekistan, raising it to a new level, comprehending constantly improving computer sound recording technologies and the technical capabilities of sound equipment (Iosis, I. Z., 2024).

**Conclusions**

Since the time of the first sound recording in Uzbekistan, with its variety of technologies and techniques, sound engineering has undergone many changes, starting from complex mechanical recording, using magnetic capabilities to improve sound quality, converting sound into the digital format and improving its quality bringing it closer to the analogue sound format, synthesizing and shaping new sounds of instruments, creating sounds that do not exist in nature, introducing electronic sound and giving birth to new genres in art, using compact sound equipment to achieve high results, adjusting and enriching various technical and performing qualities of the phonogram and ending with the creation of an unimaginable acoustic space. A special contribution to the development of the national school was the development of technology for recording Uzbek folk instruments performed by orchestras and ensembles, as well as works by Uzbek composers.

**References**


