Time and music are inseparably linked with each other because music cannot exist without time. It is impossible to see or to hear time; there are no organs of sense that can perceive it. It is embodied only through some other phenomenon, for instance, appearing together with music as an audible object. In such a case time becomes definite, because it has a beginning, an end and multifarious forms of movement.

Materialization of both music and time in European art took place with the advent of notation that opened opportunities of studying these two components' interdependence, their interaction and historic development, and also of understanding the way in which through music time acquires different features and evolves.

At this stage the specifics of the manifestation of musical time in works of composers of the 21st century is of the greatest interest. However, to understand its particular qualities it is necessary to have general ideas about earlier forms of musical time expression. That is why we will start from a brief review of some phenomena that took place in the evolution of musical time. It should be emphasized that the problem was considered at the origin of professional European polyphonic music formation.

In fact, between the 11th and 13th centuries in music was not realized as it is. By the second half of the 13th century indices of a certain regulation of sounding through a constant rhythm appeared. This rhythm was primary; it grew from a prosody metre and had in its arsenal only two durations – long and short. The above mentioned principle was worked out in the creations of troubadours and trouvères, it also appeared in church music. The elaboration of such a common metre gave the opportunity to add the third and even the forth part to already established two-part system.

By the end of the 13th and in the first decades of the 14th centuries the development of a mensural rhythm, and its notation brought rhythmic variety and due to this the opportunity of simultaneous participation in the development of several rhythms, correlating with each other rhythms that created multiformity of movement in the texture, had begun. At this basis the acquirement of a special side of sounding as a result of work at the architectonics of the texture – correlation of the parts on the vertical with distinctly calculated organization and interaction in the field of metre-rhythm took place. This process manifested itself to the fullest degree in the genre of isometric motet.

The main idea consists of the interaction of different forms of repeating – at the level of melody (colour) and at the level of rhythm (talea). As a matter of fact, another step forward in the cognition of time and its movement was made. The whole system of metrical relationships allowed one "to build" compositions with differentiation of parts movement. It is the evidence of the growing of a special
structure scale thanks to the fact that the time in motets is multi-level.

From the 15th century, and especially from its second part, we can talk about a gradual manifestation of a certain orientation of musical time. Orientation can be considered as the most important factor of the movement process. In the case of music this quality is connected with striving for culmination, for objective, it is manifested in uninterrupted movement in a certain scale and leads to completion and consolidation. Such properties of musical matter as striving and consolidation can be expressed in different ways, but one can see that in the 15th century the increase of certain tension is possible only when there were deliberate commencements and conclusions of composition. As for the inner organization, in compositions of, for instance, Guillaume Dufay, such a line is made up of the uninterrupted sounding of parts moving in the texture.

The next stage is unification into a single whole expressed by the line that possesses its own coming into being form. This tendency became a leading one in the Renaissance. In this context one may also refer to the compositions of Johannes Ockeghem (for example, the mass L’homme arme, Agnus III). A very important index of directed movement is beginning to manifest in them – melody consists of transforming into each other small waves (sequences) that rise higher and higher and consequently dynamize movement leading the composition to its emphasized accentuated conclusion. It is a very important index in full measure corresponding to the characteristics of creation of the Renaissance.

In the second half of the 15th and in the 16th centuries the process of further dynamization was continuing, it allows us to say that by beginning of the 17th century the foundation of movement of time as dynamic process is laid. Music and its time are perceived as one of the examples of the embodiments of our world’s main properties – a world that is alive, developing and moving in one direction, reflecting evolutionary processes as the characteristic of the living.

New time is characterized by high dynamics. Only several peculiarities proper to musical time of that epoch will be mentioned.1

Orientation rests upon the functional system of stability and instability’s interaction. These indexes are characteristic for the tonal system that was being created in practice in the 17th century and was summarized by Jean-Philippe Rameau in the 18th century. Functional relationships, as it is possible to conceive, are manifested not only at the level of harmony, but also in the structure. For instance, such a pair as movement to conclusion and coming to the conclusion also reflects interrelationships of stability and instability. Development of instrumental music that broadened both timbre possibilities and working space (at the expense of augmenting the diapason being used) also became an important factor. Permanent evolution is its characteristic quality – the instruments change and performers’ opportunities extend. Thanks to the confluence of vocal and instrumental music, manifested to the brightest extent in opera, Baroque is perceived as a bright flash in the process of development. One would also like to attract attention to the fact that the contrast that is typical for music in general, but the contrast first of all between fast and slow movement, deepens just at this time. It is also rather revealing that the quality approach is typical for the notion itself of fast and slow time, and the peculiarity of composition depends just on this quality. Such proximity to the sense and emotion of composition is emphasized by the characteristic of movement that appeared and was gradually formed. Such definitions as allegro, grave, largo, presto have emotional coloration. Qualitative perception of rate of movement would broaden, the evidence of it is classical and especially romantic periods. In such a way we have come to a different epoch in the 20th century.

We can observe that the development of art, if we start to study this process from the 11th and 12th centuries, it rises in a spiral. It is important to mention that the whole process of rising and movement of music during the period of a thousand years display magnificent examples of achievements that move us forward. And thinking of the 20th century one understands that human beings really cannot stop, especially when we deal with art that cognize the most complicated phenomena being guided by intuition. The higher achievement, the stronger striving to change it. Such is the 20th century.2

How did the changes in time happen in this period? As a matter of fact, a lot had already happened at the beginning of the century and in the 1920s and 1930s we were already in another epoch. From this point of view it is interesting to evaluate the perception of time both in live sounding and in considering the score. On the one hand, the score altogether reflects the sounding, all the sounding texture is clearly seen in all its peculiarities. On the other hand, notation of the time parameter – metre – does not reflect the true sounding at all. In its sounding it is music liberated from regulations that does not have a constant invariable metre. In the notation it is strict form that tries to “catch up” with sounding and as a result does not correspond to it. This paradox is very indicative for example for Edgard Varèse’s scores (Octandre / 1923, Ionisation / 1929–1931). In such way a weak point in tradition is revealed.

John Cage’s 4’33”, the most striking phenomena of the 20th century, may be considered as a unique example proving the unity of musical time and music proper. There is no sounding; there is only time in it. The composer found the way out creating the “score” of the passing denoted time that manifests itself through certain soundless movements of the performer. One can understand that with the loss
of sounding material musical time also disappears because it is ontological time that is written down. As a matter of fact Cage proved that music cannot manifest itself without specially organized time. This composition was “performed” in 1952. We may allow ourselves to say that in such way Cage marked the beginning of a new stage in frames of the music of the 20th century.

The 1950s are known to be especially active in the appearance of new methods of composition, of new techniques and, as a result, of remarkable new schools. First of all Cage himself created compositions based on the principle of fortuity in these years (aleatorics). Peculiar sensitiveness to approaching new phenomena is inherent to him. Such compositions as Imaginary Landscape No. 4 (1951), Music of Changes (1951) and a whole series of the following ones embody the idea of the furthest moving away from the great systematization of classical-romantic period. Imaginary Landscape No. 4, it seems, demonstrated that
compositions of such type are beyond the bounds of musical time, but exist in eternal and ontological time.

The 1950s and the beginning of the 1960s may be considered the climax of a big epoch, when aleatorics, serialism, sonorics, concrete and electronic music coexisted. From the point of view of the musical time problem not all of these schools are significant. For instance, series music does not demonstrate its new interpretation. Aleatorics in principle is not destined for long term sounding planning. Electronic music, where new features appeared, represents the greatest interest.

György Ligeti’s composition *Atmosphéres* (1961) became one of the extremely important phenomena in the frames of the movement coming out into a new area in musical thought and perception of the world. The very name of this composition brings us to perception of something enormous, light and flying. The peculiarity of this composition is the realization of big sounding forms (tutti) with the help of filling them with the movement of parts that never contemporize. The analysis of the texture not only of the initial big section, but also of 48-part perpetual canon (section H according the score) helps us to understand that the best form to create permanent movement without any doubling is ideally ordered canon that creates the necessary effect of Brown’s movement. The feeling of constant inner changes is intensified by the fact that in different voices the value of duration changes all the time – from semibreve to one hundred twenty eighth. It is just this rhythmic structure that creates the feeling of air space.

The foundation of sections consists of a big flow and huge waves that smoothly stream transforming into each other. As a result, it turns out that it is just the combination of big and uncertain mass with extremely small elements that is defined by the absence of such habitual phenomena as theme, motive and accord. In his *Atmosphéres* Ligeti managed to reproduce the real feeling of the world in the scale of the Earth, the world that is in perpetual movement and at the same time as if it stays at the same place. It is a pattern of big scales, such as, for instance, the solar system: it is invariable, nevertheless perpetual movement takes place inside it, and the system itself moves with constant acceleration. All the above mentioned characteristics and the analogy indicate one of the most important qualities that this musical composition possesses. By its movement it makes us slow down our inner tempo, to hold our breath and then we are able to feel better that sounding is also breathing and taking us with itself up and down.

Ligeti managed to bring music of the 20th century out into another time, imagining not habitual to us time of movement, but discovering duration of stay. One can see a certain pattern – fast time must be controlled, it must accelerate and intensify tension. Duration of stay does not have appreciable limits that can be placed in this or that metre, it is measured by ontological time, as in *Atmosphéres*. One should remember that there is a common metre in each composition, the metre that is not felt and is only necessary for the performers’ coordination. Ligeti marked ontological time in minutes and seconds at each section, counting it from the beginning of the composition. It is a very important thing that proves the existence of another scale of measurement of compositions of duration of stay.

Both Cage and Ligeti foresaw the changes in musical time passing. Cage excluded musical time from 4’33”. Ligeti kept it in his *Atmosphéres*, but he remarked the necessity of support at articulation according to ontological time. In these compositions and other analogous ones...
deceleration of time takes place, deceleration that became one of the most important indices of music of the second half of the 20th and the beginning of the 21st centuries. It is not similar to the usual slowing down in active movement; in this case another state appears at once. Such a type of music begins to acquire special significance in the 1970s and 1980s. One can say that a new school is forming gradually in music.

It is remarkable that the definition of this phenomenon combines characteristics both of volume and rate of movement. For instance, Valery Svetkov’s _Silent Songs_ (1977) may be considered as typical for this school. Here the definition “quiet”/“silent” characterizes both volume and rate of movement; it also emphasizes the meaning, points at a certain emotional sphere. _Silent Songs_ are hummed trustingly and sincerely. The compositions of Arvo Pärt, who turned to the technique tintinnabuli at that time, also appeared in the 1970s. In particular, in his composition _Tabula Rasa_ (pay attention to the fact that it appeared in 1977, the same year as _Silent Songs_). Pärt, in comparison with Svetkov, poses different problems. Both parts of the composition are very private, undercover. It is difficult to reproduce associations that emerge, when you listen to this composition, but, for example, the second part of _Silentium_ (silence, quietness) as if it speaks about a human being who is so lonely in the endless cosmos.

It is the change of musical time that is especially significantly in the compositions of such character. What are these changes? The sensation of big space, of staying high up over the Earth is transmitted through them. Certainly, in such conditions everything becomes smaller, further, but at the same time the feeling of animation, of grandeur of what we see or imagine and grace to which a human being really becomes more significant, when any petty movement disappears. What we perceive is vast space before us, under us, the firmament. It would be in vain to expect an acute individual emotional experience, deep sympathy in compositions of such kind, it is a different calibre. The transfer to new perception of the world is timely because in real life the realization of the fact that we are surrounded by infinite space, that people are able to make sense of it, to grasp it in all its boundlessness, to conceive its rules comes. Thus, the music of this kind to a certain degree teaches us, though indirectly and not in full measure, a new perception of the world.

So, what novelty was brought in understanding of time by the 20th century? The world of multifarious sounds and noises, both musical and not musical, opens before us. The previous system becomes the subject of attack and is partially destroyed. It is possible to continue negative descriptions further on, but it is necessary to mention a positive one, it is freedom from severe restrictions. It is in the direction of sounding and time where the limitless possibilities for creation of big scale compositions, were discovered, and first of all in the embodiment of the content.

If we are to talk about musical time, the events described above have immediate significance for its changing and appearing of its new forms. It would be enough to mention only the freedom from obligatory metre and structures. The 20th century also changed the inner experience of events, because antagonism and hostile confrontation in the ideas themselves disappeared. At the beginning of the century all these battles had been exhausted, a common sounding space had been formed. The important feature of the last century art’s development was the fact that at the peak of flourishing, diversity and triumph of different forms did not prevented the appearance of contrary schools in music, including the understanding of musical time.

The 20th century prepared its departure, but, actually, it entered the 21st century. A decade and a half of our century permits us to define leading tendencies in the sphere of musical time. In general, composers, performers and listeners without doubt have an inclination for aesthetically beautiful music, for music that has untraditional and unsettled forms. It is possible that something we perceive as being of current importance now, and we understand it as forming of a certain school, will turn out as introductory part to some other principles. Nevertheless, in any case, if we have something different, it will have signs of today. We mean first of all the duration of stay and also, partially, the general inclination for not fast movement, not strict structures, for a big scale and, as a result, to a certain degree keeping aloof from the thing observed.

We shall try to show this tendency with examples of compositions created in the 21st century. As with any method, slow time possesses various means of expression. Thus, for example, in the Lithuanian composer Onutė Narbataite’s symphonic composition _Was there a Butterfly?_ (2013), the name itself indicates a certain landscape (though, according the author the name was given after the composition had been written). The music is flowing, uninterrupted and even brief pauses do not destroy the permanency of movement. Such type of sounding wonderfully corresponds with the conception of tranquility; it smoothly and uninterruptedly proceeds from one colour to another, as the day transfers into the night. Analogous principles of musical movement are typical for Narbataite’s compositions; _Melody in the Olive Grove_ (2000) can be considered one of the brightest examples, the name of the composition points directly at the Garden of Gethsemane and the agony in the garden. The composition is written for the trumpet and two string quartets. It is in full measure corresponds to its name; it is a polyphonic melody that lasts and lasts, smoothly proceeds from one melodic fragment to another. It is significant that homogenous
sounding is being kept through all the composition. Each of the fragments is remarkable for its strong melodic expressivity and naturalness. This composition may be considered as a classical expression of the duration of stay. Such a type of statement is only possible together with extremely coherent inflexion filling.

It would be interesting to compare Melody in the Olive Grove with Šarūnas Nakas’ composition Eyes Dazzled by the North (2004). This composition demonstrates a different quality of duration and stay. It represents the embodiment of immense space in music; this space is possibly snow-clad or covered with ice. There are no bright colours, no expression of lyrical passionate feelings. Rather it has an epic character. It gives the experience of an astonishingly bright sensation of the antiquity of the described space and antiquity of sounding. It is not by chance that the composer uses as a rhythmic foundation "the whole catalogue of 120 deči-tala – rhythmic patterns by Sharngadeva” (Nakas 2012). There is an original rhythmical ostinato in Eyes Dazzled by the North, that once started continues till the very end. Movement proper is concentrated in it. The selected sounding form creates an astonishing sensation of movement by small steps: there are no limits of visible space and we have nowhere to hurry to.

Unhurried movement that is connected with a special type of inflexion and the interpretation of depicted space is typical for most of Nakas’ compositions in general. Each element of the texture, the way of prolongation of the sounding, the character of dramatic composition are in complete harmony in his works, for instance, such compositions as the Cup of Grail (2001) and Reliquary (2008).

Summarizing, one may say that the time of duration in Nakas’ compositions is very likely close to the time of antiquity. Narbutaite has a different musical development. In her compositions she is guided by melodic inflexion typical to romantic music.

Among Ukrainian composers who are interested in duration of stay we can name Svyatoslav Lunyov. In his works opportunities of slowing down passing of time have been realized more that once. His hymn In Memory of Atlantis’ People for a big symphonic orchestra (the epilogue of the opera Moscow-Petoushki, 1992–2012) can be cited as an original example in this field.

The peculiarity of the composition is the fact that the well-known for many decades anthem of the USSR served as its inflexion foundation. This symbolic in post-Soviet time composition is turned inside out in Lunyov’s interpretation. The main alteration is extreme enlargement of the sounding time – each accord is stretched excessively, the texture is condensed, the orchestration becomes more massive. The result of such work with material is absolutely different in the principle sense of the music for listener’s perception: the anthem is multiplied, grown up and reached gigantic dimensions (it is significant to remind one that it is still of current importance because it is the anthem of Russian Federation now as well).

From the point of view of the problem discussed in this article another of Lunyov’s symphonic compositions Tutti (2005) is of interest for us. It begins from the powerful sounding of all the orchestra that pours from the first moment, and further on melodic lines drift in all the parts that create the impression immense scale pulsating with energy and life. Gradually, separate contours of motif of different instruments appear. The whole composition is, in fact, staying in the sounding of numerous lines that grow from the initial impulse. An uninterrupted duration of this sounding is gradually coming down both in dynamics and pitch. There will be another two analogous waves,
though notwithstanding the scale listeners all the time feel lively intonation, sometimes tinted with a light shadow of sadness. The last intensification, the most prolonged, is inherent both to a composer and listener. And in this case slow musical time begins to approach the scale of the duration of stay. One cannot feel the pulsation of moving time at slow development. The duration of stay cannot accelerate, it represents something big and the time-duration of stay (slow). One cannot feel the connection of duration of stay with big scale of not only sounding, power, extent, continuance, but also with a human being himself, who is present in this composition.

In Tatti all musical means correspond to the meaning of the duration of stay. One can dare to say – the duration of stay of a human being. And once again the statement about the connection of duration of stay with big scale of not only sounding, power, extent, continuance, but also with a human being himself, who is present in this composition.

Time and space are inter-measurable, they are directly interdependent. A new school in music shows that big ideas and important conceptions demand a certain time to be developed and shown. In the same way they also demand time for listeners, to plunge into them and to understand them. The compositions described above demonstrate the specifics of musical time that in view of its scale slows down considerably. In general two roles of its existence are manifested clearly: the time of directed movement (fast) and the time-duration of stay (slow). One cannot feel the sensation of participation in the great sounding. A triumph of grandeur of the predestination of human beings.

References

1 The questions of being of musical time at this time is considered in the monograph by Mikhail Arkadev (Аркадьев 1992).

2 The problem of time in music of the 20th century is the subject of many studies, such as (Schäffer 1969: 113–129; Stockhausen 1963; Xenakis 1992: 255–268; Гоменко 2006; Кюрегян 1998: 230–242; Теория 2007: 71–121) etc.

3 About duration of stay you can read (Stockhausen 1963; Теория 2007: 281–284).

Literature


Nakas Šarūnas, Eyes dazzled by the North, booklet to an audio CD, 2012.