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ABSTRACT

of the dissertation for the degree of Doctor of Philosophy

ISSUES IN THE APPLICATION OF A NEW METHOD OF ANALYSIS TO MUGHAM SYNTAX
(Based on the Azerbaijani "Zabul-Segah" and Iranian "Segah" Instrumental Dastgahs)

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GENERAL CHARACTERISTICS OF THE DISSERTATION

Relevance and degree of elaboration of the topic. The art of mugham is one of the most valuable examples of heritage within Azerbaijani musical culture. The scholarly investigation of mugham music is a complex field that simultaneously demands considerable responsibility. Research conducted in this field demonstrates that a thorough study of the structural and functional mechanisms of the art of mugham requires the musicologist to possess both theoretical knowledge and practical experience.

Observations and analyses indicate that Azerbaijani mugham performance possesses a scientific-theoretical foundation. It follows that ancient master mugham performers strictly adhered to the rules and principles of its execution due to their profound comprehension of these scientific-theoretical underpinnings. However, the lack of both written and oral transmission of these theoretical foundations down to the present day has created certain gaps in the scholarly study of the art of mugham. It appears that over the historical course of transmitting mugham performance orally through master-apprentice relationships, these scientific-theoretical foundations were gradually forgotten. Consequently, within the modern educational system, mughams are taught through the imitation and mechanical repetition of the master's performance style. While this approach serves to preserve the authenticity of mugham on one hand, it restricts individual creative initiative within the performance process on the other. As a result, rote learning and conventional thinking gain dominance in mugham execution, poses certain obstacles to the academic development of this art.

In our view, the future development of the art of mugham requires a systematic approach based not solely on traditional performance models but also on scholarly-theoretical methods of analysis. This may create favourable conditions both for a profound scholarly explanation of the internal regularities of mugham and for the renewal of the educational process on the basis of contemporary pedagogical principles.

Alongside Azerbaijani mughams, we have investigated the maqam theory and performance practice of Near Eastern countries – including Iran, Turkey, and Iraq – as well as medieval musical treatises; and, owing to the pedagogical experience gained in the teaching of mugham, a different approach has been applied to mugham performance and to its modal and melodic structure. The identification of structural elements that constitute the structure of mugham but have hitherto not received adequate scholarly appraisal reveals the limitations of existing scholarly approaches. This, in turn, necessitates a renewed investigation of mugham analysis on new scholarly-methodological foundations.

As a result of the research conducted, all performance-related and modal processes occurring within the internal structure of mugham have been identified and differentiated, their functions and mechanisms of development have been explained, and they have been terminologized. The theoretical foundations of the proposed method of analysis unite the performance-related and modal foundations of mugham in an interconnected form. As a result, the principal movements (gedishes) occurring in the performance of mughams have been identified, and the general regularities of mugham formation have been established. The Azerbaijani instrumental mugham dastgah "Zabul-Segah" and the Iranian instrumental mugham dastgah "Segah" have been analysed using this new method.

Azerbaijani mugham art has been consistently investigated by musicologists from various scholarly perspectives, including its historical development, the structural organization of mugham dastgahs, terminological and etymological questions, as well as its modal, melodic, rhythmic, and thematic characteristics. These studies, conducted across different periods, have played an important role in the formation and systematization of mugham theory.

The scholarly activity of a number of eminent scholars in this field deserves particular mention. Uzeyir Hajibeyli's fundamental work *The Foundations of Azerbaijani Folk Music* constituted an important stage in laying the scholarly foundation of national music theory[1]. The

[1] Hacıbəyli, Ü.Ə. Azərbaycan xalq musiqisinin əsasları / Ü.Ə.Hacıbəyli. – Bakı: Şərq-Qərb, – 2019. – 360 s.

studies of M.Ismayilov, *The Genres of Azerbaijani Folk Music*[2] and *Scholarly-Melodic Essays on the Modal and Mugham Theory of Azerbaijani Folk Music* [3] ; the works of Professor R.Zohrabov, *Azerbaijani Mughams* [4] , *Theoretical Problems of Azerbaijani Mughams*[5], *Theoretical Foundations of the Rast Mugham Dastgah*[6], *Theoretical Foundations of the Chahargah Mugham Dastgah*[7], and *Zerbi-Mughams* [8] ; E.Babayev's study *Theoretical Foundations of Azerbaijani Mugham*[9]; and the works of R.Mammadova, *Mugham at the Crossroads of Art*[10], *Problems of Functionality in Azerbaijani Mugham*[11], and *Theoretical Problems of Azerbaijani Music*[12], constitute an important stage in the formation and development of the scholarly-theoretical basis of mugham theory.

Many renowned musicologists have carried out valuable research into various aspects of Azerbaijani mugham art on a scholarly basis. Each of them has achieved important scholarly results in the study of particular directions within mugham scholarship.

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[2] İsmayılov, M.C. Azərbaycan xalq musiqisinin janrları / M.C.İsmayılov. – Bakı: İşıq, – 1984, – 100 s.

[3] İsmayılov, M.C. Azərbaycan xalq musiqisinin məqam və muğam nəzəriyyəsinə dair elmi-metodik oçerklər / M.C.İsmayılov. – Bakı: Elm, – 1991. – 120 s.

[4] Zöhrabov, R.F. Azərbaycan muğamları / R.F.Zöhrabov. – Bakı: Təhsil, – 2013. – 336 s.

[5] Зохрабов, Р.Ф. Теоретические проблемы азербайджанского мугама. / – Баку: Шур, – 1992, – 247 с.

[6] Zöhrabov, R.F. "Rast" muğam dəstgahının nəzəri əsasları / R.F.Zöhrabov. – Bakı: Mars-Print, – 2002. – 146 s.

[7] Zöhrabov, R.F. "Çahargah" muğam dəstgahının nəzəri əsasları / R.F.Zöhrabov. – Bakı: Mars-Print, – 2000. – 130 s.

[8] Zöhrabov, R.F. Zərbi muğamlar (musiqi-nəzəri tədqiqat). / R.F.Zöhrabov. – Bakı: Mars-print, – 2004. – 406 s.

[9] Babayev, E.Ə. Azərbaycan muğamlarının nəzəri əsasları. Dərs vəsaiti. / E.Babayev. – Bakı: "MTM" İnnovation MMC, – 2018. – 368 s.

[10] Məmmədova, R.A. Muğam-sonata qovşağı / R.A.Məmmədova. – Bakı: İşıq, – 1989. – 132 s.

[11] Мамедова Р.А. Проблемы функциональности в азербайджанском мугаме. – Баку: Элм, – 1989, – 163с.

[12] Məmmədova, R.A. Azərbaycan musiqisinin nəzəri problemləri / R.A.Məmmədova. – Bakı: Avropa, – 2020. – 244 s.

Thus, G.Abdullazade[13], R.Imrani[14], and S.Farhadova[15] have, in their studies, primarily examined the phased historical development of mugham, while Z.Safarova, G.Shamill[16], and S.Agayeva[17] have investigated medieval musical treatises pertaining to Azerbaijani and Eastern musical culture. In the studies of M.Ismayilov, the role of stable and tonic pitch (pərdə) within the modal system, as well as the mutual kinship relations among modes, has been scholarly substantiated. Professor R.Zohrabov has analysed the modal structure and the melodic and rhythmic characteristics of mughams. E.Babayev, through his investigation of rhythm, intonation, and the regularities of development of the core theme (özək) in mugham, has established the principles governing the preservation of thematic unity within the internal structure of mugham. A.Guliyev[18] has investigated the principle of contrast in the melodic dramaturgy of mugham and its artistic expressive possibilities, while S.Baghirova has presented scholarly findings concerning mugham form and its internal logical structure. M.Guliyev[19], in his studies devoted to problems of mugham performance, has brought a scholarly-theoretical perspective to bear on questions of the preservation of performance traditions, principles of improvisation, and the development of performance styles.

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[13] Abdullazadə, G.A. Qədim və Orta əsrlərin musiqi mədəniyyəti, tarixi-fəlsəfi təhlil / G.A.Abdullazadə. – Bakı: – Qartal, – 1996. – 292 s.

[14] İmrani, R.H. Azərbaycan muğam janrının yaranması və inkişaf tarixi. / R.H.İmrani. – Bakı: ADPU mətbəəsi, – 1994. – 251 s.; İmrani, R.H. Muğam fəlsəfəsi / R.H.İmrani. – Bakı: Elm, – 2011. – 662 s.; İmrani, R.H. Muğam tarixi / R.H.İmrani. – Bakı: Elm, – 1998. – 280 s.

[15] Fərhadova, S.M Azərbaycan muğam dəstgahının tarixi kökləri / S.M.Fərhadova. – Bakı: Elmin inkişafı fondu, – 2018. – 198 s.

[16] Şamilli, G.B. Mirzəbəy musiqi risaləsi / G.B.Şamilli. – Bakı: Azərbaycan, – 1995. – 88 s.

[17] Ağayeva, S.X. Ruhperver bir XVII yüzyıl müzik teorisi kitabı / S.X.Ağayeva, R.Uslu. – Ankara: Genel Dağıtım Ürün yayınları, – 2008. – 148 s.

[18] Гулиев, А.Н. Принципы контрастности в музыкальной драматургии Азербайджанского мугама / А.Н.Гулиев. – Баку: Şərq-Qərb, – 2009. – 136 с.

[19] Quliyev, M.B. Muğam sənətində ifaçılıq məsələləri / M.B.Quliyev. – Bakı: MBM, – 2013. – 140 s.

In addition, the scholarly works, articles, and studies of such researchers as S.Baghirova [20], J.Hasanova [21], S.Mahmudova [22], F.Chalabiyev [23], A.Najafzade [24], L.Huseynova [25], R.Musazade [26], F.Bakhshaliyev[27], F.Khaligzade[28] and I.Shikhaliyev[29] have likewise made valuable contributions to the development of various directions within mugham scholarship.

Thanks to the treatises of medieval Eastern musicologists, it is possible to obtain detailed information about the theoretical principles of the modal music of that period. These sources bear not only historical significance but also serve as a scholarly basis for the formation of contemporary mugham theory.

In this regard, among the most valuable scholarly works reflecting ancient maqam theory are: the treatises *Kitab al-Adwar*[30] and *Sharafiyya*[31] by the thirteenth-century Azerbaijani and Eastern

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[20] Bağırova, S.Y. Azərbaycan muğamı. Məqalələr, məruzələr, tədqiqatlar / S.Y. Bağırova. – Bakı: Elm, – 2007. – 251 s.

[21] Həsənova, C.İ. Üzeyir Hacıbəylinin yaradıcılığında milli musiqinin nəzəri əsasları / C.İ.Həsənova. – Bakı: Mars-print, – 2009. – 320 s.

[22] Махмудова, Ш.Г. Тематизм азербайджанского мугама / Ш.Г. Махмудова. – Баку: Шур, – 1997, – 132 с.

[23] Челебиев Ф. И. Морфология дастгяха: / Дис. на соиск. ученой степении д-ра искусствоведения. / – Санкт-Петербург: Российский институт истории искусств, – 2009. – 725 с.

[24] Nəcəfzadə, A.İ. Muğam / A.İ.Nəcəfzadə, V.M.Məmmədəliyev. – Bakı: Ecoprint, – 2017. – 160 s.

[25] Hüseynova, L.Ş. Türk xalqlarının musiqisi. / L.Ş.Hüseynova. – Bakı: AFPoliqrAF, – 2023. –176 s.

[26] Musazadə, R.M. Muğamın tədrisi metodikası / R.M.Musazadə. – Bakı: MBM, – 2012. – 192 s.

[27] Baxşəliyev, F. Muğam sənəti ilə təsəvvüf fəlsəfəsinin əlaqə prinsipləri // "Muğam aləmi" V Beynəlxalq festivalı çərçivəsində keçirilən "Azərbaycanda muğam elmi: reallıqlar və perspektivlər" elmi simpoziumunun materialları, – Bakı: 2-9 mart, – 2018. – s. 124-129.

[28] Xalıqzadə F.X. Üzeyir Hacıbəyli və folklor. – Bakı: Şərq-Qərb, – 2014. – 276 s.

[29] Şıxəliyev, İ.N. Azərbaycan musiqisinin lad nəzəriyyəsi / İ.N.Şıxəliyev. – Bakı: Zərdabi nəşriyyat-poliqrafiya MMC, – 2015. – 168 s.

[30] Səfərova, Z.Y. Səfiyəddin, Urməvi. Kitabül-ədvar / ön söz və şərhlərin müəllifi Z.Y.Səfərova. – Bakı: –Şərq-Qərb, – 2006. – 208 s.

[31] Səfərova, Z.Y. Azərbaycanın musiqi elmi XIII-XX əsrlər / Z.Y.Səfərova. – Bakı: Azərnəşr, – 2006. – 544 s.

music theorist Safi al-Din al-Urmawi; the works *Jami' al-Alhan*[32], *Maqasid al-Alhan* [33] by the eminent fourteenth–fifteenth-century scholar Abd al-Qadir al-Maraghi; the treatise *Majalla fi'l-Musiqa*[34] by the fifteenth-century researcher Fathullah Shirvani; the *Treatise on Music*[35] by the seventeenth-century author Mirza Bey; the work *Vuzuh al-Arqam* [36] by the eminent nineteenth–twentieth-century Azerbaijani musicologist Mir Mohsun Navvab; as well as *Treatise on Music* [37] by Abd al-Rahman Jami and *Central Asian Treatise on Music* [38] by Darvish Ali Changi. The theoretical propositions recorded in these treatises – the pitch (pərdə) system, the principles of modal construction, the rules of modulation, and rhythmic models – continue to bear important scholarly significance today for understanding the theoretical foundation of Azerbaijani mugham art.

The activity of a number of eminent composers and musicologists in the field of mugham notation deserves particular mention. In this field, the manuscript notations of the Rast mugham by Muslim Magomayev (1885–1937), the Shur mugham by Gara Garayev (1918–1982), and both the Shur and Rast mughams by Taghizade Niyazi Hajibeyov (1912–1984), as well as the published notations of the Zabil dastgah by Tofig Guliyev (1917–2000) and the Dugah mugham by Zakir Baghirov (1916–1996), represented significant milestones. At the same time, the notation by N.Mammadov (1927–2015) of the instrumental dastgahs "Segah–

[32] Ubeydullah, S. Abdülkadir Meragai ve Camiu'l-elhan'ı: / Doktora tezi. / – İstanbul: – 2007. – 276 s.

[33] Uslu, R. Merağiden II Murada müziğin maksatları. "Makasidul-Elhan" /– Ankara: Atatürk Kültür Merkezi Başkanlığı. – 2015. – 240 s.

[34] Səfərova Z.Y. Fətulla Şirvani. Musiqi haqqında risalə / ərəb dilindən tərc. ed. Ə.Əmirəhmədov. Z.Y.Səfərova. – Bakı: Şərq-Qərb, – 2006. – 216 s.

[35] Şamilli, G.B. Mirzəbəy musiqi risaləsi / G.B.Şamilli. – Bakı: Azərbaycan, – 1995. – 88 s

[36] Səfərova, Z.Y. Mir Möhsün Nəvvab. "Vüzuhül Ərqam". / Z.Y.Səfərova – Bakı: Elm, – 1989. – 53 s.

[37] Джами, Абдурахман. Трактат о музыке. / Издательство академии наук Узбекской ССР. – Ташкент: – 1960, – 111 с.

[38] Семёнов, А.А. Среднеазиатский трактат по музыке Дервиша Али (XVII век). Сокращенное изложение персидского (таджикского) текста с введением, примечаниями и указателем. / А.А.Семёнов. – Ташкент: тип. №1, – 1946. – 84 с.

Zabul and “Rahab", "Chahargah and Humayun", "Bayati–Shiraz and Shur", "Rast," and "Shahnaz", as well as of the vocal-instrumental dastgahs "Chahargah" and "Rast" [39] expanded the possibilities for comprehensive analysis within Azerbaijani mugham scholarship.

Continuing this tradition, researchers such as F.Azimli (1952–2008), in his work *The Azerbaijani School of Mugham* [40]; A.Asadullayev (1949), in his work *Instrumental Mughams*[41]; and A.Mammadli (1944), in his work *Azerbaijani Mughams* [42] *(Instrumental)*, have achieved important scholarly and practical results in the field of mugham notation.

The vocal dastgah "Zabul-Segah," based on the performance of the khanende (vocalist) Vahid Abdullayev (1948–2001), has been notated by the author, but has not been published. In the present study, only the notated material of the "Zil Zabul" mugham *shöbe* is presented.

In the process of investigating Azerbaijani mugham dastgahs, the study of Iranian mugham dastgahs, which possess the same structural principles, and the examination of their notated versions, is of particular scholarly significance. The *radif* system, formed within the Iranian musical tradition, serves as a valuable theoretical basis for the comparative analysis of the modal-structural organization of Azerbaijani mughams.

The principal sources investigated in this direction include the following fundamental studies: F.Fakhraddini, *Tajzīye va Taḥlīl va*

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[39] Məmmədov, N.H. Azərbaycan muğamları, Zabul Segah və Rəhab. / N.H.Məmmədov. – Bakı: Azərnəşr, – 1965. – 58 s.; Məmmədov, N.H. Azərbaycan muğamları Çargah və Hümayun / N.H.Məmmədov. – Bakı: Azərbaycan Dövlət Musiqi Nəşriyyatı, – 1962. – 38 s.; Məmmədov, N.H. Azərbaycan muğamları “Bayatı-Şiraz” və “Şur” / N.H.Məmmədov. – Moskva: Dövlət Musiqi Nəşriyyatı, – 1962. – 40 s.; Məmmədov, N.H. Azərbaycan muğamları Rast və Şahnaz / N.H.Məmmədov. – Bakı: Azərnəşr, – 1963. – 63 s.; Məmmədov, N.H. Azərbaycan muğamı "Rast" dəstgahı / N.H.Məmmədov. – Moskva: Sovet Bəstəkarları, – 1978. – 110 s.

[40] Əzimli, F.N. Tar üçün not və muğam məktəbi / F.N.Əzimli. – Bakı: R.N.Novruz-94, – 2009. – 316 s.

[41] Əsədullayev, A.M. İnstrumental muğamlar və onların ifaçılıq məziyyətləri / A.M.Əsədullayev. – Bakı: Adiloğlu, – 2014. – 284 s.

[42] Məmmədli, Ə.M. Azərbaycan muğamları / Ə.M.Məmmədli. – Bakı: Azərbaycan, – 2012. – 328 s.

Sharḥ-e Radīf-e Musīqī-ye Īrān[43]; H.Farmoz, *Dastgāh dar Musīqī-ye Īrān* [44] ; R.Khaleghi, *Nazari be Musiqi* [45] ; A.N.Vaziri, *Teorī-ye Musīqī* [46] ; D.Talai, *Radif Analysis* [47] ; J.During, *Radīf-e Sāzī-ye Musīqī-ye Sunnatī-ye Īrān* [48] ; N.Fereidooni, *Transcription of the Vocal Radif of Traditional Iranian Music according to the Performance of Abdollah Davami* [49] ; A.Eslami, *Iranian Music Repertoire (Radif) by Mehdi Solhi (Montazem al-Hokama) and Transcription by Mehdigholi Hedayat (Mokhber al-Saltaneh)* [50] ; R.Vohdani, *The Traditional Music of Iran*[51]; L.Mofakham-Payan, *Les Systèmes de la Musique Traditionnelle de l'Iran (Radif)*[52]; and A.Ghafari, *Radif of Master Morteza Neydavood*[53].

In addition, a number of foreign sources related to the topic have also been investigated. Among these are the works of V.Vinogradov [54] , V.Belyayev [55] , I.H.Özkan [56] , Kiesewetter [57] ,

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[43] Fakhreddini Farhad. "Taczieye va tahlil va sharhe radife musiqiye İran". – Tehran: Moin, – 2013. – 480 s.

[44] Farhat, Hormoz. "Dastgah dar musiqiye İran". – Tehran: Part, –2001. – 273 s.

[45] Khalegi Ruhollah. Nazari be musigi. – Tehran: Safialishah, – 2015. – I-163 s, – II-275 s.

[46] Vaziri Ali Nagi. "Teoriye musigi". – Tehran: Safialishah, – 2008. – 393 s.

[47] Talai D. Radif Analysis. – Tehran: Ney, – 2016. – 541 s.

[48] During, Jean. Radife saziye musigiye sunnətiye İran. – Tehran: Sorush, – 1991. – 352 s.

[49] Fereidooni, Nima. Transcription of The Vocal Radif of Traditional İranian Music According to the performance of Abdollah davami. – Tehran: Tehran University. – 2004. – 169 s.

[50] Eslami, Amirhossein. İranian Music Repertoire (Radif) by Mehdi Solhi (Montazem al-Hokama) and Transcription by Mehdigholi Hedayat (Mokhber al-Saltaneh). – Tehran: – 2013. 738 s.

[51] Vohdani Reza. The Traditional Music of İran. – Tehran: – 295 s.

[52] Mofaxxam-Payan, L. Les Sistemes de la Musigue Traditionelle de l İran (Radif). Compilation dapres les radifs Aga Mirza Abdollah, Aga Hoseynqoli et Darviş-Xan. Par: Musa Marufi. – Tehran: – 1977. – 180 s.

[53] Ghafari, Ashkan. Radif of Master Morteza Neydavood. Hastan Pub. – Tehran: – 1990. – 129 s.

[54] Виноградов, В.С. Классические традиции Иранской музыки / В.С.Виноградов. – Москва: Советский композитор, – 1982. – 183 с.

[55] Беляев В.М. О музыкальном фольклоре и древней письменности. – Москва: Советский композитор, – 1971. – 234 с.

[56] Özkan, İ.H. Türk müsikisi nazariyati ve üsulleri. / – İstanbul: Ötüken, – 1998. – 686 s.

d'Erlanger[58], and Hamed al-Sa'idi[59]. The studies of these authors, encompassing the general theoretical regularities and directions of historical development of Near Eastern maqam music, have contributed to a deeper understanding of the historical-theoretical aspects of the art of mugham.

In connection with the research conducted, a number of ancient musical treatises have also been examined. The treatises composed by such eminent medieval musicologists as Dimitrie Cantemir (17th century)[60], Khidr ibn Abdullah (15th century)[61], Yusuf ibn Nizam al-Din ibn Yusuf al-Rumi (15th century)[62], Seydi (15th century)[63], Darvish al-Sayyid Muhammad Amin[64], Kadizade Muhammad al-Tirevi (17th century)[65], Ladikli Muhammad Chelebi (15th century)[66], Salah al-Din al-Safadi (13th century)[67], Qutb al-Din al-Shirazi[68], Ahmad-oglu Shukrullah (15th century)[69], Badr al-Din Dilshad[70], and Alishah Haji

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[57] Kiesewetter. R.G. Musik der Araber. – Leipzig, – 1842, – 125 p.
[58] Derlanger B.R. La Musique Arabe. / B.R.Derlanger. – Paris: – 1949, – 334 p.
[59] Mr.Hamed al Saadi. The İraqi Maqam Performance. / – London.: – 2003, – 87 s.
[60] Tura Y. Kantemiroğlu, D. "Kitabu İlmil-Musiki ala vechil-Hurufat". / – İstanbul: Yapı kredi yayınları, – 2001, – 695 s.
[61] Özçimi, S. M. Hızır bin Abdullah ve Kitabül-Edvar. / – İstanbul: T.C. Yüksek ögretim kurulu dokumantasyon merkezi, – 1989. – 221 s.
[62] Kamiloğlu, R. Şehri Kirşehri el-mevlevi Yusuf ibn Nizameddin ibn Yusuf Ruminin Risalei musikinin transkribe ve degerlendirilmesi. / – Malatya: T.C. Yükseköğretim kurulu dokumantasyon merkezi, – 1998, – 121 s.
[63] Arısoy, M. Seydinin El-Matla adlı eseri üzerine bir çalışma. / – İstanbul. – 1988, – 232 s.
[64] Bardakçı M. Derviş es-Seyyid Mehmed Eminin Tanbur perdeleri risalesi. M.Bardakçı. / – İstanbul: Musikişinas No 4. – 2000. – 39 s.
[65] Nuri Uygun M. Kadızade Tirevi ve Musiki Risalesi. / – İstanbul: – 1990.– 97 s.
[66] Tekin, H. Ladikli Mehmet Çelebi ve er Risaletül Fethiyyesi. / – Niğde: Yüksekoğretim Kurulu Dokümantasiyon Merkezi, – 1999. – 261 s.
[67] Tekin, E. Safedinin müzik teorisinin incelenmesi. / – İstanbul: Anabilim Dalı: Müzikoloji, – 2007. – 132 s.
[68] Sema Dinç. Kutbüddîn Şîrâzî'nin Dürretü't-tâc'ındaki mûsikî bölümünün incelenmesi. Doktora Tezi. / – Samsun: – 2021. – 425 s.
[69] Kamiloğlu, R. Ahmed oğlu Şükrullah (1388-1489) ve "Edvarı musiki" adlı eseri. / – Ankara: – 2007, – 177 s.
[70] Ceyhan Adem. "Bedri Dilşadın Murad-namesi" Marmara Üniversitesi Sosyal Bilimler Estitüsü. (Doktora tezi). / – İstanbul: – 1994. – 394 s.

Bukä (15th century)[71] are regarded as important scholarly sources for understanding the formation of Eastern maqam music theory.

In the course of the research, in the analytical investigation of Iranian mugham music, use was made of the translations, scholarly works, and theoretical commentaries of Gultakin Baycan gizi Shamilli[72]. The studies carried out by this scholar have made a significant scholarly contribution to the comparative study of the structural principles of the Iranian radif system in relation to Azerbaijani mugham dastgahs.

A number of scholarly studies on the comparative analysis of Azerbaijani and Iranian mugham dastgahs have been carried out to date, with two dissertations defended in this direction. One of these studies is the dissertation prepared by S.Hasanpur-Karimova[73], entitled *The Azerbaijani and Iranian "Chahargah" Mughams*. The other is the dissertation submitted by N.Garalova, entitled *A Comparative Analysis of the Azerbaijani and Iranian "Shur"*[74] *Dastgahs*. In these scholarly works, primary attention has been directed toward determining the structural characteristics, modal-melodic organization, and intonational differences between the Azerbaijani and Iranian mugham systems, operating more within the framework of classical analytical methodology.

The present study, by contrast, differs from the investigations of the aforementioned scholars in that it is based on a new scholarly-analytical approach and an original method of analysis. Here, proceeding from both music-theoretical and music-practical perspectives, the structural and melodic characteristics of mughams are analysed on multiple levels. It must be noted that, to date, no separate scholarly investigation devoted to the comparative analysis of the Azerbaijani and Iranian "Segah" mugham dastgahs has been

[71] Çakır A.“Alişah B. Hacı Bükenin Mukaddimetül Usul adlı eseri”. A.Çakır. / – İstanbul: Yüksek Öğretim Kurulu Dokumentasyon Merkezi, – 1999. – 335 s.

[72] Шамилли Г. Классическая музыка Ирана. Правила познания и практики. – Москва: Издательский дом Композитор, – 2007. – 447 с.

[73] Kərimova, S.Ş. Azərbaycan və İran Çahargah muğamının müqayisəli təhlili. Dissertasiya. / S.Ş.Kərimova. – Bakı: – 1996, – 168 s.

[74] Qaralova, N.Z. Azərbaycan və İran “Şur” dəstgahlarının müqayisəli təhlili. Dissertasiya. / N.Z.Qaralova.– Bakı: – 2013. – 158 s.

undertaken within Azerbaijani musicology.

Object and subject of the research. The object of the research comprises the structural and theoretical components of the functional-syntactic analysis method. Within the framework of this object, the mugham's modal and melodic organization is examined from a new analytical perspective.

The subject of the research encompasses the performance characteristics, modal structure, and melodic development principles of the Azerbaijani "Zabul-Segah" and Iranian "Segah" instrumental mugham destgahs, as determined through the application of the functional-syntactic analysis method. The study is directed towards the scientifically grounded identification of both the common and distinguishing features in the compositional and syntactic organization of these two mugham destgahs.

Aim and objectives of the research. The purpose of the research is to determine the melodic, syntactic, and modal (maqam) interaction processes occurring within the internal structure of mugham, using the Azerbaijani "Zabul-Segah" and Iranian "Segah" instrumental mughams as case studies, and to systematize them on a terminological basis. Additionally, the study aims to implement the theoretical foundations of the functional-syntactic analysis method in both mugham theory and mugham education.

To achieve specific scientific results in the aforementioned field, the resolution of the following objectives is envisioned:

- The comprehensive scientific study and preservation of Azerbaijani mugham performance traditions, the refinement of performance art in accordance with contemporary standards, and the contribution to the scientific-theoretical advancement of Azerbaijani mugham studies (mughamology);

- The determination of the position occupied by Azerbaijani modes (maqams) within the Near Eastern maqam music system, and the expansion of the development perspectives of Azerbaijani mugham studies and composition school based on the theoretical views formed in this context;

- The systematic investigation of historical and contemporary research sources on the art of mugham, their introduction into

scientific discourse, and their application as a methodological framework for comparative analysis;

- The scientific and systematic mastery of mugham theory rooted in the principles of ancient Eastern music science, along with the clarification of its terminological and theoretical frameworks.

Research method. The primary research method employed in the dissertation is the functional-syntactic analysis method, developed by the author. As auxiliary methods, analytical, comparative, systematizing, and structural-semantic methods have been applied. In addition, the historical-comparative method has been utilized in juxtaposing medieval theoretical sources with contemporary theory, while the empirical observation method has been applied in the transcription and analysis of classical mugham performance recordings.

The functional-syntactic analysis method employed in the present study differs from existing mughamology methods in two fundamental respects. First, it integrates the performance activity of mugham melody with its theoretical structure in a unified synthetic form – whereas hitherto these two aspects have been studied in isolation from one another. Second, it analyzes mugham melody not merely through the traditional segmentation of sentence, phrase, and motif, but primarily through the system of melodic progressions. This, in turn, allows for the first time a systematic elucidation of the internal movement mechanism of mugham melody — that is, not simply what occurs, but rather how it occurs.

The novel methodological approach advanced in the present study also ensures the integration of the theoretical-scholarly and performance-based aspects of mugham, thereby creating the conditions for the formation of a comprehensive structural model of mugham and for the broadening of its applicability within the educational process.

Main propositions submitted for defence. The main scholarly propositions submitted for defence in the dissertation are as follows:

- the determination of the theoretical foundations of the functional-syntactic analysis method and the systematization of the

structural, modal, and melodic principles of mugham within the framework of this method;

- the scientifically grounded identification of the internal organization of the Azerbaijani "Zabul-Segah" and Iranian "Segah" instrumental mugham destgahs on the basis of the functional-syntactic analysis method;

- the clarification, as a result of the analysis conducted, of the modal, melodic, and performance characteristics of mugham;

- the determination of the similar and distinctive features of the Azerbaijani instrumental mugham "Zabul-Segah" and the Iranian instrumental mugham "Segah."

Scientific novelty of the research.

For the first time, the general regularities of the theoretical structure of mughams and of mugham performance have been determined;

For the first time, as a result of a different approach to the modal foundation and pitch functions of mughams, a number of significant new also clarified functional terms have been proposed, namely "governing pitches" ("root pitch," "shah pitch"), "gedish" (principal movements), "modal house" (məqam evi), "modal circle" (məqam dairəsi), "modally transformed mughams," "modal strata" (məqam təbəqələri), "the first and second stages of intramodal development," "peak pitch" (zirvə pərdə), "naxish" (ornamental melodic-rhythmic formulas), and a number of other important terms;

For the first time, all the internal formations of mugham have been identified from a different perspective, differentiated from one another, and their regularities of development, functions, theoretical structure, and performance characteristics have been explained and terminologized;

On the basis of the functional-syntactic analysis method, the Azerbaijani "Zabul-Segah" and Iranian "Segah" instrumental mughams have been analyzed in a novel manner from both theoretical and performance-based perspectives.

Theoretical and practical significance of the research. The results obtained in the dissertation are of significant practical and

theoretical value for mugham performers, musicologists, ethnomusicologists, mugham researchers, and composers.

The practical significance of the research manifests itself in the following domains:

The advancement of mugham instruction and performance at secondary and tertiary levels of music education, including music schools, music colleges, and such institutions as the National Conservatory, the Baku Music Academy, and the Azerbaijan State University of Culture and Arts;

Its application as a scholarly resource and instructional material in the teaching of disciplines such as "Fundamentals of Azerbaijani Folk Music";

The implementation of a theoretically grounded approach in mugham performance practice and compositional activity;

The development of a "Solfeggio" textbook reflecting the structural principles of mugham, based upon the conceptual framework presented in the dissertation.

Approbation and application. The research has been reflected in Azerbaijani and foreign periodical scholarly publications, recommended by the Higher Attestation Commission under the President of the Republic of Azerbaijan and included in abstracting and indexing systems. In connection with the topic, the author's articles have been published in local and international journals, and reports have been delivered at international conferences and symposiums.

Name of the organization where the dissertation was carried out. The dissertation was carried out at the Department of Ethnomusicology of the Azerbaijan National Conservatory.

The total volume of the dissertation indicated in characters. The dissertation comprises an introduction, three chapters subdivided into nine sections, a conclusion, a bibliography, and appendices. The volume of the structural sections of the dissertation, indicated separately, is as follows: Introduction – 13 pages, 23,192 characters; Chapter I – 85 pages, 112,633 characters; Chapter II – 106 pages, 95,857 characters; Chapter III – 37 pages, 34,899 characters; Conclusion – 7 pages, 11,610 characters. In total, excluding the bibliography and appendices, the dissertation comprises 247 pages and 278,240 characters.

MAIN CONTENT OF THE DISSERTATION

In the **Introduction** to the dissertation, the relevance and degree of elaboration of the topic are substantiated; the aim, objectives, and methods of the research, as well as the main propositions submitted for defence, are determined; and, at the same time, information is presented concerning the scientific novelty of the research, its theoretical and practical significance, the approbation and application of the research, the name of the organization where the dissertation was carried out, and the volume of the structural sections of the dissertation, indicated both separately and as a total character count.

The first chapter of the dissertation is entitled **"Theoretical foundations of functional-syntactic analysis."** The questions investigated in this chapter are covered in five sections. The first section consists of two subsections, ***"The 17-Degree Sound System" and "Pərdə Yeri"*** (Pitch Position). This section investigates the internal structure of the sound system of mugham music.

We outline the fret disposition reflecting Safi al-Din al-Urmawi's 17-tone sound system. The presented pitch series are based on the f^{k} modal system (f^{k} denoting the note F of the small octave). The interval of baqiyya (90 cents, 4 commas, 1 limma) is designated by the letter B, whereas the interval of fazla (24 cents, 1 comma) is denoted by the letter F.

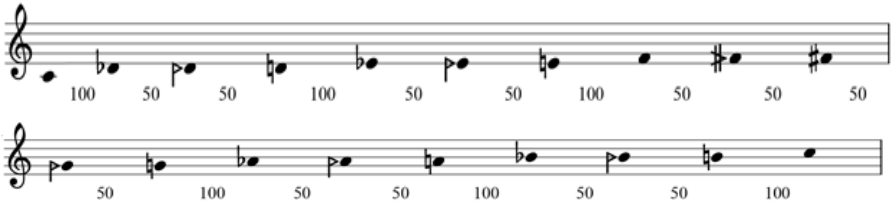
Example 1.



In contemporary Iranian mugham music, the pitch series of the modes – including the pitch series of the modes constituting the Iranian "Segah" mugham dastgah – are based on the quarter-tone 17-degree sound system compiled by Ali Naqi Vaziri[75].

[75] Vaziri A. N. Teoriye musigi. – Tehran.: Safialishah, – 2008. – 393 s.

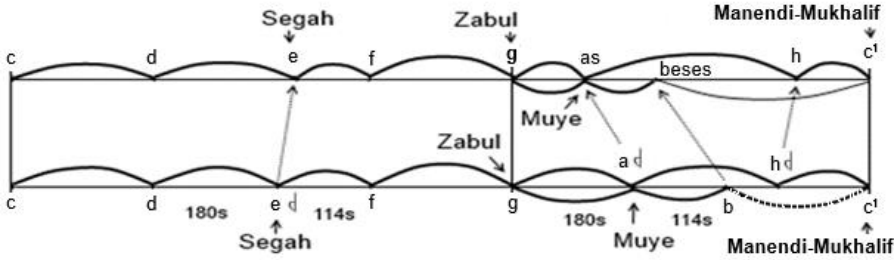
Example 2.



In the first section, the necessity of studying the 17-degree sound system is substantiated, in that the regularities of the modal and melodic structure of mugham rest precisely upon this sound system. The mutual relationships among pitches within mugham melody, and the determination of modal houses (məqam evi) and modal circles (məqam dairəsi), are explained on the basis of the aforementioned sound systems. As a result of the research conducted, it has been established that the tonal and modal relationships of the sections comprising the "Zabul-Segah" and the Iranian "Segah" mugham dastgah fully correspond to the Near Eastern (Turkish, Iranian, Iraqi) modal-pitch system.

We indicate the interval changes occurring in the overall pitch series of the "Zabul-Segah" dastgah as a result of the transposition of its modal pitch series into the equal-tempered sound system.

Example 3.



"*Pərdə yeri*" (pitch position) is a term denoting the interval characteristics of the tonic pitch of modes within the 17-degree modal-pitch system. Within the modal-pitch system, three groups of pitch positions, situated at fixed distances from one another, are distinguished from each other according to the chromatic intervals surrounding them. Through the study of the term *pərdə yeri*, the following are determined: 1) the principal tonalities and transposition

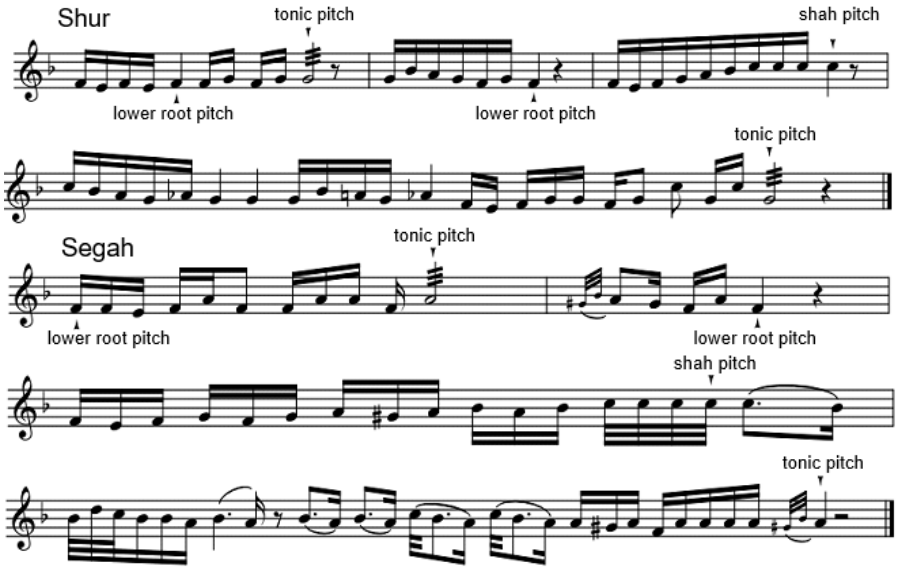
tonalities of the modes situated within the modal system; 2) modal strata (*məqam təbəqələri*); 3) modally transformed modes.

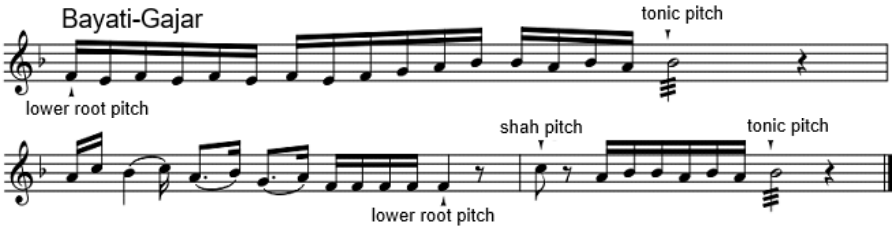
The tonalities of the Segah, Muya, and Hisar mugham sections belonging to the "Zabul-Segah" and the Iranian "Segah" mugham dastgahs refer to the Segah pitch positions.

In the second section, entitled ***"Governing Pitches"*** (İdarəedici pərdələr), the "root" (kök) and "shah" pitches are discussed. It is established, as a regularity, that in the construction of all mughams the tonic pitch is brought forward on the basis of the governing pitches.

Let us consider the notated example reflecting the processes occurring at the beginning of the mughams "Shur" (g^k), "Segah" (a^k), and "Bayati-Gajar" (b^k) – all belonging to the Rast modal family and situated within the b^k-Rast modal circle. It can be clearly traced that the tonic pitch (istinad pərdə) of these mughams orient themselves toward the shared lower root pitch (alt kök pərdə) f^k and the shared shah pitch (şah pərdə) c^1. Through reliance upon the root and shah pitches, and by means of the gedishes (melodic movements) arising between them, the pitch series is traversed and thereby finds its confirmation.

Example 4.





Thus, we witness the governing role of the shared root and shah pitches in the formation of the modal cells situated within the same modal circle. The fact that these modes share a parallel pitch series and common governing pitches doubly strengthens their kinship relationship and creates convenient possibilities for transition between them by means of the shared governing pitches.

The third section of the first chapter consists of two subsections, ***"Modal House"*** (Məqam evi) and ***"Modal Circle"*** (Məqam dairəsi).

The modal house is a medieval concept determining modal affiliation. The modal house is the modal affiliation of a given pitch of a mode's pitch series, determined on the basis of the interval relationship between that pitch and its neighbouring pitches and the governing pitches. The functions of the modal house are as follows:

1. Through the determination of the modal house, a forecast is provided of the range of processes possible within the framework of a given pitch series and tonic pitch, and an understanding is gained of the modal cell forming around the tonic pitch.

2. The simple modal cell, constructed on the basis of the requirements of the modal house, groups together the modes based upon this cell.

3. Through the determination of the modal house, the relationship of a given modal cell to other modes is forecast.

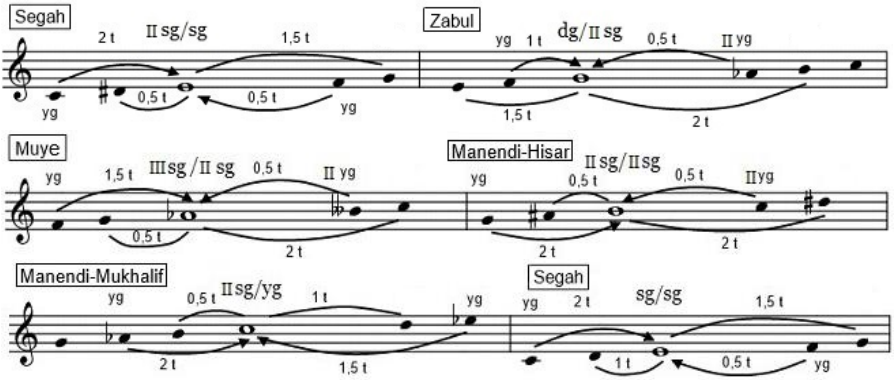
4. Where the portion of a mode below and the portion above its tonic pitch belong to different modal houses, a compound modal house arises; in this case, two incomplete modal houses are united in a single tonic pitch.

The Segah, Muya, and Manandi-Hisar (called simply Hisar in Iran) modes within the analysed mugham dastgahs belong to the Segah modal house both above and below. The Manandi-Mukhalif

and Zabul modes, by contrast, belong to different modal houses above and below their tonic pitch. The lower portion of the Manandi-Mukhalif mode, from its tonic pitch, belongs to the second type of Segah modal house, while its upper portion belongs to the Yekgah modal house. The lower portion of the Zabul mode, from its tonic pitch, belongs to the Dugah modal house, while its upper portion belongs to the second type of Segah modal house.

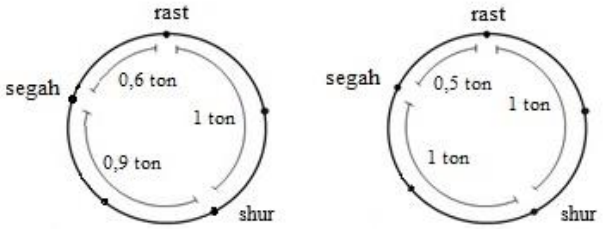
Diagrams are presented showing the modal houses of the mugham sections comprising the "Zabul-Segah" dastgah, together with their approach from the root pitches to their respective tonic pitch. The relationships between the root pitches and the tonic pitch are indicated by arrows.

Example 5.



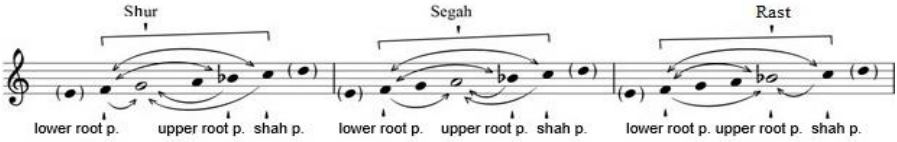
In medieval musicology, the formation of a circle by parallel modes is illustrated, using the group of Rast, Shur, and Segah modes (called in medieval sources Rast, Huseyni, and Iraq), within both the irregular and the equal-tempered pitch system, as follows.

Example 6.



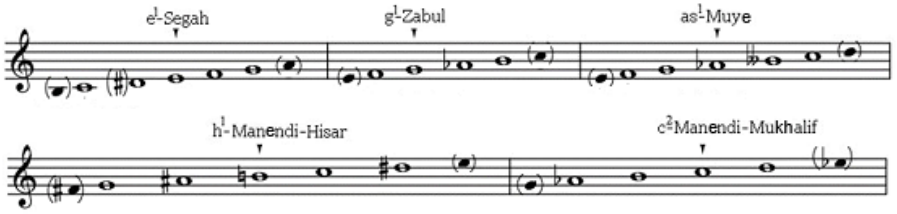
The "modal circle" (məqam dairəsi) is that portion of kindred modes framed by identical governing pitches. The modal circle is bounded below by the root pitch and above by the shah pitch. The Shur, Segah, and Rast modes, situated within the b^k-Rast modal circle (written, for the sake of clarity, one octave higher), are presented as tonic pitch by way of example. As can be seen, these modes share a common lower and upper root pitch, as well as a common shah pitch.

Example 7.



The modal circles to which the sections of the "Zabul-Segah" dastgah belong, together with the positions of the modes' tonic pitch, are indicated.

Example 8.

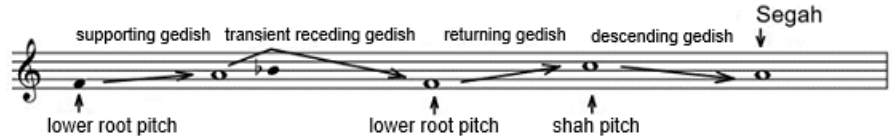


The fourth section of the first chapter consists of the subsections ***"Orientation"*** (Səmtləşmə), ***"Gedishes"*** (Melodic Movements), ***"Peak Pitch"*** (Zirvə pərdə), ***"Resolving Pitch"*** (Qapayıcı pərdə), ***and "Cadential Closure"*** (Ayaq etmə).

In the first stage of development of the mugham structure, during the performance process, an "orientation" (səmtləşmə) of the tonic pitch occurs toward the governing degrees of the modal circle to which it belongs. At this stage, the melodic currents of motion arising both among the governing pitches themselves and in their mutual relationship with the mode's tonic pitch are evaluated as "gedishes" (melodic progression). Four types of melodic progressions have been identified: the supporting gedish (dayaqlama

gedişi), the transient receding gedish (çəkilmə gedişi), the returning gedish (qaytarma gedişi), and the descending gedish (enmə gedişi).

Example 9.



Example 10.



At the outset of descending *çəkilmə* (transient receding), *enmə* (descending), and, in particular, *xarici enmə* (outer/terminal descending) gedishes, a pitch situated, as a rule, above the movement's initial supporting pitch is emphasized. Following this, without interruption, a downward-directed motion carries the melody to its target pitch. This emphasized pitch, situated above, is termed the "peak pitch" (*zirvə pərdə*). An example concerning the emphasis of the peak pitch within the "*ayaq etmə*" (cadential closure) section of the Zabul mugham is presented.

Example 11.



The "resolving pitch" (qapayıcı pərdə) is a theoretical term denoting pitch functions within the structure of a mode's pitch series.

1. When a pitch situated a semitone (or an augmented semitone) below the root pitch is joined to the root pitch as an auxiliary component in melodic motion, that pitch acquires a closing function.

2. When a pitch situated a semitone (or an augmented semitone) below the tonic pitch of a given mode is attached to the tonic pitch as an auxiliary element in the cadential process, that pitch functions as the closing degree of the tonic pitch.

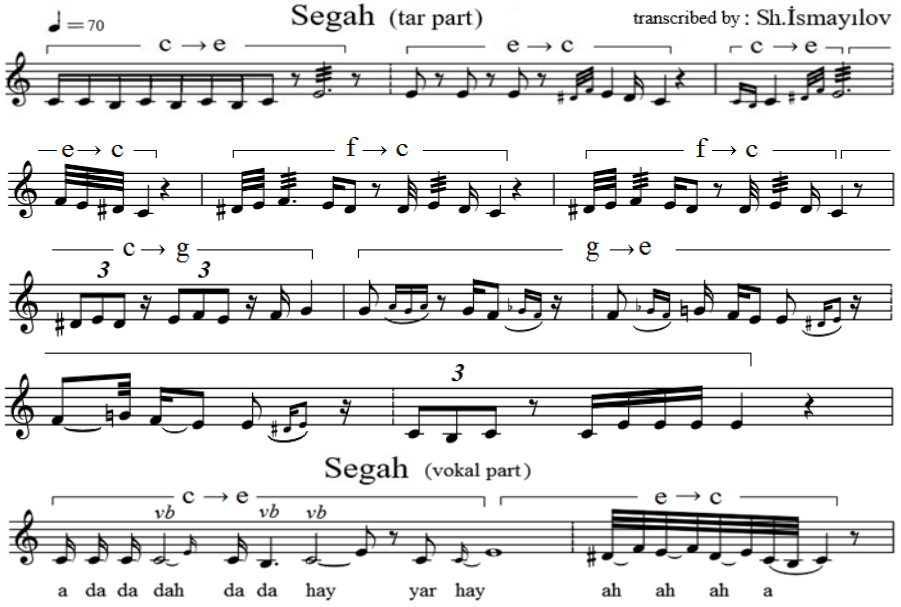
Mughams are classified, according to their hierarchical position within the modal system and the breadth of the musical idea they express, into "root" (kök) and "branch" (budaq) modal groups (asil-farr,

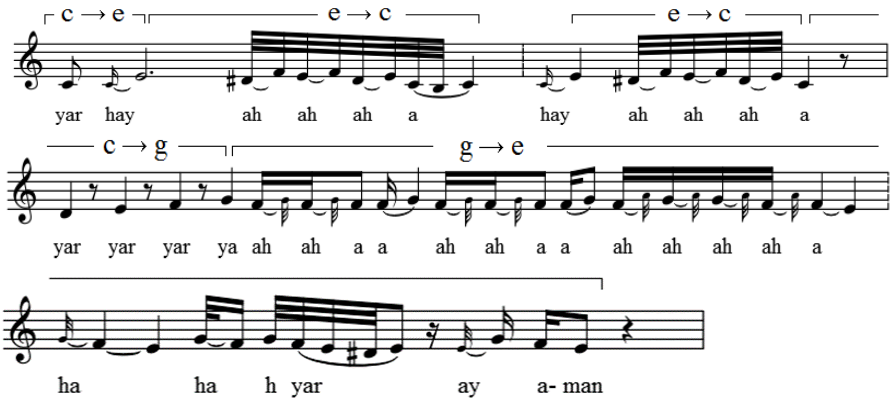
i.e., principal and derivative). It has been established that, in examples belonging to the root mugham category, the final cadential process, at minimum, occurs following the emphasis of the special shah pitch, in the process of terminal cadence (ayaqetmə). This structural function is termed the "great cadence" (böyük ayaq). In mugham sections belonging to the branch mugham category, by contrast, the cadence is realized through the emphasis of a pitch situated below the special shah pitch. This concluding section is termed the "small cadence" (kiçik ayaq), or simply the "cadence" (ayaq). Thus, the structure of the cadential section of root mughams differs from that of branch mughams precisely in the height of the peak pitch.

The fifth section of the first chapter consists of the subsections ***"The Testing of Gedishes in the Process of Mugham Performance," "Stages of Intramodal Development," and "Naxishes"*** (Ornamental Motifs).

For the purpose of tracing intramodal gedishes, the first stage of development of the "Orta Segah" mugham section, transcribed from an audio recording of the khanende Shakili Alasgar (1866–1929) accompanied by the tar, is examined.

Example 12.





The sequence of gedishes in the instrumental part is as follows: measure I, $c^1 \rightarrow e^1$ supporting gedish; measure II, $e^1 \rightarrow c^1$ transient recession gedish; measure III, $c^1 \rightarrow e^1$ supporting gedish; measure IV, $e^1 \rightarrow c^1$ transient receding gedish; measure V, $f^1 \rightarrow c^1$ transient receding gedish; measure VI, $f^1 \rightarrow c^1$ transient receding gedish; measure VII, $c^1 \rightarrow g^1$ returning gedish (qaytarma gedişi); measure VIII, $g^1 \rightarrow e^1$ ($g^1 \rightarrow f^1 + f^1 \rightarrow e^1$) descending gedish, concluding with a cadence.

The sequence of gedishes in the vocal part is as follows: measure I, $c^1 \rightarrow e^1$ supporting gedish; measure II, $e^1 \rightarrow c^1$ transient recession gedish; measure III, $c^1 \rightarrow e^1$ supporting gedish; measure IV, $e^1 \rightarrow c^1$ transient recession gedish; measure V, $e^1 \rightarrow c^1$ transient recession gedish; measure VI, $c^1 \rightarrow g^1$ returning gedish; measure VII, $g^1 \rightarrow e^1$ ($g^1 \rightarrow f^1 + f^1 \rightarrow e^1$) descending gedish, concluding with a cadence. In this analysis, only the gedishes are indicated.

Two stages of development are discernible in the process of modal formation. The first stage of development occurs within the modal circle – that is, between the governing pitches situated below and above the tonic pitch. The beginning of the second stage of development is built upon the relationship between the tonic pitch and the governing pitch situated above it. Following this, the process of melodic saturation of that zone is realized by means of traversing the modal area above the tonic pitch up to a certain limit.

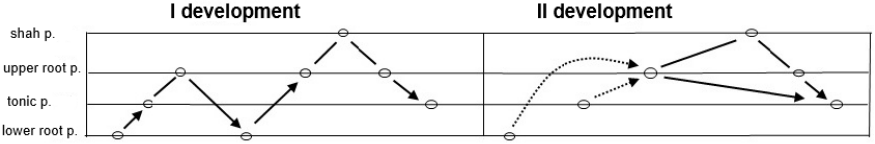
In the first stage of development (I inkişaf mərhələsi), the lower root pitch is active while the upper root pitch is passive; in this

instance, the upper root pitch fulfils a mediating function in relation to the lower root pitch. In the second stage of development, the situation is reversed: the upper root pitch becomes active, while the lower root pitch becomes passive, assuming the mediating role in relation to the upper root pitch.

In the second stage of development (II inkişaf mərhələsi), of root mughams, their modal domain is extended, at minimum, up to the special shah pitch. In branch mughams, by contrast, this process does not extend as far as the special shah pitch, and the melodic movement develops within a more limited compass.

Diagrams of the gedishes of the first and second stages of development for modes belonging to the Dugah and Segah modal houses are presented.

Example 13.



In mugham melody there exist various-sized meloritmik (melodic-rhythmic) formulas whose rhythmic structure and interval relationships remain constant, while their modal basis may change. Such formulas, which are transposable across different modes, are termed "naxish" (ornamental formulas). These naxish formulas have been indicated according to a special notational system devised by the author.

Below is presented a naxish with the formula //122/12//, performed in the "Zil Zabul" section of the "Segah-Zabul" dastgah as notated by Nariman Mammadov[76].

Example 14.



[76] Məmmədov N.H. Azərbaycan muğamları, Zabul Segah və Rəhab. – Bakı.: Azərnəşr, – 1965. – 58 s.

Chapter II of the dissertation is entitled Functional-Syntactic Analysis of the Azerbaijani **"Zabul-Segah" and Iranian "Segah"** Instrumental Mughams. The first section of Chapter II is titled. ***"The 'Zabul-Segah' Instrumental Mugham***", and the second section is titled ***"Iranian 'Segah' Instrumental Mugham".*** In the course of the analytical process, the functionality of the mutually interchangeable structural elements within the internal architecture of the mughams is examined, and their significance within mugham composition is elucidated.

The comparative analysis of the ***"Azerbaijani Zabul-Segah and the Iranian Segah instrumental mughams"*** is presented in the third chapter of the dissertation.

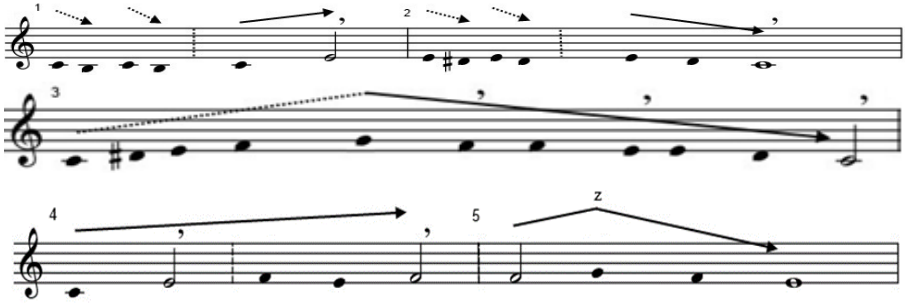
This chapter consists of two sections entitled ***"Naxishes, Scale Degrees of Modes, Reference and Resolution Pitches"*** and ***"Pitch Functions of Modal Scales, Developmental Stages I – II and Principal movements (Gedish)"***

As a result of the comparisons made, the similarities and differences of these mughams, as well as their melodic and performance characteristics, are elucidated.

In the example below, the diagrams of the gedishes occurring in the first stage of development of the e1 Segah and ekr1 Segah modes – comprising the "Zabul-Segah"[77] and the Iranian "Segah[78] instrumental mugham dastgahs, – are indicated within the same tonality.

Example 15.

E^1 Segah

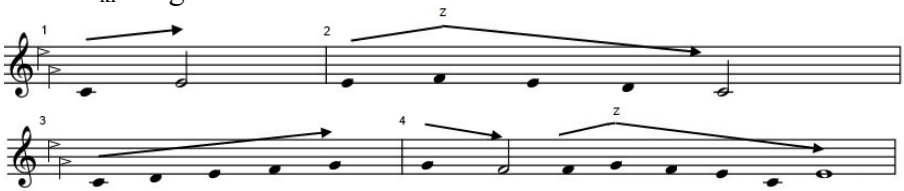


[77] Əsədullayev A. Şur, Segah-Zabul, Şüştər. – Bakı.: Adiloğlu, – 2006. – 64s.

[78] Hooshang Z. Elementary Radif for Tar end Setar. Tehran.: Mahoor İnstitute of Culture and Art, 2007. 149 s.

Example 16.

E_{kr}^{1} Segah



The pitch series of the e_{kr}^{1} Segah mode is constructed on the basis of the Iranian 17-degree sound system, whereas the pitch series of the e^{1} Segah mode is constructed on the basis of the equal-tempered sound system. The difference between these pitch series is connected with the pitches giving rise to microtonal intervals. Notwithstanding this, the pitches of the e_{kr}^{1} Segah and e^{1} Segah modes carry identical functions. The principal functional pitches are indicated below.

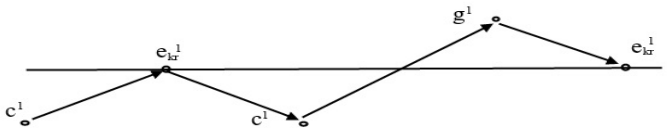
Example 17.

E^{1} Segah mode	E_{kr}^{1} Segah mode
c^{1} – lower root pitch	c^{1} – lower root pitch
e^{1} – tonic pitch	e_{kr}^{1} – tonic pitch
f^{1} – upper root pitch	f^{1} – upper root pitch
g^{1} – shah pitch	g^{1} – shah pitch
b^{1} – second upper root pitch, the special peak pitch	b^{1} – second upper root pitch, the special peak pitch

Within the pitch series of the e^{1} Segah mode, the pitch d^{1}, which carries no significant weight, is a variable, mutable pitch. In melodic activity, it appears more frequently in its raised form (dis^{1}).

In the first stage of development of the e_{kr}^{1} Segah and e^{1} Segah modes, an orientation of their tonic pitch occurs toward the governing pitches situated within the f^{1}-Rast modal circle. There exists a quarter-tone difference in the height of the tonic pitch of these two modes.

Example 18.



It may be observed that the sequence and formulas of the gedishes arising from this orientation do not differ significantly.

In the e_{kr}^1 Segah mode: the $c^1 \rightarrow e_{kr}^1$ supporting gedish; in the e^1 Segah mode: the $c^1 \rightarrow e^1$ supporting gedish. In the e_{kr}^1 Segah mode: the $e_{kr}^1 \rightarrow c^1$ transient receding gedish; in the e^1 Segah mode: the $e^1 \rightarrow c^1$ transient receding gedish. In the e_{kr}^1 Segah mode: the $c^1 \rightarrow g^1$ returning gedish; in the e^1 Segah mode: the $c^1 \rightarrow g^1$ returning gedish. In the e_{kr}^1 Segah mode: the $g^1 \rightarrow f^1 + (f^1)g^1 \rightarrow e_{kr}^1$ descending gedish; in the e^1 Segah mode: the $g^1 \rightarrow e^1$ descending gedish.

Certain parallel and distinctive features are revealed in the performance characteristics of the "Segah" mugham variants of the two countries. In the Iranian "Segah" mugham, the supporting gedish is performed rarely, and even then only in passing. In the Azerbaijani "Segah" mugham, by contrast, the supporting gedish is used extensively. Likewise, there are more variants in which the supporting gedish begins with a one-part or two-part gedish preparation. The repetition of the supporting gedish in various manners is also characteristic. As a result, the supporting gedish is used more extensively, and performed in a broader manner, within the Azerbaijani mugham dastgah tradition of "Segah."

In the Iranian "Segah" mugham, transient receding and returning gedishes are rarely encountered in instrumental interpretation, and are likewise used sparingly in vocal interpretation. In the Azerbaijani "Segah" mugham, by contrast, there exist both conjunct and separate performance variants of the transient receding and returning gedishes. Furthermore, there are numerous variants in which these gedishes are divided into half-gedishes and performed extensively.

Since the descending (enmə) gedish is completed with a cadence, in both the Azerbaijani and Iranian variants it is performed extensively, divided into half-gedishes. In Azerbaijani performance, a greater degree of repetition of the half-gedishes is traced, together with the use of differing expressive means and naxishes within these repetitions.

In the performance of the Iranian "Segah" mugham, the second stage of development is predominantly active, while the lower modal area often remains passive. In the performance of the Azerbaijani "Segah" mugham, by contrast, activity is traced in both the upper and

lower modal zones relative to the tonic pitch.

The fact that Azerbaijan and Iran formed part of a unified state during certain periods of history created favourable conditions for the musical cultures of these peoples – including the art of mugham – to develop on the basis of shared traditions and to undergo an analogous process of evolution. From this it may be concluded that the existence, in both countries, of mugham dastgahs and mughams bearing the same names does not bear a coincidental character.

The theoretical foundations of the functional-syntactic analysis method, along with the mugham analysis conducted on the basis of this methodology, have yielded a number of significant scientific results:

It is demonstrated, with scholarly evidence, that Azerbaijani mugham music, within Near Eastern musicology (referring to the Azerbaijani, Turkish, Iranian, and Iraqi traditions), rests upon the 17-degree sound system accepted as the tonic sound system of the traditional mugham (makam, maqam) system. In this context, the traditional system of pitch nomenclature is presented. The interval structure of this sound system was first systematized and scholarly interpreted in the theoretical works of Safi al-Din al-Urmawi.

For the first time, the following scholarly propositions are advanced: first, that the 17-degree pitch system, and the modal system based upon it, refers, within Azerbaijani mugham music, to the pitch f^{k} (sounding as e^{k}-flat on the piano) with the status of "universal principal pitch"; second, that on the neck of the tar (accepted as the instrument that most directly reflects the sound system of Azerbaijani mugham music), the division of the 17-degree pitch system among the principal playing strings into quarter-segments possessing identical interval structure begins from the "dugah" pitch position[79].

For the first time, the grouping of pitches within the 17-degree sound system, on the basis of their interval relationships, is determined, and this grouping is introduced into scholarly circulation

[79] It should be noted that the principle of distributing the 17-fret system across the strings is also reflected on the neck of the *ud* in both medieval Middle Eastern music treatises and modern *maqam* theories. On the neck of the *ud*, the strings are tuned at intervals of a perfect fourth, and each open string begins at the *dügah* fret position.

under the term "pərdə yeri" (pitch position). It is shown that Azerbaijani mugham tonalities refer to their corresponding pitch positions, and the functional significance of pitch positions in the transposition of these tonalities is substantiated.

In addition, it is established, within Azerbaijani mugham theory, that mugham tonalities bear a systematic character and are situated in accordance with the f^{k} modal system. In particular, the position of the tonalities comprising the "Zabul-Segah" mugham dastgah within the f^{k} modal-pitch system is indicated.

As a result of determining the modal houses of the modes comprising the Azerbaijani "Zabul-Segah" and the Iranian "Segah" mugham dastgahs, their modal-house groups are established, and the melodic gedishes that may arise on this basis are scholarly forecast. Thus, it is revealed that the Segah, Muya, and Hisar modal cells belong to the Segah modal house. This result scholarly substantiates the fact that the indicated modes share a common modal cell, as well as the reason for the occurrence of gedishes at identical interval distances between their tonic pitch and governing pitches. In addition, it is established that the Zabul modal cell, which belongs to a compound modal house, is affiliated below with the Dugah modal house and above with the second type of Segah modal house; likewise, it is revealed that the Manandi-Mukhalif modal cell is affiliated above with the Yekgah modal house and below with the second type of Segah modal house. In the course of the analysis, the correspondence of the gedishes occurring in the mughams comprising the "Zabul-Segah" and the Iranian "Segah" mugham dastgahs to their respective modal houses (upper and lower modal houses) is determined.

On the basis of the term "modal circle," groups of kindred modal houses possessing identical governing pitches are determined. On this basis, the reason for the differing intervallic positioning of adjacent modal tonic pitch relative to the shared root and shah pitches is scholarly substantiated. In addition, the pathways of transition between modes, occurring by means of the shared root and shah pitches, are determined. On the basis of the term "modal circles," groups of modes possessing shared governing pitches yet belonging to different modal circles are likewise revealed.

For example, in the pitch series of e^1 Segah, g^1 Zabul, and as^1 Muya, all belonging to the "Zabul-Segah" dastgah, f^1 functions as the shared root pitch. Likewise, in the pitch series of e_{kr}^1 Segah, g^1 Zabul, and a_{kr}^1 Muya, belonging to the Iranian "Segah" dastgah, f^1 plays the role of the shared root pitch. In the same manner, in the pitch series of g^1 Zabul and c^1 Manandi-Mukhalif, as^1 functions as the shared root pitch. The shared root pitch thus becomes a means of transition among the aforementioned modes.

As the tonalities of the sections situated within a mugham dastgah rise, certain general changes, growing progressively more pronounced, occur in their structure. In particular, the acceleration of tempo, the omission of certain gedishes, the increased specificity of the expressive means allotted to the gedishes, the increasingly rapid execution of gedishes, their conjunct performance, the decrease in the number of repetitions of gedishes, and, finally, the complete absence of repetition of gedishes, all emerge as characteristic features. The possibility of omitting certain gedishes reveals that their functional significance is relatively weaker compared with other gedishes. The variability of gedishes is traced, in the course of analysis, to be connected with the type of movement employed. Only the terminal descending (xarici enmə) gedish is, in all instances, performed with a delaying technique.

It is confirmed, in the course of analysis, that the principal movements occurring in mugham melody consist of four gedishes (supporting, transient receding, returning, and descending gedishes). It is established that these gedishes, occurring between the mode's tonic pitch and its governing pitches, are, in the analysis of both dastgahs, performed in accordance with their respective functional roles. It is observed, throughout all mugham sections, that modes belonging to identical modal houses exhibit gedishes at identical interval distances.

It is revealed for the first time, and confirmed through the analyses conducted, that the internal development of mughams (with the exception of güshes) consists predominantly of two levels. It is observed that, as the tonalities of the sections rise, the second stage of development gradually shortens in their structure, and, in certain instances, is entirely omitted.

The functional roles of the root and shah pitches, regarded as governing pitches, are traced as a regularity in both mugham dastgahs. In particular, within the shared mugham sections of both dastgahs, the tonic pitch and the governing pitches are situated at identical interval distances, and the functionality of the governing pitches is observed in all gedishes. The functionality of the root pitch manifests itself most prominently in the supporting gedish, while that of the shah pitch manifests itself most prominently in the descending gedish.

As a result of the comparative analysis conducted, it is proven that the mugham music of the Azerbaijani and Iranian peoples shares the same theoretical foundations

As a general conclusion, we believe that the method of analysis based on a different perspective toward mugham structure, together with the functionality of such significant terms as modal house, modal circle, and gedish, has proven its validity through the analysis carried out. We believe that the functionality of these newly proposed terms will contribute to the refinement of mugham theory and to the enrichment of mugham terminology.

In our view, the analysis of mugham solely by means of syntactic units (motif, phrase, period) is not fully satisfactory. This is because there exist within mugham a number of components whose points of division do not coincide with the units of syntactic thought – phrase, motif, and period. Foremost among these are the gedishes.

Gedishes are principal units of thought pertaining to the structure of mugham melody; unlike syntactic units, they reflect not the division of melodic material but, rather, the division of the activity occurring within the performance (törəniş) of mugham itself. The analysis of mugham structure on the basis of gedishes makes it possible to distinguish the individual processes occurring in mugham performance from one another and to evaluate each of them from a functional standpoint.

We hope that the presented new method of analysis of mugham structure, and its theoretical foundations, will prove beneficial to the science of mugham studies and to the development of mugham pedagogy.

In accordance with the content of the dissertation, the author has published the following works:

1. "Müxalif" və "Manəndi-Müxalif" muğam şöbələrinə bir nəzər // – Bakı: Konservatoriya, – 2009, №3-4, – s. 135-148.
2. Muğam tonallıqlarının transpozisiya problemləri // – Türkiye: Rast uluslararası muzikoloji dergisi, – 2013, cilt 1., sayı 1. – s. 76-89.
3. "Hisar" şöbəsinin nəzəri və praktiki məsələlərinə dair // – Bakı: Konservatoriya, – 2016, №4(34), – s. 25-36.
4. Segah muğamı tarixi mənbələrdə // ISME – 2018 Beynəlxalq musiqi təhsili cəmiyyəti, 33-cü Dünya konfransı türk dünyası oturumu, – Bakı: – 15-20 iyul, – 2018, – s. 223-228.
5. "Segah-Zabul" və "Çahargah" muğam dəstgahlarının qarşılıqlı əlaqələri" // Doktorantların və gənc tədqiqatçıların XXII respublika elmi konfransının materialları, – Bakı: – 22-23 noyabr, – 2018, – s. 484-487.
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8. Türk müziği makam teorisi'nde "ev, hâne" kavramının esâsı: yegâh, dügâh, segâh evleri // – Türkiye: Karadeniz uluslararası bilimsel dergi, – 2020, sayı 47, – s. 423-437.
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10. Segah-Zabul dəstgahı şöbələrinin Yaxın Şərqin qədim və müasir məqamları ilə müqayisə edilməsi // "Qloballaşan dünyada musiqi ənənələri" II Beynəlxalq elmi-praktik konfrans, – Bakı: – 14-16 noyabr, – 2022, – s. 304-313.
11. Segah muğamının mayə şöbəsinin seyr xüsusiyyətləri // Beynəlxalq rəqs gününə həsr olunmuş, beynəlxalq elmi simpoziumun materialları, – Bakı: – 2 may, – 2022, – s. 141-149.
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