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LIUDMILA P. KAZANTSEVA

Astrakhan State Conservatory, Astrakhan, Russia ORCID: 0000-0002-7943-9344, kazantseva-lp@yandex.ru

Tonality: the Semantic Aspect

Present-day perceptions of semantic connotations of tonality rely for the most part on the metaphoricity of meanings, the reason of which is rightfully found in the mechanism of building associations. However, it would be too simple to explain such a complex and stable phenomenon only by means of a metaphorical transfer of meanings from the adjacent fields of activity to music. In this seemingly purely personal act there are a lot of rather objective, "universal" elements. Effectively, association as a semantic principle may be characterized not only by spontaneity and subjectivity of semantic connections but also by their rather consistent and objective character.

Today we have right to speak about an ontological and natural (which is far from subjective) metaphoric character of tonality's semantics. This type of semantics possesses quite objective grounds. A composer programs and sets a specific artistically indispensable metaphoricity. It is important to realize that the semantics of any tonality is undoubtedly adjusted by many factors. It depends on the context, so it presents a flexible notion – this also defines the objective rule of its existence.

<u>Keywords</u>: tonality, semantics, metaphoricity, composer's style, language/speech, intertextuality, archetype.

Л. П. КАЗАНЦЕВА

Aстраханская государственная консерватория, г. Астрахань, Россия ORCID: 0000-0002-7943-9344, kazantseva-lp@yandex.ru

Тональность: семантический аспект

Современные представления о семантической окраске тональности в большой степени уповают на метафоричность смыслов, причина которой правомерно отыскивается в механизме ассоциирования. Однако объяснять столь сложный и стойкий феномен действием только метафорического переноса смыслов из смежных областей в музыку было бы явным упрощением. В этом, казалось бы, сугубо личностном акте немало объективного, «всеобщего». Тем самым в ассоциировании как принципе смыслообразования следует усматривать не только спонтанность и субъективность смысловых связей, но и их вполне закономерный и объективный характер.

Сегодня мы вправе говорить об онтологической, природной (отнюдь не субъективной) метафоричности семантики тональности. Эта семантика имеет вполне объективные основания. Композитор программирует, задаёт вполне определённую, художественно необходимую метафоричность. Важно понимать, что семантика тональности непременно корректируется множеством факторов. Она находится в зависимости от контекста, стало быть, она подвижна — в этом также состоит объективный закон её бытия.

<u>Ключевые слова</u>: тональность, семантика, метафоричность, стиль композитора, язык/речь, интертекстуальность, архетип.

onality is one of the basic categories in music theory. Many aspects of tonality have been studied comprehensively. Principally, researchers aspire to define an initial concept as pertaining to the music of various historical periods, the essence of tonality, a typology of tonalities, tonal drama and polytonality. The accessible academic

research represents tonality as a fundamental compositional tool (at least, in the broad sense, within the domain of classical music).

Another aspect of tonality – its *semantics* – does not escape the attention of musicians and music thinkers either. For instance, the theory of affects has defined the expressiveness of the

tonalities most widely used in composing practice, thus summarising the practical knowledge. Particular keys have been connected to specific affects - this aspect was reflected in the works of Johann Mattheson, Johann Quantz, and Marc-Antoine Charpentier. Subsequently, the range of semantically significant keys was expanded (for example, in the music of the Romantic era), the expression of tonality revealed its synesthetic qualities (in the colour and light concepts of Nikolai and Alexander Scriabin). Rimsky-Korsakov Towards the present time, a significant number of observations in the sphere of semantics of tonality have been accumulated within the styles of certain composers: Johann Sebastian Bach [9], Wolfgang Amadeus Mozart [13; 15], Frederic Chopin [1], Mikhail Glinka [7], Piotr Tchaikovsky [14], Sergei Rachmaninoff [8], Nikolai Rimsky-Korsakov [2], Dmitri Shostakovich [12], etc. Contemporary scholarship has brought the semantic aspect of polytonality into a sharp focus [10].

In summary of the current tonality semantics studies, musicology is presently beginning to embrace tonality semantics on an empirical level – there is hardly any theory fully present in this domain of knowledge. The accessible information on tonality provides no substantial examination of its semantic aspect and, thus, cannot be considered satisfactory. This is why present-day musicology is faced with the challenge of further investigation of tonality's semantic potential.

This challenge implies raising several scholarly questions – I shall address only some of them here.

If we view tonality as a medium of expression for a composer, it is reasonable to perceive its semantics from an ontological standpoint and define how tonality-based semantics are created, and what does the spectrum of tonality-related semantics represent.

Present-day views on semantic connotation majorly rely on the metaphorical aspect of the meanings, the reason of which is rightfully found in the mechanism of forming associations. Nonetheless, it would be too elementary to explain such a complex and stable phenomenon with merely a metaphorical transfer of meanings from the adjacent areas of activity to music. There is no doubt that achievements in the sphere of acoustics, psychology, physiology, culturology and semiotics may provide an invaluable contribution to the development of the abovementioned matters.

Thus, experimental and statistical acoustic data prove the existence of quite evident formant constants in the colouring of the sound of a specific pitch, sounded by a specific instrument. When studying formant pitch characteristics (on the piano, the violin, the oboe, or the cello), Andrei Volodin managed to discover the correlation between the quality of a tone and the pitch, and to make an important conclusion "of the presence of objectively reasonable grounds for why musicians attribute a special emotional tone to each of the pitches and are able to feel it, even when they do not have absolute pitch" [3, p. 37]. Consequently, it becomes possible to discover not only the associative (or, rather, the subjective) component in the semantics of tonality, but also the acoustic component (which is rather stable and objective in its goal).

The association itself does not proceed as easily as it may be imagined. This seemingly personal act contains many objective "universal" components. O. D. Volchek provides one of the proofs for the existence of a permanent "universal" sense of tonality. She discovered stable connections between the keys and references to specific "environmental conditions" based on the analysis of 400 songs by Russian composers. The researcher detected the tonalities which are most appropriate for reflecting "vast expanses" (E-flat major), "bounded space" (C major, B-flat major), "a water-related environment" (E-flat major, D major, B minor), "the sky" (G major, E minor) etc. (see: [4, p. 109]). Hence, the association as a meaning-bearing principle may be characterized not only by the spontaneity and subjectivity of the semantic connections but also by their extremely consistent and objective character.

The dichotomy of "language vs. speech," developed by semiotics, is also conducive for understand the nature of creation of meaning in tonality. Similarly to the other musical elements, tonalities "live" in two paradigms. One of the paradigms is speech-related, since it defines the individual semantic fullness of a particular key, introduced by the composer in certain musical composition, and specifically presenting a "speech" statement. At the same time, the inclusion of tonality into the world of "language," established by the efforts of many generations of musicians, who contributed to the global fund of musical elements with a historically formed domain of their potential meanings, permeates the individual local semantics

with the aggregates of the meanings which were developed and selected during centuries-long practice of musical composition. Individual "speech-related" semantics, which intensifies some of the components of the "language-related" spectrum of meanings, naturally gains more depth and polysemy.

While studying the origins of the meanings of certain keys, it is hardly possible to bypass the phenomenon of intertextuality, which defines the integrative quality of fiction texts. In our case, we refer to semantic parallels and arches, based on tonal similarities of musical compositions. An obvious hint at Beethoven's heroic style (the Eroica Symphony) provides the key of E-flat major for Richard Strauss' symphonic poem Ein Heldenleben, thereby placing the composer's artistic autobiography, interwoven with reminiscences from his earlier works, upon a pedestal. Likewise, C major is hardly a randomly established tonality in Doctor Gradus ad Parnassum, a piano piece from Claude Debussy's suite for piano Children's Corner. Because of this recognizable trait, the composer's reference to numerous etudes in C major, which perfect the pianist's skills (particularly, to Carl Czerny's etudes), becomes more evident. It becomes clear that composing music triggers the mechanism of associations, which result in the occurrence of juxtapositions of meanings.

The concept of the metaphorical origin of tonal semantics was also substantially complemented and transformed by Carl Gustav Jung, who stated that culture is saturated with meanings, namely archetypes, which accumulate basic human values. Within the context of the issue in question, it defines the role of a particular key in the formation and the long-lasting existence of some fundamental archetypical meanings in music. One of such archetypes, namely that of a grievous loss, was noticed by N. G. Ivanko, who found out that among 108 compositions by composers in Russia and other countries written in the genre of Stabat Mater, keys with flats were prioritised, specifically G minor (in 30 musical compositions), C minor (28), F minor (25), and D minor (9), whereas keys with sharps possessed exceptional natures (since they were found in 3 works only) [5]. The key of C minor became a symbolic tonality, typical for a solemn and tragic parting, cultivated by another genre, namely, the funeral march (for instance, it may be found in the slow movements featuring funeral marches of the 3rd Symphony and the Piano variations of Beethoven's opus 34, 2 movements from Schumann's Piano Quintet opus 44, Chopin's Prelude No. 20, the funeral march from the Act 3 of Wagner's *Götterdämmerung*, and Alyabiev's songs *The Living Dead* and *The Coffin*, etc.).

Thus, today we may speak about an ontological and natural (which is far from subjective) metaphoric character of the semantics of specific keys (as well as various other musical elements). This semantics possesses very objective grounds. The composer programs and sets a specific metaphoricity, which is artistically indispensable.

It is important to realize that the semantics of any particular tonality is certainly adjusted by many factors. It depends on the existing context of the music, so it presents a flexible notion – this also defines the objective rule of its existence.

One should not ignore the fact that any key manifests itself with various levels of definitiveness: it may be concisely represented with some typical mode and harmonic means, or, otherwise, it may be represented as a scarcely perceptible, subtle component. Sometimes it is more perceptible to the ear of an analyst, rather than being audible to a listener. Surely, when the key is "diffusive," it is difficult to speak about its semantics. This causes the natural character of the keys' ambiguous semantical interpretations.

It is essential to understand how the semantics of a particular key proves itself in the musical form during the entire musical work. In the process of musical formation, the level of the key's importance is regulated: at the expositional stage of the composition, where it is aimed to narrate the musical theme, it may prove itself in a consistent and symbolic way, while in the developing stages its transient appearance has too little time to manifest its semantics. In this connection, we may point out the quite stable semantics inherent to the C major tonality, which is quite typical for the first musical pieces of cycles of preludes or the polyphonic cycles of preludes and fugues (considering their quite different following tonal strategies) of Bach, Shostakovich, and Shchedrin.

Semantics significantly correlates with a composer's style. According to our experience (once again, empirically), we know that Bach's *C major* differs greatly from the one that is present in the musical pieces of Haydn, Mozart, Beethoven, Chopin or Prokofiev. Edison Denisov once said: "My *D major* is *special*. No one else ever had

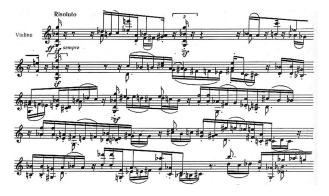
a *D major* like that in my music" [6, p. 99]. It is also known that the perceptions of connection between colour/light and tonalities of the masters of synesthetic abilities Nikolai Rimsky-Korsakov and Alexander Scriabin differed from each other (Rimsky-Korsakov perceived *C major* as the white tonality, while Scriabin perceived it as the red one). However, there are some questions that are waiting to be considered, such as: what are the reasons for formation of this or that semantics in a composer's style; to which extent is it subject to evolution; how does it fit in the context of contemporaries' music; to which extent does it preserve the predecessors' gains and to which extent does it give rise to its adherents.

Within the context of a musical style, it is important to know to which extent the tonality's semantics is significant for the composer. In addition to the observations of researchers, a lot of information may be gained from statements of the composers themselves. Thus, Mikhail Glinka allowed his songs to be performed and published in different transpositions of the initial keys, and this could refer to the fact that when choosing a tonality (at least in the vocal music), he was guided by the principle of the convenience of the music for the performer, rather than its semantics. Alexander Scriabin felt rather subtly the expressive diversity of tonalities: "All the music changes completely if we imagine that it [an Etude. -L. K.] was composed in E-flat minor rather than in D-sharp minor" (quoted from: [11, p. 135]).

When studying a composer's style, it may be interesting to consider the matter of priority of the choice (or, on the other hand, the avoidance on the part of the composers) of certain tonalities. For instance, the fondness for keys with a great number of sharps or flats, demonstrated by such composers as Mily Balakirev, Anton Rubinstein and Anatoly Lyadov is quite informative. Nonetheless, this issue should be solved, and not only statistically, since the use of the tonalities is stipulated by various reasons, some of which pass beyond the composer's style. Considering the main reasons, the priority of some tonalities must be understood as a trait, typical for the composer's individual style. One should consider the critical demand for certain expressive means, including the tonality or tonalities helping implement the ranges of musical thoughts and images, which are important for the composer. Widely used by the composer and related to the imaginative and semantic dominant of his/her creative work, this key may be considered the composer's individual tonality. *D minor* in Rachmaninoff's music and *C-sharp minor* in Sviridov's music obtained such a personal meaning.

Tonalities may gain the status of a special stylistic sign (the style of an epoch or a culture) not only in the oeuvre of some individual composer, but also within wider contexts. Tonality is abundant with such semantics in conditions of correlation with atonality, modality or other pitch systems, which are used by composers who are our contemporaries. The *D major* triad, which impressively concludes Krzysztof Penderecki's *Stabat Mater*, has become a signature of classical art. An intense dialogue between two "characters," tonality (represented by the *G minor* triad) and atonality, unfolds in the first movement of Edison Denisov's Sonata for Violin (Example 1).

Example 1 Edison Denisov. Sonata for Violin (I)



Besides the stylistic aspect, it is quite worthwhile to study the genre aspect of the semantics of tonality. It is known that in the baroque tradition the semantics of a particular key (and not only the tonality) was in many ways influenced by the words to which the music was set, and was established in the genres combining music and the spoken word, such as oratorios, masses, passion music, etc. The affects from the rhetoric tradition were subsequently extended to instrumental music. Nonetheless, in this sphere multiple genres coexist together with their original semantic areas. When applied to such genres, tonalities are subject to the "genre content" (a term coined by Arnold Sokhor) of the music. Thereby, it turns out that even within the boundaries of the style of a single composer, for example, Frederic Chopin, the abovementioned C major possesses a great many

interpretations, as manifested in its chorale (in the middle part of the Nocturne in *C minor* opus 48 No. 1), Mazurkas (opus 7 No. 5, opus 24 No. 2, opus 33 No. 3, opus 56 No. 2, opus 67 No. 3, opus 68 No. 1), Prelude opus 28 No. 1, and Etude opus 10 No. 1. This is why not considering the proper content peculiarities of the genre and not studying the interaction of tonality and a genre would greatly impede the understanding of the position

of particular tonalities in individual compositions by composers.

Consequently, this brief overview of the issue, connected with the semantics of tonality, demonstrates that the range of problems in this sphere is quite broad and has yet to be explored in full. The blank spots in this sphere of musicology are enormous, and the perspectives for research are tremendous.

>> REFERENCES



- 1. Asaf'ev B. V. Mazurki Shopena [Chopin's Mazurkas]. *Shopen, kakim my ego slyshym* [Chopin, as We Hear Him]. Moscow, 1970, pp. 46–68.
- 2. Bozina O. A. *Semantika tonal 'nosti v opernom tvorchestve N. A. Rimskogo-Korsakova* [Semantics of Tonality in the Operatic Legacy of N. A. Rimsky-Korsakov]. Krasnoyarsk: Krasnoyarsk State Academy of Music and Theater, 2013. 194 p.
- 3. Volodin A. A. Rol' garmonicheskogo spektra v vospriyatii vysoty i tembra zvuka [The Role of the Harmonic Spectrum in the Perception of Pitch and Timbre of Sound]. *Muzykal'noe iskusstvo i nauka* [Musical Art and Science]. Issue No. 1. Moscow, 1970, pp. 11–38.
- 4. Ivanchenko G. V. *Psikhologiya vospriyatiya muzyki. Podkhody, problemy, perspektivy* [The Psychology of the Perception of Music. Approaches, Problems, Perspectives]. Moscow: Smysl, 2001. 252 p.
- 5. Ivan'ko N. G. Stabat Mater v bogosluzhenii i kompozitorskom tvorchestve (k probleme zhanrovoy modeli): avtoref. dis. ... kand. iskusstvovedeniya [The Stabat Mater in Church Service and in Composers' Music (Concerning the Issue of the Genre Model): Thesis for Dissertation of Candidate of Arts]. Rostov-on-Don, 2006. 20 p.
- 6. Neizvestnyy Denisov. Iz Zapisnykh knizhek (1980/81–1986, 1995) [The Unknown Denisov. From the Notebooks (1980/81–1986, 1995)]. Moscow: Kompozitor, 1997. 159 p.
- 7. Zhigacheva L. T. Tonal'noe myshlenie Glinki kak otrazhenie sushchnostnykh chert russkoy narodnoy muzyki (tonalnye plany krupnykh form) [Tonal Tinking of Glinka as a Reflection of the Essential Features of Russian Folk Music (Tonal Plans of Large Forms)]. *Problemy vzaemodii mystetstva ta teorii i praktyky osvity* [Problems of the Universe of the Theory and Practice of Osvity]. Kiiv, 2000, pp. 136–143.
- 8. Kazantseva L. P. Semantika tonal'nosti v muzyke Rakhmaminova [The Semantics of Tonality in Rachmaninoff's Music]. *Sergei Rakhmaninov. Istoriya i sovremennost'* [Sergei Rachmaninoff. History and Modernity]. Rostov-on-Don, 2005, pp. 147–365.
- 9. Orlova S. V. Semantika tonal'nostey v tvorchestve I. S. Bakha [The Semantics of Tonalities in the Works of I. S. Bach]. *Khudozhestvennoe obrazovanie Rossii: sovremennoe sostoyanie, problemy, napravleniya razvitiya: materialy Vseros. nauch.-prakt. konf.* [Artistic Education of Russia: the Current State, Problems, Directions of Development: Materials of the Russian Scholarly-Practical Conference]. Volgograd, 2005, pp. 143–150.
- 10. Paisov Yu. N. *Politonal'nost'v tvorchestve sovetskikh i zarubezhnykh kompozitorov XX veka* [Polytonality in the Works of Composers of the Soviet Union and of other Countries in the Twentieth Century]. Moscow: Sovetskiy kompozitor, 1977. 389 p.
- 11. Teplov B. M. *Psikhologiya muzikal'nykh sposobnostey* [Psychology of Musical Abilities]. Moscow; Leningrad: Publishing House of the Academy of Pedagogical Sciences of the RSFSR, 1947. 355 p.
- 12. Fanning D. "Sovremennyy master Do mazhora" ["The Contemporary Master of C Major"]. *Shostakovich. Mezhdu mgnoveniem i vechnost'yu* [Shostakovich. Between an Instant and Eternity]. St. Petersburg, 2000, pp. 661–678.
- 13. Chigareva E. I. *Opery Motsarta v kontekste kul'tury ego vremeni* [Mozart's Operas in the Context of the Culture of his Time]. Moscow: Editorial URSS, 2000. 210 p.
- 14. Kholopov Yu. N. Vyrazitel'nost' tonal'nykh struktur u P. I. Chaykovskogo [The Expressiveness of Tonal Structures in the Music of Piotr Tchaikovsky]. *Problemy muzykal'noy nauki* [Problems of Musical Science]. Issue. 2. Moscow, 1973, pp. 89–102.
- 15. Eynshtein A. *Motsart: Lichnost'. Tvorchestvo* [Einstein A. Mozart: Personality. Creation]. Moscow: Muzyka, 1977. 454 p.

About the author:

Liudmila P. Kazantseva, Dr. Sci. (Arts), Professor at the Music History and Theory Department, Head of the Laboratory of Musical Content, Astrakhan State Concervatory (414000, Astrakhan, Russia), **ORCID:** 0000-0002-7943-9344, kazantseva-lp@yandex.ru

ЛИТЕРАТУРА

- 1. Асафьев Б. В. Мазурки Шопена // Шопен, каким мы его слышим: сб. ст. М., 1970. С. 46-68.
- 2. Бозина О. А. Семантика тональности в оперном творчестве Н. А. Римского-Корсакова. Красноярск: Красноярская гос. академия музыки и театра, 2013. 194 с.
- 3. Володин А. А. Роль гармонического спектра в восприятии высоты и тембра звука // Музыкальное искусство и наука: сб. ст. М., 1970. Вып. 1. С. 11-38.
- 4. Иванченко Г. В. Психология восприятия музыки. Подходы, проблемы, перспективы. М.: Смысл, 2001. 252 c.
- Иванько Н. Г. Stabat Mater в богослужении и композиторском творчестве (к проблеме жанровой модели): автореф. дис. ... канд. искусствоведения. Ростов н/Д, 2006. 20 с.
 - Неизвестный Денисов. Из Записных книжек (1980/81–1986, 1995). М.: Композитор, 1997. 159 с.
- 7. Жигачёва Л. Т. Тональное мышление Глинки как отражение сущностных черт русской народной музыки (тональные планы крупных форм) // Проблеми взаємодії мистецтва та теорії і практики освіти. Киев, 2000. C. 136-143.
- 8. Казанцева Л. П. Семантика тональности в музыке Рахманинова // Сергей Рахманинов. История и современность: сб. ст. Ростов н/Д, 2005. С. 347-365.
- 9. Орлова С. В. Семантика тональностей в творчестве И. С. Баха // Художественное образование России: современное состояние, проблемы, направления развития: материалы Всерос. науч.-практ. конф. Волгоград, 2005. C. 143-150.
- 10. Паисов Ю. Н. Политональность в творчестве советских и зарубежных композиторов ХХ века. М.: Сов. композитор, 1977. 389 с.
- 11. Теплов Б. М. Психология музыкальных способностей. М.; Л.: Изд-во Академии пед. наук РСФСР, 1947. 355 c.
- 12. Фэннинг Д. «Современный мастер До мажора» // Шостакович. Между мгновением и вечностью: Доклады. Материалы. Статьи. СПб., 2000. С. 661-678.
 - 13. Чигарёва Е. И. Оперы Моцарта в контексте культуры его времени. М.: Едиториал УРСС, 2000. 210 с.
- 14. Холопов Ю. Н. Выразительность тональных структур у П. И. Чайковского // Проблемы музыкальной науки. М., 1973. Вып. 2. С. 89-102.
 - 15. Эйнштейн А. Моцарт: Личность. Творчество. М.: Музыка, 1977. 454 с.

Об авторе:

Казанцева Людмила Павловна, доктор искусствоведения, профессор кафедры теории и истории музыки, заведующая Лабораторией музыкального содержания, Астраханская государственная консерватория (414000, г. Астрахань, Россия), ORCID: 0000-0002-7943-9344, kazantseva-lp@yandex.ru

