

On the Formation Role of the “Events Dynamics” in the Musical Compositions for Voice and Piano”

The subject of this research is the form in pieces of vocal music regarded as a systematic organization of poetical and musical sound elements providing for the harmony of composition components. Such approach reveals the dual character of the formation principles. On the one hand, such principles are determined by the interaction of poetical and musical resources, on the other hand – by the laws of thinking, including its rational and logical types. We assume that the realization of the general formation principles should employ universal as well as specific means. **The object** of the research is to consider these universal means.

The theoretical assumptions of the research are based on the conceptions, which present the unfolding of artistic content as a temporal process. Regarding artistic time as **measuring of changes** we need to identify such changes in the functions of existing elements or introductions of new elements, which can be qualified as **events**. Among various sound events representing different levels of composition, rhythmic phenomena take on special significance as they can be characterized quantitatively as well as qualitatively, that is, **measured**.

Three types of poetical and musical sound elements were considered as such events:

- the smallest verbal and musical units (phoneme and attacked sound);
- units marked by the feature, significant for a given level of composition (metric accents in verses and accords with a new tone content);
- units possessing certain structural integrity (words and texture verticals).

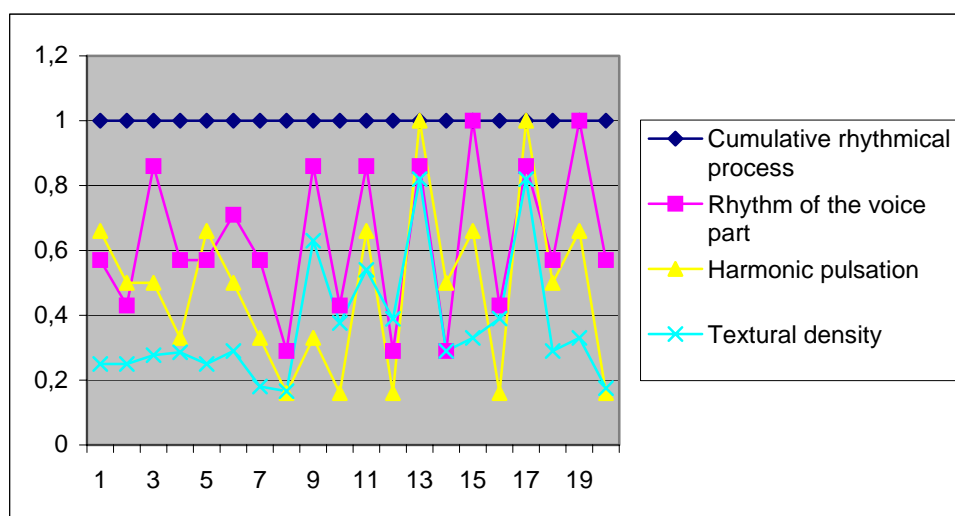
We used fuzzy sets to calculate the density of temporal units (lines and musical phrases corresponding to them) in a vocal composition. Each sound parameter described earlier was characterized by the fuzzy set:

$$\Phi_{cn} = \left\{ \mu_{\phi}(i) / i, \mu_{\phi}(K_j) / K_j \right\}, \mathbf{j} = \overline{\mathbf{1}, \mathbf{m}}, \text{ where}$$

i – artistic time (in this case, the number of a poetic line or a musical phrase

corresponding to it); and **m** is the quantity of parameters, which influence the dynamics of events.

Thus we calculated and visualized the density of sound events and its changes in the process of unfolding the musical composition for voice and piano. We applied this method to the romances of M. Glinka based on poems of the Russian poets. For the musical row we applied two types of graphs – bar-by-bar and line-by-line. They differ not only by the duration of a time unit (a bar and a musical phrase), but also by the opportunities of content interpretation. Let us demonstrate these opportunities on the example of the romance «Не искушай меня без нужды» (Slide 1).

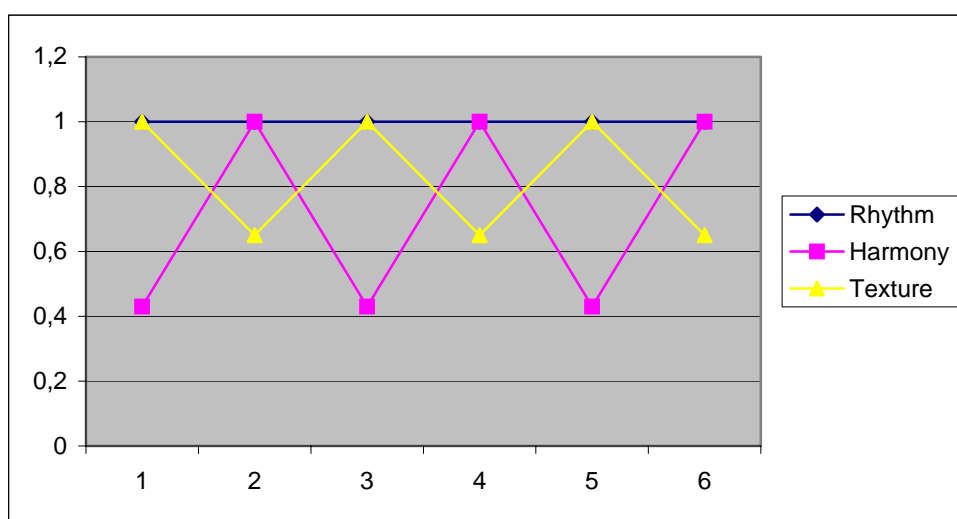


Slide 1

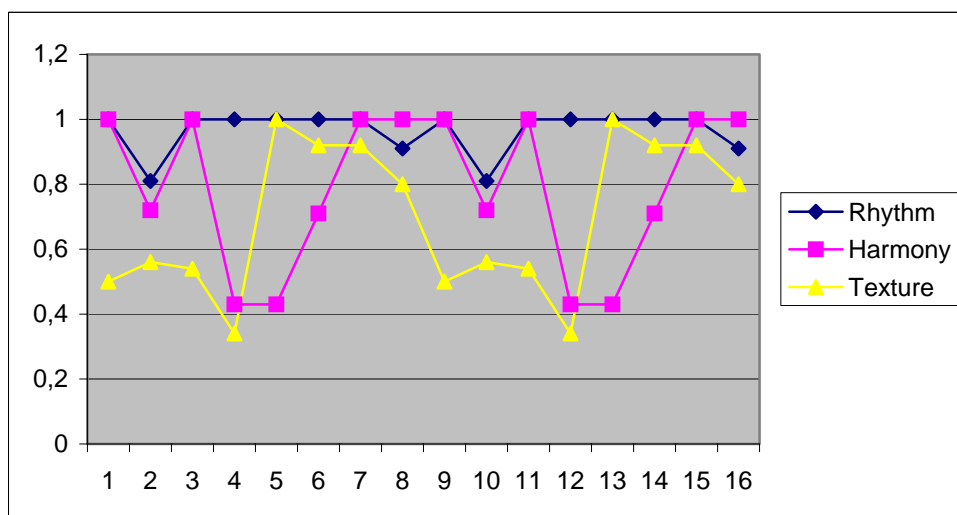
This slide represents the graphs of one couplet bar-by-bar, which expressly illustrate the connection of each events dynamics profile with the structure of the verbal text. The figure shows two rhythmical curves. One of them, representing cumulative rhythmical process is “degenerated”; the other, reflecting rhythmical composition of the voice part, contains declines of events density in each even bar, representing the end of a poetic line. The only exception is the 6th bar. It shall be taken to account that the numeration of bars is conducted from the beginning of a voice part, as we don’t deal with the sound events taking place in the pianoforte introduction. The harmonic curve features the reduction of chordal changes frequency twice as rarely (in 4th, 8th, 12th, 16th and 20th bars, respectively), marking the division of the musical row into sentences, corresponding to the poetic half-stanza. The forth – textural – curve describes structural profile of the couplet in general: it shows a decline of density in the 8th bar, marking the end of the first part of the musical form and the first poetic stanza, and also the decline in the 20th bar, marking the end of the whole couplet. Let us also point out that the caesura of the 16th bar, separating the second poetic line from the repetition of its second half-stanza, is absent in the textural curve, which contributes to the integrity of the developing and closing part of the

musical form. Thus, the division of different eventive flows corresponds to different aspects of the poem division – its regular metrics, division into lines and stanzas and further incorporation of stanzas at a higher level.

I would like to attract your special attention to the cumulative curve of the rhythmical process. In the study, devoted to "degenerated" cases of tensivity function we related such cases to the degree of genre characteristics expression in musical pieces. The present study has revealed another non-musical correlation of event curves – the metrics of a poem. In the romances, in which the composer relies on a metrical principle of poetic text vocalization, the "degenerated" curves may be observed not only on bar-by-bar, but also on line-by-line graphs. In, particular, look at the line-by-line graph of one couplet of the romance «Что, красотка молодая» (Slide 2).



Slide 2

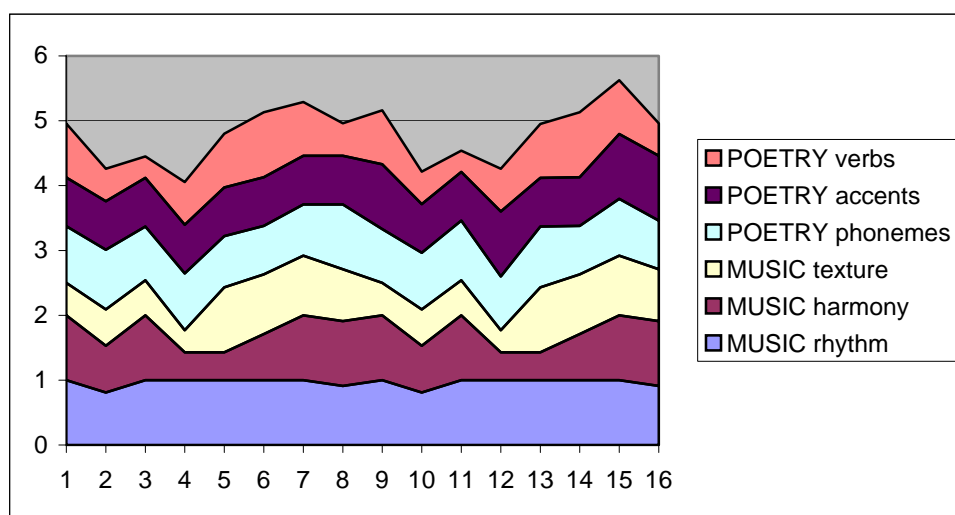


Slide 3

A different picture is displayed in the line-by-line graphs on Slide 3 («Не искушай меня без нужды»), where none of the caesuras, including the inter-couplet one after the 8th line, is expressed definitely enough. Thus, the caesura between the half-stanzas of the first stanza

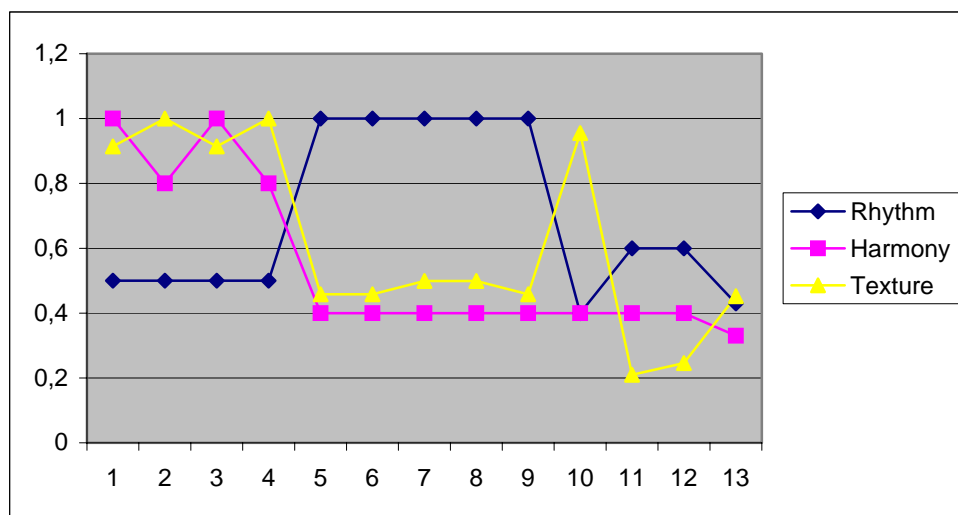
represented in the rhythmical and the harmonic curves is disguised on the textural one, and so on. Therefore, the change of sound events density observed in line-by-line graphs, does not reveal, as opposed to bar-by-bar graphs, the structural division of an artistic (musical and poetic) text, but shows a place of each separate moment of artistic time in the event dramaturgy of the romance.

Regarding the dramaturgic process in general, its musical component shall be analyzed in integration with the poetic one. All the six event flows are represented in Slide 4 as a diagram of a special type, that shows, unlike graphs, “relevant”, and not “absolute” values of the distinguished parameters, allowing to observe the principal trends of event density changes. Looking at the diagram of Slide 4 from this angle, we can make a conclusion about correlation of event organization of musical and poetical rows of the romance in general terms.



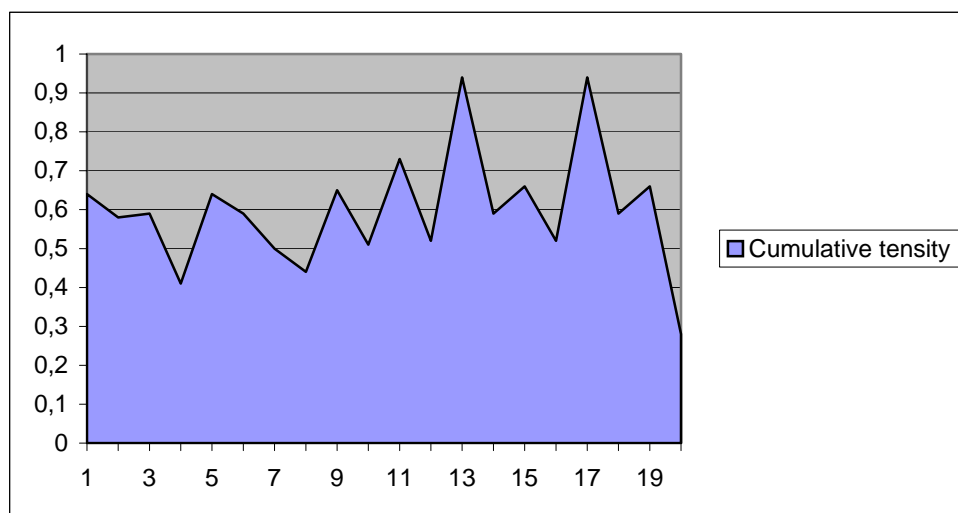
Slide 4

The indicated correlation is typical of the romances, which are based on metrical principle of poetic text vocalization. Among the analyzed pieces an exception is represented by «Где наша роза ...» (Slide 5), where the shift of principles is observed. In this romance the beginning of the developing stage of the musical composition in the 5th bar (coinciding with the beginning of the 2nd stanza of the poem) is marked not by event minimums, but by change of the curves' profiles. In its turn, the beginning of the closing stage in the 9th bar (coinciding with the beginning of the 3rd stanza of the poem) is not expressed in any of the curves. The music of the 2nd and the 3rd poetic stanzas forms an integral development and closing stage, where the harmonic curve is “degenerated”, the textural curve has a single profile of rise and fall, and the rhythmical curve is clearly divided into the parts of development and closing, but the border between them falls not on the 9th, but on the 10th bar.



Slide 5

Another aspect of event dramaturgy is related to detection of principal dramaturgic functions realization. From this point of view the actualization of climax by specific and non-specific means is of special interest. In the romance «Не искушай меня без нужды» the couplet has two equally climaxing bars – the 14th and the 18th, where the highest peak of a melodic wave is prepared by the acceleration of harmonic pulsation and active counter-movement of utmost voices in the musical texture. Look at the growth of event saturation of the 13th and the 17th bars with all types of musical events at the graph provided on the Slide 6.

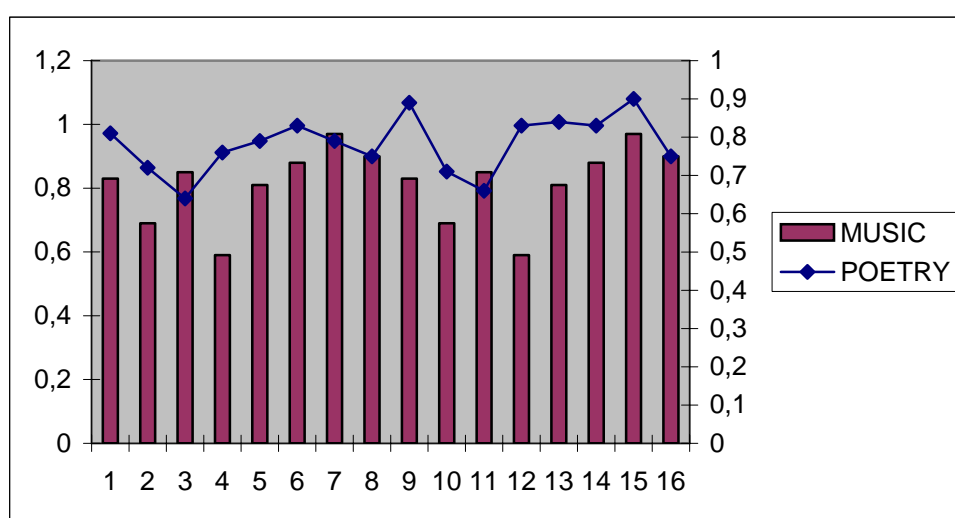


Slide 6

The doubling of peaks is related to repetition of two conclusive lines of a poetic stanza, which, in its turn, follows the intention of the composer to achieve architectonic harmony of musical form. In the absence of repetition, the couplet would have consisted of eight phrases with culmination in the seventh. Such structure would have been unbalanced, whereas the point of the golden section falls on the fifth phrase. In the presence of the repetition the couplet includes ten phrases, and the first “top” bar is located in the point of the golden section. This

peak, however, is not simply doubled with the repetition of the last four bars – it is also intensified with the help of a dynamic accent. The second, more powerful climax, is located in the ninth phrase, which breaks the barely achieved balance and motivates the need of further musical movement. The named necessity is realized in the next couplet, which, however does not bring in the expected equilibrium, as it literally repeats the first one.

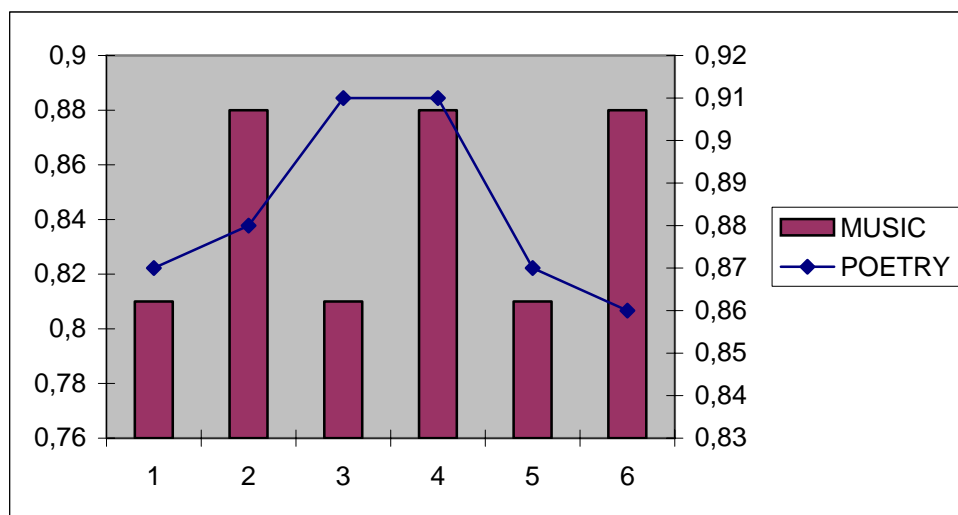
Thus, the question of factors, providing for dramaturgic integrity of the romance, cannot be resolved based on the analysis of the musical row alone. For purposes of comparing musical and poetic dramaturgic organization the reliance not on graphical representation of separate event flows, but the data on cumulative saturation of artistic time units with all types of musical and poetical events shall be considered more rational.



Slide 7

Look at the Slide 7. At the background of repeated configuration of the musical row histogram's columns, the curve of the poetic row stands out prominently, subordinating to a gradual elevation to the climax of the ninth line (falling on the golden section of the poetic form) and the following post-culmination decline. So, in the scope of a separate couplet dramaturgic process is based on exclusively musical laws, whereas in the couplet form of the whole romance it is determined by the peculiarities of sound organization of the verbal row.

The formation role of sound events of the poetic text turns out more evident in cases, when purely musical characteristics are expressed graphically as “degenerated” curves. In particular, look at the graph of cumulative saturation of the artistic time units of the romance «Что, красotka молодая» by all types of musical and poetic events (Slide 8).



Slide 8

This conclusion is justified in relation to all the romances by M. Glinka involved in our experiment, as this composer features a generalized approach to musical embodiment of poetic text. The revealed peculiarities of this approach may be formulated in the following way.

1. The composer resolves the principal issues of compositional and dramaturgic organization primarily on the level of specific musical means and devices, taking into account only the most general characteristics of the poem.

2. The problem of a synthetic integration of the whole is resolved primarily on the level of poetry, partly – by using non-specific sound means, analyzed in our research.