ISSUES OF MODULATION IN AZERBAIJANI MUGHAMS

Researching of the formation of specific structural features in the process of historical development of Azerbaijani mughams attracts attention from the point of view of musicology. Azerbaijani mughams have undergone a great evolution. In this process, their melody, the base of magam, metrorhythmic features, form structure were developed, changed and enriched. From this point of view, the study of mughams is necessary and actual. The author has researched devoted to structural features of mugam dastgahs in Azerbaijani musicology. He explained the importance of modulations in the structure of a number of mughams on the basis of scientific-theoretical provisions put forward in scientific research. At the same time, the author analyzed mughams on the basis of notes and sound recordings and revealed modulated sections in their structure. A number of eponymous sections in the mugam heritage are used in the composition of various mughams, have the importance of transitioning from one magam to another in the chain structure of the dastgah, and serve the development of the compositional structure. Therefore a number of mugham sections have a special place both in the same magam-based mughams and in different magam-based mugam dastghahs: for example, “Araq”, “Shikasteyifar”, “Mubarriga”, “Nishibi-faraz”, “Mukhalif”, “Manandi-mukhalif”, “Uzzal”, “Masih”, “Mowlavi”, “Feli”, “Tarkib” and so on. Such sections are used in a number of mughams. However, the place and position of each of these sections in mugham dastghahs are different. However, each of these departments has a wide place and position in mugham dastghahs. A number of sections used in Azerbaijani mugam dasthags are of a dual nature. On the one hand, the section sounds in its own neighborhood in the mughams of the same foundation, depending on its base. On the other hand, this chapter is part of other magam-based mughams and is important for the transition to a new magam.

Keywords: Azerbaijani, mugham, modulation, composition, musical language.
Методологія дослідження. Дослідження базується на методі теоретичного та порівняльного аналізу. Одновременно загальнотеоретичні принципи етномузикології, науково-теоретичні концепції, розроблені в дослідженнях видатних азербайджанських та зарубіжних музикознавців, важливи як методологічна основа.

Результати. Вивчення використання одноименных розділів у мугам дест’ях виявляє різноманітність методів їх застосування. Немало розділів, що використовуються в мугам дест’ях, мають подвійну природу. З іншого боку, цей розділ є частиною інших мугам на базі макам і важливий для модуляції до нового макаму. У спадщині мугамів кілька одноимених розділів використовуються в складі різних мугамів, мають значення переходу від одного макаму до іншого в ланцюговій структурі дест’ях та служать для розвитку композиційної структури.

Отже, немало секцій мугамів посідають особливе місце як в одних і тих самих мугамах на базі макам, так і в різних мугам дест’ях на базі макам. Усі вони обґрунтовують взаємозв’язки мугам, які мають свої структурні особливості.

Новизна. Це перша спроба зрозуміти, що вивчення використання одноименных розділів у мугам дест’ях виявляє різноманітність методів їх застосування.

Практичне значення. Інформація, що міститься в цій статті, може бути корисною для студентів, учених, дослідників азербайджанської музикознавчої науки.

Ключові слова: Азербайджан, мугам, модуляція, композиція, музична мова.

Problem statement. Azerbaijani mugam dastghahs have a unique structure. If we look at the history of the formation of mugham genres, from the Middle Ages to the present day, the improvement of mugham dastghahs, small mughams, zarbi-mughams in the performance practice, the formation of mughams in the musical treatises of prominent musicologists, mugham tables and curricula of master performers.

Our appeal to this topic is related to the study of the formation of specific structural features in the process of historical development of mugam dastghahs. Features of the musical language of Azerbaijani mughams — the basis of the magam, compositional structure, melody provide rich material for research, allow to reveal important regularities of the musical language of mughams. All this raises the study of mughams in ethnomusicology, the study of their musical language as a topical issue.

Analysis of recent research and publications. The art of mugam has been scientifically studied in the works of the great musicologists of the East — Safiaddin Urmavi (XIII century), Abdulgadir Maragayi (XIV–XV centuries), Mirza bey (XVII century), Mir Mohsun Navvab (XIX century) and others. The problems of historical and theoretical research of mugam dastghahs became widespread in the XX century, the genius composer and
musicologist Uzeyir Hajibeyli (Hajibeyli, 2010; Hajibeyli, 2004), as well as prominent musicologists Mammadsaleh Ismayilov (Ismayilov, 1984; Ismayilov, 1991), Ramiz Zohrab (Zohrabov, 2013) are reflected in their scientific work. In addition, musicologists Afrasiyab Badalbeyli (Badalbeyli, 2017), Elkhan Babayev (Babayev, 1990), Nariman Mammadov (Mammadov, 1991), Gulnaz Abdullazade (Abdullazade, 1983), Rena Mammadova (Mamedova, 2002) studied various issues of mugam instruments. Sanuber Bagirova (Bagirova, 2007), Akif Guliyev (Guliyev, 2009) and others.

**Discussion.** Mugham has existed in the oral traditional music of the peoples of the Middle East for centuries and has been formed in each school of music performance in its own way. The main sources in the study of the mugam art are notes and sound recordings. Sound recording is an important work in traditional Azerbaijani music. Mugham notes appeared only in the 20th century. Currently, there are a number of mugams in several versions. The recording of mughams on CD–DVD discs and the publication of notes with modern technical means ensure their preservation and transmission to future generations with all their richness.

The structural features of the mugam dastgah have been characterized in the scientific literature. In the scientific-fundamental work “Fundamentals of Azerbaijani folk music” U. Hajibeyli gave the historical-theoretical character of the art of mugam and wrote: “The musical culture of the peoples of the Middle East reached its peak in the fourteenth century and proudly rose in the form of a «building» (dastgah) with twelve columns and six towers…” (Hajibeyli, 2010a, p. 18).

After he gave information about the development of the mugam dastgah, noting that after the fourteenth century, the peoples of the Middle East, using the valuable pieces of this “music building” that had collapsed, built a new “musical barracks” in their own distinctive style, each with its own “magam building” (Hajibeyli, 2010b, p. 19). The main feature of U. Hajibeyli’s opinion is that mugham pieces are made of “lad construction” accessories. According to U. Hajibeyli, magam is the main creative material of mugam. He theoretically substantiated this opinion in the book “Fundamentals of Azerbaijani folk music”. U. Hajibeyli considered the structure of the instrument to be a direct product of singers and musicians, a work created by their thinking and imagination. U. Hajibeyli emphasized that musicians have polished a great wealth like mugham for centuries, passed it down from generation to generation with memory, and brought the secrets of mastery in this field to our days. Thus, according to U. Hajibeyli, mugam is a genre with serious structural features formed in the works of professional musicians. Works of this genre are based on various scenes. M. Ismayilov have written: “If we compare mugam in a figurative language with a magnificent building,
then the magam is the frame of the music building and is the chest. The various sections and corners that make up mughams can represent the pillars of building. The melism types such as trel (zangula), mordent, forshlag, “lal barmag” used in mugam consist of ornaments that adorn the musical structure. Finally, various expression tools such as repetition, sequencing method, element of variation in the structure of mugam melody, up and down transfer of musical expressions in quartet, quintet and octave intervals are building materials used in the construction of “buildings” (Ismayilov, 1984a, p. 58). Then M. Ismayilov described the passages inside the mugam set as follows: “One of the principles in the organization of mughams in terms of form (formation of sections) is the transfer of the same magam (as well as certain melodies) one octave higher, fifth or fourth intervals. In some cases, the top fourth or fifth tone of the magam changes its tonality by becoming an independent fluid, and thus modulation or direction is formed within the magam” (Ismayilov, 1984b, p. 98).

As can be seen, M. Ismayilov emphasizes the importance of modulation and orientation in the structure of the dastgah, emphasizing the importance of the transfer of magam in their formation.

At the same time, he notes that the main musical material of mugam is based on its previous three or four sections: the sections referring to the maye of the magam (T), the upper fourth of the maye (S) and the fifth (D). In the structure of the mugam, these sections are repeated one octave above, changing melodically and rhythmically. Thus, M. Ismayilov pointed out that the structure of the mugam set consists of two large parts — exposition and reprise, noting that it is close to the “Sonata-allegro” form, and thus opens a direct path to the symphony of mughams. R. Zohrabov considers the instrument to be a large series or multi-part musical work with a colorful content and a single magam system, exhaustive and perfect form, and writes that “the sequence of sections and corners on the basis of logical principle is the main quality of the dastgah” (Zohrabov, 2013a, p. 144). According to R. Zohrabov, all mugam dastgahs have a unified system in terms of composition. Numerous instrumental parts and vocal-instrumental sections are combined in an exhaustive, improved system. He characterizes the mugam instrument as a series of multi-part musical works created by professional singers and musicians in an exhaustive and perfect form. R. Zohrabov shows the sequence of components in the machine as follows: daramad, bardasht, maye, tasnif or color. Subsequent mugham sections (including corners and sounds) are sequenced by tasnif and color. This structure is traditional for all mugham dastgahs. One of the interesting aspects of R. Zohrabov’s research on the structure of the mugam dastgah is the discovery of the chain structure of the mugam dastgah and its description in the form of micro-series. He
have written: “Several sections in dastgah, corners, voices, tasnif, colors and dirings create 2–5 microseries” (Zohrabov, 2013b, p. 156).

R. Zohrabov expressed his views on the “Rast” mugam dastgah. Addressing these views, we must say that the scientist has divided the composition of the “Rast” mugam dastgah into three micro-series: The first micro-series — “Daramad”, “Bardasht”, “Mayeyi-rast”, “Ushshag”, “Husseini”, “Rang”.

II micro-series — “Vilayati”, “Shikasteyi-Fars”, “Dilkesh”, “Kurdish”, “Rang” or “Tasnif”.

III micro-series — “Araq”, “Panjgah”, “Kichik Rak”, “Garayi”, “Rasta ayag” (cadence) (Zohrabov, 2013c, p. 156).

This research of R. Zohrabov can be applied in all mugham dastgahs, systematizing the general compositional structure of mugam. One of the interesting aspects here is the substantiation of the transitions from the main magam manifested in mugham to other magams. All scientific theoretical views show that the transitions within the mugham dastgahs are carried out on the basis of step-by-step. This is an important condition for the formation of mugham.

A number of eponymous sections in the mugam heritage are used in the composition of various mughams, have the importance of moving from one magam to another in the chain structure of the dastgah, and serve the development of the compositional structure. From this point of view, a number of mugham sections have a special place both in the same magam-based mughams and in different magam-based mughams: for example, “Iraq”, “Shikasteyi-fars”, “Mubarriga”, “Nishibi-faraz”, “Mukhalif”, “Manandimukhalif”, “Uzzal”, “Mashti”, “Mowlavi”, “Feli”, “Tarkib” and so on. Such sections are used in a number of mughams. However, the place and position of each of these sections in mugham dastgahs is different. The study of the application of mugham sections of the same name on the dastgahs can be carried out in two directions: first, the use of the same name sections in mugham families; The second is to study the use of eponymous sections in mughams based on different magams. All this allows us to justify the issues of modulation and direction in mugham compositions. Consider the use of eponymous sections in mugham families. In the mugam heritage, the repetition of a number of sections in the mugham dastgahs belonging to the “Rast”, “Shur”, “Segah” mugham families shows itself. One of them is “Iraq” mugam section. This section is based on the magam of Rast. It sounds at the culmination of “Rast” mugam dastgah. The musical content of “Araq” is an octave repetition of the theme of the “Maya Rast” section. The theme of “Maya Rast” is the main theme of the mugam at the beginning of the mugam, which forms the basis of the composition. The variant of this
theme is first sounded in “Bardasht”, in the high register, and then widely developed in the “Maya Rast” section. The same theme is given at the culmination of mugam. “Bardasht” and “Iraq” sections sound at the same level. While Bardasht is the starting magam for development, Maya Rast is interpreted as the foundation, and Iraq is interpreted as the high and final stage of development. If we divide the compositional structure of the mugam dastgah into three stages, the first of them is the Maya stage consisting of “Bardasht”, “Maya Rast” and “Ushshag” and “Husseini” departments built around the maya, the second — “Vilayati”, “Dilkesh», “Kurdu”, “Shikasteyi-fars” is a stage of development based on shur and segah magam transitions, and the third is the culmination, reprise and final stage based on the main magam, consisting of “Araq”, “Rak”, “Panjgah”, “Qarayi” sections and corners.

As can be seen, the main task of the “Araq” section is to provide the culmination and reprise of the dastgah. This aspect is also reflected in other mughams based on rast magam. Thus, in terms of magam-tonality, the “Iraq” section of the “Mahur-Hindi” mugam, based on the maya “do” rasta, a quarter higher than the “Rast” mugam, reflects the stage of climax and repetition, respectively, based on the octave of Maya. In the “Orta Mahur” mugam, which is based on the “fa” maya, the “Araq” section is no longer used because it has a very high register due to its sound.

The use of the “Iraq» section in mughams including to the “Shur” and “Segah” mugham families has other qualities. Shur maqam-based mughams are used in the “Rahab” mugam from the “Iraq” section.

In this case, “Iraq” — as a section based on the magam of rast, has the importance of modulation in the composition of “Rahab”. In the “Rahab” mugam, after the “Maya” section, with the development of the “Shikasteyi-Fars” and “Araq” sections, there is a transition from the shur to the sega and rasta, and then the shur ends.

Thus, in the “Rahab” mugam, the “Araq” section is characterized not as a climax and reprise, but as a section that reflects the transitions in the development and preparation for the culmination of the mugam. In modern times, the “Araq” section is not used in mughams belonging to the “Segah” mugam family. However, in the mugham programs of the early twentieth century, the “Araq” section is found in the “Segah” mugam. In this case, the department is important to move from the segah to the rast.

Thus, the “Iraq” section — used in the composition of mughams based on the same magam and different magams, has a different position due to its position and importance: in rast magam-based mughams, the “Araq” section performs the culmination and reprise of the maqam, while in the shur and segah maqam-based mughams, the “Araq” section is of modular importance.

One of the most widely used sections in the mugham heritage as part of various mughams is “Shikasteyi-fars”. This section is based on the magam
of segah. In the mughams of the Segah family, Shikastei-yi-fars is the largest and most important branch after the Maya section. The melodic structure of the “Shikastei-yi-Fars” section refers to the VI stage in the sound sequence of the segah magam, in the process of development the cadences of melodic sentences are completed mainly in the VI stage and finally in the IV stage (maya). This section can be characterized as a new stage in the development of mugam after “Maya”. However, it should be noted that the “Shikastei-yi-Fars” section is reflected not only in the segah maqam-based mughams, but also as the eponymous section used in mugams based on different magams. Thus, from the “Shikastei-yi-Fars” section, “Rast” and “Shur” mughams are used in the mughams of the mugham families during the transition to the segah magam, in other words, in these mughams, “Shikastei-yi-fars” represents the “Segah” mugam and “segah” becomes a factor that shapes the “environment”. From this point of view, “Shikastei-yi-fars” can be characterized as a section of modulation importance.

The structure of “Rast” mugam dastgah consists of three stages of development. In the first stage, after the sections concentrated around the liquid of the mugam, in the second stage, the transitions from the rasta to the shur and segah points show themselves. The Shikastei-yi-Fars section is used to go directly to the sega, which creates the Segah atmosphere within the Rast mugam. Then, in the third stage of the mugam, the culmination and reprise manifests itself by returning to the point of encounter. Such a rast-segah-rast modulation plan is also reflected in other rast-based mughams such as Mahur Hindi and Orta Mahur. In «Shur» point-based mughams, the “Shikastei-yi-fars” section is of modular importance. In the middle part of the “Rast” mugam, the transitions to the moments of shur and segah are traditional. Modulation to the council point is carried out in the “Vilayati” section, as well as in the «Dilkesh» and «Kurdi» departments. The “Shikastei-yi-fars” section is used in connection with the modulation of the Segah point. In this case, the modulation manifests itself from the right point to the upper third of the segah. Characterizing this section, M. Ismayilov notes that the melody of the “Shikastei-yi-fars” section is based on the diatonic stages of the moment, referring to the VIII step of the moment (Ismayilov, 1991, p. 9). The transition process takes place by walking on the steps of the point of reference, referring to the steps VIII and VI of the point. The sixth stage of the truth becomes the liquid of the segah, the fourth stage. In the third case, the modulation of rastga-segaha is formed as a regular feature of mughams. Thus, from the “left” tense to the “si” tense sega, from the “do” tense to the “mi” tense sega, and so on is traditional. The transition from one point to another within a mugham also changes its musical content. Uzeyir Hajibeyli in his article “On the music of the Azerbaijani Turks” described the transition
from right to left as follows: “The return of Shikasteyi-fars”, which is based on “Segah” and “Segah” in the middle of “Rast”, to “Rast” again declares the victory of the mind over the emotion” (Hajibeyli, 2005, p. 39).

Thus, the “Shikasteyi-Fars” department, established at the moment of segah, serves to enrich the content and emotional nature of the device by creating a transition to the segah environment within the “Rast” mugam. At the same time, the “Shikasteyi-fars” mugam section is noteworthy as a section that is important for the transition to the segah magam in mughams based on different magams.

In the structure of “Shur” mugam, the transitions to rast and segah are also important, and these modulations are carried out through the relevant sections. When describing the structure of “Shur” mugam, we can note three stages in the basis of magam and melodic development. The first stage consists of “Bardasht”, “Mayeyi-Shur”, “Shur Shahnaz” sections based on the capital stage of the Shur magam. These sections are performed one after another, forming the basis of the momentum and melodic development of “Shur” mugam. At the same time, the melody of these sections is characterized by common features in terms of reference levels and cadence features of the same magam. In this part, “Bardasht” and “Maya” sections are built in the main magam-tone (“left” council). The “Shur Shahnaz” section is based on the shur magam-tone (“do” shur) in relation to the quartet.

In the second stage of the development of mugam, modulated transitions to other magams are reflected. These transitions are carried out through the “Bayati-Turk” (“Bayati-Gajar”) sections based on the rast magam and the “Shikasteyi-fars” (“Mubarriga”, “Ashiran”) sections based on the segah magam. As can be seen, although different sections are used during the modulation of the shur rasta, the transition to the segah magam traditionally takes place through the “Shikasteyi-fars” section.

The third stage of development of mugam is its culmination. This stage is characterized by the return of the main tone of the magam to a new level: “Simayi-shams”, “Hijaz”, “Saranj”, “Nishibi-faraz” and complementary cadence. Here, in the “Samayi-Shams” section, the transition to the council point and the return to the magam-based at a new level shows itself. At the same time, with the acquisition of a higher register in the “Hijaz” section, the quintet is transferred to the upper shur point, then in the “Saranj” section again modulation to the segah magam and through the “Nishibi-faraz” section, the main magam-tonal completion is reflected in the “Shur” mugam.

It should be noted that during the development stages of “Shur” mugam, modulation to the segah magam is observed twice. In the first case, the transition to the sega takes place through the “Shikasteyi-Fars” section, and in the second case through the “Saranj” section. Although the “Shikasteyifars”
section is used as a traditional means of modulation among mughams, the “Saranj” section is only a section belonging to the “Shur” mugham and is not found in other mughams. Thus, the magam-tonal plan of “Shur” mugam attracts attention with its originality. Similar features can be observed in other mughams. In “Bayati-Shiraz” mugam the transitions to rast and segah magams show themselves. However, in Bayati-Shiraz, the transition to the rasta is carried out through the Khavaran section, which is close to the Araq department in terms of music content. Within the “Rast” mugam, the “Khavaran” section, sounding between “Shikasteyi-fars” and “Araq”, has a kind of transition from segah to rasta. “Khavaran”, which sounded after “Shikasteyi-Fars”, shows itself as the section that prepares the culmination of mugam — “Iraq”. In “Bayati-Shiraz” the “Khavaran” section has a different position, and then there is a transition to the sega, “Uzzal” and “Shikasteyi-fars” sections based on the segah magam are sounded. Taking into account the importance of the “Uzzal” section in the “Bayati-Shiraz” mugam, the “Khavaran” section can also be considered as a stage of preparation for the culmination of this mugam. As can be seen, within a number of mughams, modulations to rast and segah magams are performed in traditional ways. Taking into account the importance of the “Uzzal” section in the “Bayati-Shiraz” mugam, the “Khavaran” section can also be considered as a stage of preparation for the culmination of this mugam. As can be seen, within a number of mughams, modulations to rast and segah moments are performed in traditional ways. At the culmination of the Bayati-Shiraz mugam, after the Uzzal section, the Shikasteyi-Fars section is included to expand the walks on the segah magam and increase the effect of the segah magam. Thus, the “Shikasteyi-Fars” section is reflected not as a means of transition, but as a means of strengthening the position of the segah magam in the magam-tonal plan of mugam. Thus, if these sections are used together in “Bayati-Shiraz” mugam, in some mughams, for example, in “Chahargah”, and in some cases in “Humayun”, “Uzzal” section characterizes the transition to segah. There are three stages of development in the structure of “Chahargah” mugam. The first stage of development of mugam covers the following sections: “Bardasht”, “Mayeyi-Chahargah”, “Basta-Nigar”. At this stage, the magams-tonality plan reflects the sections related to the capital stage, and the main magam-tonality ("do" chahargah) is strengthened. The second stage of development of mugam consists of “Hasar”, “Mukhalif” sections, which differ from each other in terms of tone and melodic content. The third stage of development of mugam consists of “Mansuriyya” and “Uzzal” sections, and at the culmination is characterized by the return of “Chahargah” mugam to a new level. However, the application of the “Uzzal” section characterizes the modulation of the segah magam at the peak of the development of mugam.
Results. Thus, the study of the use of eponymous sections in mugham dastgahs reveals the diversity of their methods of application. A number of sections used in mugam dastgahs are of a dual nature. A number of sections used in Azerbaijani mugam dasthags are of a dual nature. On the other hand, this section is part of other magam-based mughams, and the new magam is of modulation importance. A number of eponymous sections in the mugam heritage are used in the composition of various mughams, have the importance of moving from one magam to another in the chain structure of the dastgah, and serve the development of the compositional structure. Therefore a number of mugham sections have a special place both in the same magam-based mughams and in different magam-based mugam dastgahs. All of them justify the interrelationships of mughams, which have their own structural features.

References
Babaev, E. A. (1990). The rhythm of the Azerbaijani destgah. Baku: Ishyg. [In Russian].
Badalbeyli, A. B. (2017). Detailed monographic music dictionary. Baku. [In Azerbaijani].
Hajibeyli, U. A. (2010). Basics of Azerbaijani folk music. Baku: “Apostrophe” printing house. [In Azerbaijani].
Hajibeyli, U. A. (2004). Selected works (In 2 volumes, I part). Baku. [In Azerbaijani].
Hajibeyli, U. A. (2005). About the music of Azerbaijani Turks. Baku. [In Azerbaijani].
Ismayilov, M. C. (1984). Genres of Azerbaijani folk music. Baku: Ishyg. [In Azerbaijani].
Ismayilov, M. C. (1991). Scientific-methodical essays on the theory of moment and mugam of Azerbaijani folk music. Baku: Elm. [In Azerbaijani].
Mammadov, N. H. (1981). Azerbaijani mugam. Azerbaijani folk music. Essays. Baku: Science. [In Azerbaijani].
Zöhrabov, R. F. (2013). Azerbaijani mughams. Baku: Education. [In Azerbaijani].
Abdullazade, G. A. (1983). Philosophical essence of Azerbaijani mughams. Baku: Yazychi. [In Russian].
Bagirova, S. Yu. (2007). Azerbaijani mugam (articles, studies, reports). Baku: Elm. [In Russian].
Guliev, A. N. (2009). Principles of Contrast in the Musical Drama of Azerbaijani Mugham. Baku. [In Russian].
Mamedova, R. A. (2002). Azerbaijani mugham. Baku: Elm. [In Russian].

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