Musical Architectonics
A Methodological Aspect

Abstract. The importance and functions of musical architectonics in the creative process of a composer and performer are considered in the paper. The conceptual basis of the work is the definition of musical architectonics and classification of its types by V. Moskalenko. Specific features of musical architectonics compared to musical composition are revealed. The functions of architectonics in the musical-creative process of a composer and performer are defined. A method of studying the architectonics of a musical work is proposed. It consists of the study of indirect data, the features of musical material, the definition of the basic composition model and the dramatic relief of the work. It is emphasized that musical tempo-rhythm is an important means of materializing the "virtual" image of architectonics. In the sheet music, the composer fixed a certain tempo-rhythmic solution that clarifies the architectonic project of the work. Performers embody it in different ways, so the comparative analysis of performance versions is of particular importance. By identifying the differences in tempo-rhythmic solutions, the composer’s architectonic project is clarified, and the artistic potential of the musical work is revealed. Musical architectonics is an indicator of the composer’s and performer’s styles.

Keywords: architectonics, musical architectonics, musical composition, composer’s architectonic project, architectonics of the performance version.

Introduction
The scientific understanding of the phenomenon of musical architectonics is a relevant direction of modern musicology, which is confirmed by the active use of architectonic imaginations in the practice of composers, performers, and teachers. The problem of the article is in line with modern studies of musical thinking, theory and history of musical performance.

The Greek word “architektonike” is translated as “art of construction”. In this sense, it can be used to characterize various creative processes.

The broadest, scientific and philosophical understanding of architectonics is given by I. Kant in his Critique of Pure Reason (Kant, 1998). He clearly indicated the intellectual nature of building, its system-forming and methodological functions. The philosopher determined the nature of the relationship between architectonics and such scientific categories as a whole, system, and idea. An important point in the chain of thoughts of I. Kant is the presence of a scheme, which provides a generalized image of the main constructive principle, which clarifies the regularities of the structure and the nature of the relationship of parts with each other and with the whole.

The universality of the concept of architectonics lies in the fact that it can be used both abstractly: in the field of mental activity, and more specifically—in the intellectual organization of subject types of activity. In artistic creativity, architectonics exists both as a psychological phenomenon that guides the creative process of building a structured whole, and as a materially captured result of this process.

The concept of architectonics is closely linked to architecture—the art of designing and constructing buildings. The phenomenon of architectonics in other...
forms of art, including music, preserves the characteristics of architecture: subject-spatial perceptibility, visual constructive clarity, aphoristic expression, a sign of aesthetics. Compared to the “objective” meaning in architecture, architectonics in procedural arts is a phenomenon that is yet to be studied in full.

**Literature Review**

The prerequisites for the emergence of an architectonic imagination in the human mind are such fundamental factors as the objective laws of nature: gravity and earth’s gravitation, the laws of symmetry, the physiological binary of a person and its certain psychophysiological prerequisites (the ability for simultaneous imagination, synesthesia, etc.).

Architectonics in architecture provides the presence of supporting and non-supporting parts, their relation, location and rhythm of the form, artistic expression of construction laws, visual identification of static construction efforts. Architectonics is closely related to the search for a prototype model, which is a form of communication of sorts. Among the means of organizing the architectural whole, the system of divisions, proportioning, the similarity of the element to the whole, the relations of the structure and the specifics of the material are highlighted. It is proposed to use the architectural term “articulation of form,” which is based on emphasizing the nodal points of the form and contributes to its expressiveness. In order to evaluate the whole in architecture, the distance method (layout) is used.

The term “musical architectonics” is an example of a combination of words with the opposite meaning, which, at the same time, form a new semantic whole. The contradiction lies in the fundamental difference between the forms of existence of the arts. Music is a temporal, procedural art, while the concept of “architectonics” is related to architecture—a spatial, objective and material art that does not develop in time.

Taking into account, in the most general terms, the combination of the studied phenomenon with the problem of time-space, we note that an important component of musical architectonics is the effect of the imaginary collapse of the musical process into a conditionally spatial, simultaneous imagination. The feeling of architectonics in music balances between the fluidity of the intonation process and imagination about the stability of the internal structure of a musical work. If the procedurality of a musical work “lies on the surface,” then its crystalline side is characterized by “hiddenness, the internal nature of the simultaneous effect” (Moskalenko, 1994, p. 45).

According to V. Moskalenko, “the value of simultaneous representations is associated with the possibility of mentally grasping a musical work as a whole” (Moskalenko, 1994, p. 43). The researcher also claims that “the simultaneous musical-architectonic imagination contains a generalized idea of the entire ‘musical building’ including its intonation ‘body’” (Moskalenko, 1994, p. 46).

Musical architectonics is a form of musical thinking of a higher order. As a result of distancing and generalization, a simultaneous, timeless, quasi-spatial image of the artistic whole emerges. The collapsing process is accompanied by selectivity—the separation of the most informative points of intonation movement from the flow of formation. This leads to the emergence of a kind of “vacuum”, which in the reverse process of musical unfolding, includes the mechanism of “add-intonation” (Moskalenko, 1994, p. 80). This is the potential energy of architectonic imaginations in musical interpretation, production of new intonation ideas, and variants of interpretive solutions.

The elements of the musical-architectonic whole are divided into supporting and non-supporting. In the process of forming musical thought, they can be considered in any sequence. Finding the principle of their connection helps form a simultaneous imagination of a whole, which can be considered the “meta-intonation” of a musical work. It also reveals the stylistic features of a musical work.

The idea of the interrelation of supporting constructive elements, which is extrapolated to music from architecture, here is connected with the function of the musical theme, with the feeling of it as a concentrate of the intonation material of the work. In the theme, the figuratively dominant and concentrated main intonation-rhythmic “building material” of the musical work is marked. The theme has the function of a relief musical thought, which ensures its recognition and memorability. The importance of the theme in the formation of architectonic imaginations is defined in the concept of musical architectonics by V. Moskalenko: “Musical architectonics is a leading constructive principle that ensures the connection of the supporting elements of intonation movement — themes, that can be expressed simultaneously and which serves as a basis for formation, assimilation, and memorization improving and developing the intonation concept of the work” (Moskalenko, 1994, p. 69).

It should be noted that the phenomenon of musical architectonics is quite often mentioned in academic publications from various branches of musicology. After all, in the understanding of its properties, there are still “blank spots” that have not received sufficient scientific coverage.

**Aim of the paper**

This study outlines the research methodology for musical architectonics, clarifying the specifics of musical architectonics in comparison with musical composition, examines in more detail the function of musical architectonics in the creative process of a composer and performer, and suggests the introduction of the terms “composer’s architectonic project” and “architectonics of performance version.”
Results and Discussion

In order to highlight what is essential to the concept of musical architectonics, the focus should be placed on the phenomenon most closely related to it: musical composition. Musical composition is considered part of the discipline “analysis of musical works,” where a musical work is understood as a “final product.” Musical architectonics is part of V. Moskalenko’s concept of musical interpretation, which involves understanding a musical work as a creative process, an artistic renewal. Musical architectonics in interpretation models the creative process and operates with wholes, includes the motor principle and the creative principle.

Musical composition, as well as musical architectonics, the form-creating and meaningful aspects of a musical work are taken into account. Nevertheless, there are also a number of differences that reflect the specificity of the concept of musical architectonics itself.

The first difference between the architectonic imagination of a musical work is the simultaneity of the auditory imagination effect. Accordingly, architectonics accentuates,actualizes and expresses the simultaneous spatial image of a musical work, and the composition is a “temporal plan of its unfolding.”

The second difference lies in the high degree of generalization of architectonic imaginations. This quality is defined by V. Moskalenko as a “leading constructive principle.” The composition, on the basis of architectonic imaginations, organizes the entire material of a musical work that sounds or is imagined in the sound. The more expressive the architectonics “manages” the whole, the more expressive the construction becomes, the richer are the inner life of the parts, the sharper are the compositional divisions (boundaries of sections, reprise, framing).

The third difference is determined by the focus on the selectivity of perception. Active perception of a musical work is accompanied by the selection of the “most informative points” from the information (intonational) stream (Moskalenko, 1994, p. 44). Musical architectonics reveals the constructive principle of their connection. In musical and architectonic imaginations, the dominant side is their constructive presentability, which contributes to the organization of musical perception and is a factor of communicativeness.

The Latin word praesento translates as “represent, transmit, hand over.” The act of presentation is an “information technology” of sorts that is focused on the fact of the presentation and is aimed at causing a certain reaction in the audience. Based on this understanding, we will define a number of qualities of presentability: the maximum power of expressiveness, convenient form for perception, visual impact, increased recognition, expressive and short formula, informativeness, and demonstration.

Thus, it is noted that a musical composition refers to the composition of an artistic whole in the process of its temporal unfolding, while architectonics is a simultaneous spatial imagination of the construction of a whole. Architectonics implies a higher degree of generalization of the structural imaginations of a musical work, which arises as a result of a kind of “leap of consciousness.” Identifying the leading constructive principle contributes to the clarity of divisions, expressiveness and autonomy of parts. Architectonics is characterized by the dominance of the presentability of the structure and leading architectonic supports (themes). Conditions are created for a visual review of architectonics, which allows you to evaluate it from the standpoint of artistic beauty, proportionality and harmony, and, in general, aesthetics.

Architectonic musical and auditory imaginations are an important component of the composer’s purpose of a musical work. V. Moskalenko understands the musical purpose as “...the preliminary construction plan and leading semantic orientations of a musical work” (Moskalenko, 2012, p. 7). It contains only the main, guiding contours of what will become the real sound body. In the same way, we can talk about the creative process of a musician-performer. V. Moskalenko believes that the performer “as it were, unfolds the artistic time of the work compressed into a single moment. In a psychological sense, the effect of a hidden spring works here, which serves as an impetus to re-intonation” (Moskalenko, 1994, c. 55). The performer, as it were, builds a new whole, finding new meaningful connections between events in the space of a musical work. These processes enable considering architectonics as one of the mechanisms of self-development of a musical work.

From the point of view of the function in the creative process of the composer and performer, two types of architectonic imaginations are known. One of them is terminologically identified by V. Moskalenko as “preceding architectonics.” The characteristic of the function of preceding architectonics in a musical creative act is focused in the statement of V. Moskalenko: “Convolted into a simultaneous representation, preceding architectonics is nothing more than a promising constructive basis of musical intonation, which is aimed at the feeling of an artistic whole and directs the formation of this wholeness” (Moskalenko, 1994, p. 69).

This is exactly the function performed by two architectonic principles distinguished by V. Moskalenko—basic and arched, which are a “deep grammatical structures of musical language” of sorts (Moskalenko, 1994, p. 71). The basic type is characterized through musical folklore and is distinguished by the fact that “in sound there is no division of functions into ‘theme’ and ‘non-theme’” (Moskalenko, 1994, p. 71). Arched architectonics is characteristic of professional composer’s music. Here, the division of functions into “theme” and “non-theme” is mandatory. V. Moskalenko believes that “historically, the architectonics of the arch type arose as a development
of the architectonics of the basic type" (Moskalenko, 1994, p. 72). They coexist as imaginary landmarks and complement each other in a specific artistic context.

The second type of architectonic imaginations is terminologically defined by V. Moskalenko as “summarizing architectonics.” Accordingly, “summarizing architectonics” emerging from a musical work that has already sounded. Here, according to the scientist, architectonics “feels like the ‘lava’ of the intonation movement has not yet completely solidified, which, figuratively speaking, is only taking shape in a crystal” (Moskalenko, 1994, c. 48).

An important feature of the concept of musical architectonics is that it takes into account both the factually “material” side of the organization of the whole, fixed in the text of the musical work, and its “psychological” feeling, that is, a simultaneous image in the auditory imagination. The psychological component of the phenomenon of musical architectonics causes difficulties associated with the disclosure of its properties in a specific musical work. Feelings of the features of a constructive whole are difficult to study. Therefore, it is necessary to highlight the reliable facts about the objectification of musical architectonic imaginations available to the researcher.

Musical architectonics affects the sphere of phenomena that are not directly observable. The statements of the composer can be counted among the facts of the objectification of the sensations of musical architectonics. Individual details contained in correspondence, memoirs, articles, interviews, diaries, autobiographies, reviews, and other documents form an image of the composer’s personality, which also defines his composing style. In the nature of speech, self-evaluation, forms of expression of thoughts, handwriting, etc., the psychological features of the composer’s personality are laid down, which helps to identify and refine the parameters of the musical style. Accordingly, these components are also important in the study of musical architectonics. Documentary facts may contain information about the nature of the creative process in the work, about the architectonic direction in the composer’s creative thinking, and about the architectonic component of the purpose of a specific musical work.

The formation of a musical architectonic imagination is closely related to the visual perception of a conventional graphic image of a musical work, with the appearance of a sheet music. To a greater or lesser extent, the graphic appearance, the order of appearance of the main themes, their location in the space of the notation of the work, not only clarify the structure of the composer’s creative process, the trajectory of his musical thought but also create an idea of the ways of unfolding the architectonic musical imagination.

The role of the thematic factor in this regard has already been discussed. As for the compositional and dramaturgical parameters, as noted by V. Moskalenko, practically all historically formed compositional forms demonstrate “...an ‘outgate’ of the deep foundations of architectonic organization into the sphere of compositional forms of professional composer music” (Moskalenko, 1994, p. 72). The division into supporting and non-supporting points creates a rhythmic combination that is implemented in one or another compositional model. Most of them have a reprise and thus implement the arch principle of architectonics.

In terms of the influence of the dramatic factor on the formation of an architectonic imagination, two points are important: a sense of the general compositional and dramaturgical relief of a musical work and accentuation, and identification of the most supporting musical events in the deployment of the musical form. The latter became events of architectonic significance. Such “events” can be perceived as the presentation of a theme, its reprise, a false reprise, the inclusion of a new theme, highlighting the edges of sections, invasion, overlay, a general pause, the emphasis of critical nodal moments of development, the location and nature of the main culmination, a predicate attraction that strengthens the feeling of waiting for stability stroke, etc.

One of the leading parameters in the manifestation of the phenomenon of architectonics in a musical work is the musical tempo-rhythm.
Tempo-rhythm is a materialization of sorts of the “virtual” image of architectonics, as if it was another existence. The opposition of architectonics as a simultaneous imagination (a collapsed “quasi-spatial” image of the whole) and its tempo-rhythmic unfolding in sound realities plays a role here. That is, the tempo-rhythm realizes the dialectical essence of musical architectonics as spatial, quasi-static, and temporal, processual.

The composer, creating a musical piece, foresees a certain tempo-rhythmic solution of his architectonic project. A similar trend exists in the architectonic imagination of a musical work by the performer. Statements by K. Martinsen confirm this point: “This clearly visible general overview, which reaches a really high level of consciousness with a really creative perception, from the very beginning determines the sound color, the intensity of the line, the rhythm, and, above all, the pace of performance” (Martinsen, 1930, p. 19). Preceding architectonic imagination of a piece of music includes a direction to a certain tempo, to the tempo relationships within the cycle or its parts related to the dominant intonation of the music.

One of the ways to objectify the phenomenon of musical architectonics is through a comparative analysis of performance versions of a musical work. In this regard, K. Martinsen’s statement is indicative: “...when performing, we have, on the one hand, a superpersonal will to form, embodied in the work, on the other hand, an absolutely personal formative will of the performer” (Martinsen, 1930, p. 230). It is especially interesting how the researcher explains the difference between the performing versions: “The superpersonal autocratic form of the artistic work and the will to form embodied in it is an intermediary link between, on the one hand, the vital forces ... of the creator and, on the other — the vital forces of the performer ... But since, due to the natural composition of the human soul, the formative will of each performer will be different, then ... each performance of an artistic work will have a subjective character" (Martinsen, 1930, p. 233).

When considering the performance versions, the leading stylistic attitudes of the performers are of particular importance. In general, it can be stated that there is a category of performers, who emphasize the architectonic factor in a musical work, and performers, whose musical thinking is focused on revealing the improvisational principle, the actual flow of musical expression. As in the study of the compositional parameters of the organization of the musical architectonics of the work, in the identification of architectonic features in the performance reading of music, documentary evidence and information about the architectonic component of the performer’s creative method are important. Statements that testify to the architectonic purpose of a specific “performer’s work” are also significant.

Since the architectonics of a musical work is implemented by performers in different ways, the ‘performer’s work’ can be considered the implementation of the architectonic project of the “composer’s work” (Moskalenko, 2012, p. 6–7). From the same point of view, different “works of performers” are compared with each other. The advantage of this method is the clarification of the architectonic project of the “composer’s work” by identifying differences that reveal its potential.

As it was said above, one of the most important forms of materialization of musical architectonics is musical tempo-rhythm, therefore, the mastery of musical time is of great importance in the performer’s “construction” of the wholeness of a musical work. Obviously, an additional factor in the objectification of architectonics is the ability to record (with relative accuracy) tempo-rhythmic indicators of performance with the help of a metronome, including the total time of the piece and the time of individual sections.

The result of comparing the “composer’s work” and “performers’ works” can be an intellectually formed generalized simultaneous imagery of the architectonics of a musical work. It could, to some extent, be represented graphically or imagined in the form of a three-dimensional “layout” (architectural or landscape). It consists of an imaginary overlay of “transparent” layers (parameters highlighted above), which form a certain relief.

A specific sound embodiment can reveal a “violation of the rules” (an anomaly of sorts) in matching the rhythm of the compositional form with the nature of the musical material, which additionally crystallizes the fragments into a whole and clarifies the meaning of their formation in artistic time. It can also be the point at which the features of the form are focused, its structure is actualized, or the non-identity of the compositional and architectonic function of the section is revealed. Thus, the uniqueness of a specific intonation-constructive concept of a musical work, creatively found by the composer and later embodied by the performer, is understood.

Conclusions.

Musical architectonics is an important part of the concept of musical interpretation. Musical architectonics, which is realized every time in its updated temporal unfolding, reveals the creative potential of a musical work. Musical architectonics is an indicator of the composer’s and performer’s style. The importance of architectonic imagination in musical and creative process is confirmed by the practical activity of the composer and performer.

The method of research on musical architectonics proposed in the article is based on forms of objectification of musical and architectonic imagination. They are contained in the statements of the composer or researchers about his creative process, in the composer’s sketches, as well as in the text of the musical work. In particular, the nature and content of the composer’s statements reflect his
psychological features and contain facts about the specifics of the creative process and the architectonic component of the purpose of a particular work.

The connection of the architectonic imagination with the visual perception of the graphic modelling of the musical work and with the appearance of the musical text, is also emphasized. In the work of the performer, the graphic image of the musical notation created by the composer is an important factor in preserving the work in the musician’s memory, it contributes to the formation of a certain “spatial” image of the musical work. In particular, the graphic appearance of sheet music manuscripts demonstrates ways of deploying the composer’s architectonic imaginations. Also, in order to understand musical architectonics, the use of auxiliary visual models such as diagrams and tables is suggested.

An important component of the methodology is the study of the properties of the musical material, which clarify the architectonics of the musical work: themes, tonal plan, tempo interrelation, genre parameters, composition, dramaturgy, etc. The most important in this sense are the determination of the basic compositional model, the feeling of the general dramatic relief of the work, and the identification and accentuation of musical “events” of architectonic significance.

One of the leading parameters of the manifestation of the phenomenon of architectonics, a kind of materialization of its “virtual” image, is musical tempo-rhythm. The composer foresees and fixes in the text of the work a certain tempo-rhythmic solution to the work, which clarifies its architectonic project. The performer embodies this project to life in a specific tempo-rhythmic form and builds the form in real time. To a certain extent, tempo-rhythmic indicators of performance can be fixed with the help of a metronome, the time parameters of the sound of the work, etc., provided by the computer.

In this case, the comparative analysis of consciously chosen performance versions, which are different in terms of stylistic settings, becomes indicative. By identifying the differences in tempo-rhythmic solutions, the composer’s architectonic project is clarified and, at the same time, the artistic potential of the musical work is revealed. Different approaches to performing readings of the work, the result of which is the accentuation of one or another component of the artistic whole, speak on the one hand of the flexibility of the architectonic construction, and on the other hand, confirm its stability and artistic validity. In general, two poles can be defined in the performance orientation: emphasis on the architectonic factor and emphasis on the fluidity of musical expression, on its improvisational nature.

The results of this research can be developed further and used in the practical activities of a composer, performer, and pedagogue in music-theoretical and music-historical courses at educational institutions.

References


Водолєєва Н.
Музична архітектоніка: методичний аспект

Анотація. Розглянуто значущість і функції музичної архітектоніки в творчому процесі композитора та виконавця. Концепційною основою роботи є визначення поняття «музична архітектоніка» і класифікація її типів В. Москаленка. Виявлено специфічні риси музичної архітектоніки порівняно із музичною композицією. Визначено функції архітектоніки в музично-творчому процесі композитора та виконавця. Запропоновано методику дослідження архітектоніки музичного твору. Вона складається з вивчення непрямих даних, властивостей музичного матеріалу, визначення базової композиційної моделі, драматургічного рельєфу твору. Наголошено, що важливим засобом матеріалізації «віртуального» образу архітектоніки є музичний темпоритм. Композитор в нотному тексті фіксує певне темпоритмічне вирішення, яке прояснює архітектонічний проект твору. Виконавці втілюють його варіант, тому особливою значення набуває порівняльний аналіз виконавських версій. Шляхом виявлення відмінностей темпоритмічних вирішень прояснюється архітектонічний проект композитора і, відповідно, розкривається художній потенціал музичного твору. Музична архітектоніка є показником стилю композитора та виконавця.

Ключові слова: архітектоніка, музична архітектоніка, музична композиція, архітектонічний проект композитора, архітектоніка виконавської версії.

Стаття надійшла до редакції 1.09.2023