MUSICAL ART CONCEPTS IN WORKS OF SCIENTISTS OF CENTRAL ASIAN X-XIV CENTURIES

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ABSTRACT

This article illustrates the works of the scholars of the 10th and 14th centuries, tells about a talented composer, and the outstanding performer of ud, tanbur, gijjak, flute, dust, and konun (national musical instruments), Abu Nasr Muhammad ibn Uzlug Tarhon Farobi, about the profound scientific legacy of Abu Ali Ibn Sina, and Safiuddin Urmavi, a well-known singer and composer, about "The Book of al-Kafi fi al-musiqâ" which is the only book written by Ibn Zayla about music. It is known that there are several copies of the Great Book in various libraries around the world. On the 1100th anniversary of the birth of Farabi, Arabic scholars Zakariya, Yusuf and Mahmud Daphnei published the complete text of the book based on existing manuscripts.

Keywords: music, culture, cultural heritage, soundline, classification of sciences, interval, book al-khafi fi al-musiqâ, booklet Sharafiya libraries and books.

1. INTRODUCTION

Abu Nasr Forobi (873-950). Farobi (alias Abu Nasr Muhammad ibn Uzlug Tarhon Farobi) is the largest representative of medieval Oriental music culture. Unfortunately, very little is known about Farabi's life and work. He was born in 873 in the Syrdarya region called Farob (present-day Kazakhstan, Chimkent). Farabi's father served in the military. It is known that his childhood passed in his homeland, and in his youth he lived and studied in Tashkent, Bukhara and Samarkand. Later, Farabi went to Baghdad, the cultural center of the caliphate, to increase his knowledge. He was also in such Iran cities as Isfahan, Hamadon and Ray. He has lived in Damascus since about 940. The next years of Farabi's life were spent in Halab (Aleppo). He served to Sayfuldavla Khamdami and was welcomed by him.

Sources show that he was a talented composer and a skilled performer of ud, tanbur, gijjak, flute, dust, and konun instruments. Farobi's keen taste and excellent musical ability made him familiar with the musical culture of the various peoples of the Middle and Near East. The musical heritage of the peoples of Central Asia and Iran greatly influenced the formation of his musical views. It is evident in Forobi's works that he had mastered the scientific and practical aspects of musical heritage of these people. He was well-known either in music and its practice. His performances and compositions reached such heights that even many legends were raised about this. In one of the legends, Farabi confused people by his playing and singing, the legend says that sometimes he could make merry people sad, and sometimes he turned live people sleepy, and left experts surprised. In science, however, he created works of great importance and left a lasting mark on the history of musicology.

He wrote many works on music. His sources include "Classification of Science" ("Ikhso al-Ulum"), "The Great Book of Music" (Kitab al-musik al-Kabir), Introduction to Music ("Mad-hal fi-l-Musika"), "Rhythm Classification Book" and many other works are mentioned. Some of these works are kept in various libraries around the world as handwritings. Two of Farabi's main works were widely used in modern science. They are the music section of the “Classification of Science” and “The Great Book of Music”.

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"The Great Music Book" is one of the masterpieces of the world science, which was unique in its time in its comprehensive and deep coverage of the issues of music. In this work, Farobi elevated music, previously a component of other disciplines, to an independent science.

It is known that there are several copies of the Great Book in various libraries around the world. On the 1100th anniversary of the birth of Farabi, Arabic scholars Zakariya, Yusuf and Mahmud Daphnei published the complete text of the book based on existing manuscripts.

This book was popular in the music world for many centuries. It always was one of the most unique and important works in the music of the Middle and Near East. It is difficult to find any prominent scholar in Oriental music who has nothing to do with Farabi's works. "The Great Music Book" was long known in Europe for a long time. It was originally translated into Latin by Zohid Guldislav in the 12th century.

Recently, "The Great Musical Book" has been translated into several modern languages. In 1840, German orientalist Land translated the part of the book about musical instruments into Latin. In the 1930s Baron Rudolf D. Erlanje translated "The Book of Music" into French completely and published in the Arabian Musical Collection.

Through this translation, the Farabi heritage was widely introduced in Europe. Various chapters of “The Great Book” have been published in Persian and Turkish. This work has been partially translated into Russian, Uzbek and Kazakh.

In the preface to the work, Farabi points out that “The Great Music Book” consisted of two parts. The first describes the theoretical and practical foundations of this science, while the second focuses on the errors of the scholars of the past in the science of music. This last part of the book did not reach us.

The surviving copy of the Great Music Book itself consists of two parts. The first is an introduction to the art of music ("Madham sinoatu fi-l-musiqa"), the second is called “The main part” (“Juzvi asl”). In its turn, the introduction to the art of music is divided into two chapters, each consisting of two parts. The main part consists of three chapters, the first - two, the second - three, and the third - three chapters. Thus, “The Great Book of music” consists of a total of 12 chapters.

As noted above, Farobi divides the science of music into theoretical and practical parts. Theoretical science considers the basics of music (primitive laws) and methods of studying them. In any theoretical science, three things are necessary for human perfection:

1. Mastering its basics.
2. To be able to draw the necessary conclusions from the basics of this science.
3. To be able to find erroneous results in this science, to be able to understand the opinions of other scientists, to be able to discover the good from their bad ideas, to be able to correct mistakes, - writes Farobi in the preface to the Great Music Book.

Farobi gives a broad and perfect description of each of the above categories of science. The basic concept of science begins with the study of the musical and physical properties of sound. Sound is defined as a physical phenomenon that results from the vibration of any hard or soft body.

The acoustic properties of sound, that is, the relationship between the volume of a vibrating body and the pitch of sound, are explained in the example of various musical instruments, and the factors of their quantification are explained in a mathematical way."Melodies are compared to a poem and an ode. In poetry, the primary element are the letters, which cause the formation of verses and bytes from their combination. The only thing that plays the role of the letters in poetry in melodies are naghmas (musical sound, tone or tune) ” - writes Farobi. Farobi discusses the causes of low-pitched melodies, the factors of proportionality, and the effect of emotion through these features (Farobi. The Great Book of Music, Cairo, 1967). The category of interval is one of the central concepts of science. Because the tune itself cannot be a separate piece of melody.

Farobi explains the formation of intervals by measuring the size and volume of the oscillating body and expressing the resulting fragments in numerical proportions. The factors that determine the pitch of a sound vary,
the length and thickness of the string on stringed instruments, and the length, height, and width of the body in which the air vibrates on wind instruments. However, the most important of these is length. Therefore, the amount of length is mainly measured.

2. MATERIALS AND METHOD

One of the centers of ancient culture - the people of Central Asia have made a significant contribution to the treasury of world science and culture. They also have a very rich and ancient heritage in the field of music culture. Ancient written sources on the history of the musical culture of the people of Central Asia and the monuments found by archaeologists are proof of this and confirm that these people had a high culture. However, during the Arab Spring (VII-IX centuries), along with other cultural monuments, written sources on music were rarely burned and lost. Therefore, some written sources on the history of the last millennial culture of the people of Central Asia have come down to us. In the second half of the ninth century, the popular liberation struggle in Movarounnahr and Khorasan, the fierce resistance of the indigenous people to the invaders, and the revolts overthrew the Arab caliphate and established the local Tokhirid and then Samanid states.

During this period, some conditions were created for the development of science, culture and art. A number of scientists from Central Asia became world famous for their scientific works in the history of medieval science at the same time. Many great scholars, such as al-Farabi, Ibn Sina, al-Khorezmi, who created immortal scientific works in other fields of science, also wrote scientific works on music theory and opened a whole period in the history of the development of Oriental music. These scholars played a decisive role in the emergence of the music theory used in the peoples of the East.

The great philosopher-scientist, one of the founders of the medieval Eastern music theory - Abu Nasr Muhammad al-Farabi was born in 871 in the city of Farab on the banks of the Syrdarya and died in 950. He came from the Turkic tribes of Central Asia and received his first education in his homeland. Al-Farabi, who had a thorough knowledge, went to Baghdad, Damascus, and then to Egypt, where he increased his knowledge. Al-Farabi was a great musician and music theorist. He played on all the musical instruments that existed in his time. He performed melodies with great skill, especially on the flute and tanbur. According to some sources, al-Farabi invented the instrument of konun and did a great deal to improve the oud, which was popular at that time.

Al-Farabi was one of the leading scholars of his time who created great scientific works in philosophy, logic, mathematics and other sciences. The science of music was one of the sciences of mathematics, which included arithmetic, geometry, astronomy, and music.

Al-Farabi substantiated the theory of Eastern music in his treatises on music. His musical works are "Kitabul-musiqiy al-kabir" (A book on music), "Ilmu fil-musiqiy" (A book on the styles of music), "qitabul-musiqiy" (A book of music), "kitabun fi-ihsail-ulum" (The part of the book on the classification of sciences) devoted to music, "Kitabun fi-ihsail-ika" (Rhythms of music) and others.

The scientific and theoretical works of al-Farabi and other scholars of the time were written in Arabic in accordance with the requirements of the time and comment on the fundamental issues of the theory of Oriental music. Al-Farabi's books on music theory are among the most complete and well-known of the works written on the subject in the East, and have served as the basis for the writing of books by musicologists who lived and worked in his later times. One of those who continued the path of al-Farabi was Abu Ali Ibn Sina.

Abu Ali ibn Sina (980-1037) was born in the village of Afshana, near Bukhara. He was a great philosopher, naturalist, famous physician, but also a great music theorist. The musical part of Ibn Sina's Kitabush-shifa, Donishnamak, Risalatun fi-ilmil musikiyk (Treatise on the Science of Music) and other books on al-Farabi's works are of special importance in the history of world music science and culture. Abu Ali ibn Sina not only wrote special works on music, but he also included his great works on music theory in medical books. This was no accident, of course. Abu Ali ibn Sina in his immortal works highly valued the emotional impact of music in the treatment of mental illness.

In particular, in several places in the book of fit-medicine of Ibn Sina, Kshifo is recommended as a cure for mental illness, and in his similar works a separate section is devoted to the interpretation of music theory.
His works "Kitabush-shifa", "Kitabun-najat" ("Book of salvation") are among them. A comparison of some of the theoretical issues of music interpreted in the sources proves that Abu Ali ibn Sina in his works on music further developed al-Farabi's musical-aesthetic views and raised it to a higher level.

The part of the encyclopedia "Mafatihul-ulum" ("The Key of Knowledge") by the great Central Asian scholar Abu Abdullah Muhammad ibn Yusuf al-Kotib al-Khorazmi, devoted to music theory, has a special place in the history of music culture of the IX-X centuries. Al-Khorazmi's work is one of the most important sources in covering the history of science and culture of the peoples of Central Asia. In their encyclopedic books, Oriental scholars not only initially considered music to be one of the philosophical sciences, but also included it in their works as one of the philosophical sciences. In doing so, they undoubtedly took into account the artistic and aesthetic power and socio-educational role of music. In recent times, the science of music has been included in encyclopedic books as one of the mathematical sciences.

The works of such famous scholars as Al-Kindi (IX century), al-Farabi, Ibn Sina, al-Khorazmi have served as the main source in the interpretation of the music theory of the peoples of the East for many centuries and clarified the content of recent musical treatises. From the time of Al-Farabi to the fifteenth century, the subject matter and content of theoretical treatises on music (despite some differences in their internal content) are closely related in many aspects. These pamphlets, devoted to the theory of music, have been published at various times, and there are some differences on some issues. The great scholar of the thirteenth century, Safiuddin Abdulmomin al-Urmawi, tried to prove that al-Farabi's theoretical considerations were inaccurate in some respects. Such discrepancies are reflected in the acoustics of music, the sound of music (savt or nagma), the rhythm (iko), the location of certain curtains on the oud, and other issues. Such conflicts reflected changes in the historical development of music for almost three centuries.

The issues raised in Oriental music pamphlets are close to modern elementary music theory.

But there are also issues in medieval music treatises related to the practical aspects of the music of the peoples of the East in the past, which are not found at all in modern music theory. Medieval musicologists relied more on theoretical issues in the works of al-Farabi and Ibn Sina. Music theory has been developed by scholars who have lived and worked in recent times - Safiuddin Abdulmumin, Mahmud bin Masud al-Sherazi (XII-XIV), Khoja Abdulkadir Maroghi (XIV century), (author of the treatises "Jamiul-alkhan", "Makasidul-alqan"), al. It was further developed in the works of Qusayn, Abdurakhman Jami (XI century) and others. In the musical tractates of these scholars, the question of status is regarded as one of the greatest and most fundamental issues of music theory. Because the purpose of interpreting the theory of music was to connect it with live musical works - makoms, and to generalize and explain the practice of music.

Therefore, before commenting on the makoms, let us briefly consider some of the issues related to them and commented on in ancient, musical treatises. These issues describe the theoretical and practical aspects of makoms and the elements that make up the live music of the peoples of the East in general.

Abu Ali ibn Sino (980-1037). Music occupies an important and significant place in the rich scientific heritage of the great thinker Abu Ali ibn Sina. Ibn Sina created an independent doctrine in the science of music, mastering the works of his predecessors, the Greek philosophers Aristotle, Ptolemy, Euclid, as well as Oriental scholars Khorezmi, Kindi and Farabi. The significance of Ibn Sina's teaching, which was unique in its time in terms of the breadth of the issues raised and the depth of its coverage, is not limited to the period, but also plays an important role in the further development of Eastern and Western music.

Abu Ali ibn Sina mastered the science of music very early. According to the biography of Ibi Sina, at a young age he studied mathematics. It is well known that the science of music was an integral part of mathematics. Ibn Sina was acquainted with the works of the great mathematicians and musicologists Ptolemy and Euclid.

Ibn Sina's youth was spent in his hometown of Bukhara. During this period, Bukhara was one of the most developed cities. One of the most notable aspects of the cultural life of the Samanid capital was the rise of the Caliphate and the growing interest in local traditions. It is common in the peoples of Central Asia and Iran under this general direction.
In the time of Ibn Sina, the phenomenon, which was subject to new requirements, was re-learned. Rost, Zangula, Ziraftand, Rahovi, Navruz and similar ancient ways began to break into the new structure of professional music of the Middle East - makoms.

During this period, in Bukhara and later in the central cities, such as Urgench, Ray, Hamadon, where Ibn Sino lived and created, the introduction of composers, masters, singers and musicians, the status of the highest examples of musical thinking, created a great need for musicology. The works of Ibn Sina are invaluable in this regard. Issues related to the science of music are reflected in many works of Ibn Sina. Unfortunately, not all of them have reached us. For example, works of music such as "Madhal sanati al musiqa" ("Introduction to the art of music") mentioned by Ibn Usayba, Kitab al lawahiq ("Book of supplements") mentioned by Ibn Sina himself in his book "Shifa" are still unknown to science. Ibn Sina's musical legacy has come down to us through his major encyclopedic works: the part of the book "Shifa" called "Javomi ilmal-musiqa" ("Summary of Music Science"); "Muhtassar ilm al musiqa" ("A brief introduction to the science of music"); Musical parts of the "Donishnoma". In addition, Ibn Sina's books "Laws of Medicine" and "Ishq" devoted to other sciences also contain information about music. Ibn Sina's views on music are more completely reflected in "Javomi ilm-al musiqa"; The musical parts of "Mukhtasar ilm-al musiqa" and "Donishnoma" are based on that work.

The main feature of Ibn Sina's views on music, as well as one of the differences from Farobi's teachings, is that Ibn Sina sought to build his music theory (mainly science) more on the physical properties of sound. Farobi, on the other hand, connects theory with more laws of experience and perception. This shows the strengths and weaknesses of Ibn Sina's teaching. The weak point is that Ibn Sina seeks to absolutize the internal structure and perceptual laws of music. The strength is that it encourages the development of music not only through experience itself, but also through science and scientific thinking.

In the time of Ibn Sina, the term maqom was not yet widely used. These were prototypes of statuses. Ibn Sina's musical teachings reflected a number of topical issues related to aesthetics, theory and practice.

Ibn Sina's aesthetics, based on the understanding that music is a product of human activity, a means of communication, is one of the most advanced manifestations of medieval musical thinking. Ibn Sina begins his "Jawami ilm-al musiqa" with a direct rejection of idealistic views: "We do not pay attention to comparing the relation of the musical curtains to the moral properties of the celestials and the soul, for this is the habit of those who cannot distinguish one science from another. He was a great scholar in the Middle Ages in supporting the directions of the progress of music, in defending it from idealistic views. In Ibn Sina's theory of science and literature, all its categories, from sound to complex structures, are considered. His scientific composition is based on the following sound system.

In the Farobi Table, natural intervals form the basis of the sound system. This led some researchers to call Ibn Sina the creator of the "pure curtain system" in music. In fact, Ibn Sina did not yet understand the "pure curtain system" as the basis of polyphonic or harmonic deficits, and the preference for these intervals was due to the desire to bring music closer to natural foundations.

Ibn Sina's views on science are also noteworthy. He attributes the beauty and inner nature of the melody in many ways to the proportionate weight, and therefore considers weight to be an important factor in music. The scientist was famous in his time:
1. According to the law of acoustics, every sound contains many sounds. They are called overtones and are arranged in a certain order. The order of the overtones is called the natural interval, and the intervals are called natural intervals.
2. There are three main curtain structures in music. They are called Pythagorean, pure and tempered curtain systems.

In this regard, Ibn Sina is a follower of the Aristotle tradition and a sage who continued the issues of music and poetry in the context of Oriental culture. Noting that the biggest bridge between poetry and music is weight, Ibn Sina paid special attention to the issues of weight, the problems of the natural harmony of music and poetry. The weight of poetry and music was closely linked to their content, which he considered to be one of the most important conditions for the perfection of a piece of music. It is noteworthy that Ibn Sina also studied musical instruments extensively, and the scientist considered the human voice to be the most perfect instrument, and
compared other musical instruments to it. Ibn Sina's favorite instrument was the gijjak. He considered the gijjak to be a natural and playful instrument closest to the human voice. He also gave information about the oud, tanbur, rubab, nay, surnay and legal instruments, and touched upon many issues related to their performance characteristics and interrelationships.

Ibn Zayla (died 1044). A famous musicologist who was a student of Ibn Sina. According to medieval sources, Abu Mansur ibn Zayla died in 1044 at a young age. However, during his short life, he created thorough works in various fields of science, and his contemporaries called him al-hakim (the Wise) because he was one of the leading scholars of his time. Ibn Zayla's only work in musicology is known as the “Complete Music Book” (Kitab al-kafi fi almusiqa). Ibn Zayla's work was influenced by Ibn Sina's musical views.

Safiuddin Urmavi Shark (died 1294). Safiuddin Urmavi Shark is the greatest representative of the science of music, after Farobi and Ibn Sina. Safiuddin Abdulmomin Urmavi was as great in musicology and practice as the great Farobi. He was born in the ancient city of Urmia in Azerbaijan (120 km south of Tehran). “But because he spent most of his life in Baghdad, the capital of the Abbasid Empire, Arab scholars also refer to him as Safiuddin Urmavi Baghdadi. At the age of 19, Safiuddin Urmavi was known as a master performer, hafiz and famous composer. Safiuddin Urmavi had many legends about the art, knowledge and mastery of music in his time and in later times. Safiuddin also gained great fame in other sciences, especially in the thematic sciences. The works of the great mathematician of his time, Nasriddin Tusi, had a great influence on Safiuddin's work and led to the rise of rationalist ideas in his musical views.

He creatively assimilated the legacy of his predecessors, Farobi and Ibn Sina, and raised the science of music to a new level. Safiuddin Urmavi's famous treatises on music are “Sharafiya” (Kitab al-Sharafiya) and “Kitab al-Dawr” (Kitab al-Dawr).

3. CONCLUSION

Urmavi's views on science are still relevant in oriental music. What is the nature of this doctrine? If Farobi and Ibn Sina constructed the tone structure of music on an empirical basis (that is, based on experience), Urmavi puts forward ideological ideas in this regard. He argues that while the scale of Farabi and Ibn Sina are based on tones of different sizes, Urmavi introduces an equal distribution of them. According to the previous theory, because the rock tones were different, it was only possible to cross-match them. In the Safiuddin's system, since the rock intervals are formed from a single base, it is possible to combine them all together, and as a result, the range of groups formed from the rocks is greatly expanded.

In Safiuddin Urmavi's scale, the pre-known I baqiya intervalis taken as the basis. The whole tone of the genus (mutlaq-sabboba and sabboba-binsir) is divided by it. From each whole tone two residues and a small curve-phase interval are formed.

The important point is that the phase is not used as an independent tune, but is added to the composition of other intervals, changing their essence. The importance of phase can be compared to a certain extent with the signs of softening and separation of the Russian alphabet. Although these characters do not have an independent phonetic significance, they are added to other letters and radically change the meaning of the word. With the help of phase, large and small variants of whole and half tones are formed.

Thus, instead of different tones, their equally divided options are used. From the arrangement of these intervals in different order, Safiuddin Urmavi forms 7 types of four-step rocks and 13 types of five-step rocks.

As mentioned above, in the Safiuddin’s system, all rocks can be interconnected. So, theoretically, the number of sets is 91 (this number is derived from the multiplication of four-step and five-step rocks 7x13 = 91). But these are not all sumsused in practice. Those used in practice are divided into species according to their melody. The proportion of the sums is determined by the amount of pure intervals in it. If the sum of pure intervals in the set (octave, quintet, quartet) is equal to or greater than the number of steps, this category is called a status. Thus, 12 out of 91 sums fall into the category of status. Applied to the highest varieties of sums in musicology.
The term makom was first used by Safiuddin Urmavi. This is where the "12 makom" system, widely used in Oriental music, begins. Later, the famous Tajik thinker Abdurahmon Jami (XV century) considered 12 makoms to be the most ancient ways of professional music.

Qutbiddin Sherozi (1236-1311), a contemporary of Urmavi, was a great musicologist and scholar of his time. Since the musical views of Urmavi and Shirazi are in many respects close, without going into detail about Shirazi's theory, I will draw a comparative table of the circles they describe. More information can be found in Rajabov's book on the issue of status.

Various debates among contemporary musicologists about the seventeen-stringed vocalist continue to this day. Some understood that the features of Oriental music, including Uzbek music, could only be reflected in this seventeen-step vocalist, and that its theoretical foundations should be based on it.

Basic concepts:
2. Bod is the concept of interval in modern music.
3. Kitab al-kafi fi almusiqa - The only work written by Ibn Zayla on music is also called the Complete Music Book.

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