TEHNICI DE COMPOZIȚII ÎN LUCRAREA LUI BELA BARTOK *MICROCOSMOS*

(Analiza părților selectate din Microcosmos-ul lui Bartók')

COMPOSITIONAL TECHNIQUES IN BARTÓK'S MIKROKOSMOS

(Analysis of selected pieces from Bartók's Mikrokosmos)

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Lucrarea "Microcosmos" a lui Bela Bartók constă in 6 volume care totalizează 153 piese pentru pian. Gradul de dificultate al acestor lucrări este crescător, în corelatie cu dezvoltarea progresivă a tehnicii pianistice a studentului.

Din această perspectivă, "Microcosmosul" este un instrument foarte folositor în predarea pianului. Mai mult, această serie de piese pentru pian cuprinde aproape toate tehnicile compoziționale ale lui Bartók, împreuna cu tehnicile de compoziție de la inceputul secolului 20 din domeniul pianistic. Deși nu respectă formele clasice (cum ar fi sonata, rondo-ul, etc.), aceste lucrari includ și relevă elemente de revigorare, de reconsiderare, simetrie, contradicție și dezvoltare tematică intr-o asemenea manieră încat determină studentul să studieze conotațiile și semnificațiile acestor proceduri în construcția formelor muzicale.

Bartók's "Mikrokosmos" consists of 6 volumes which carry totally 153 piano pieces. The difficulty demands of these pieces are increasing corresponding to the progressive development of the student's piano technique.

Under this perspective "Mikrokosmos" is a very useful and powerful piano teaching tool. Furthermore, this series of piano pieces comprises almost all Bartók's compositional techniques along with many of the early 20th century compositional techniques regarding the field of piano. These works, although not obeying and following the classical forms (such as sonata, rondo, etc.), utilize and exhibit elements of revision, symmetry, contradiction and thematic development in such a manner that help the student survey the implication, contribution and significance of these procedures for the construction of musical forms. Moreover, it should be noted that the evolution of compositional techniques does reflect on piano writing, since these techniques require the expansion and enrichment of fingering positions, rhythmical feeling, aesthetic means and expressive manners as well as the innovative and revised use of traditional composition techniques such as harmony and counterpoint.

ANALYSIS OF SELECTED PIECES

<u>Note</u>: The indications of the (a,b,c) form, where a,b,c integer numbers signify: 1) a: page number of piece (written using Latin characters, i.e. I, II, III, etc.). If the piece occupies just one page (or less) this number is omitted. 2) b: number of system (in specific page) and 3) c: bar number (in specific system).

No.32

It's written in Dorian mode, which is the border between the "dark" and the "luminous" modes. The left hand does not play the role of an accompaniment; it occupies an equivalent (to the right hand) role.

The melodic scheme that appears in the beginning of the piece (the first four notes at right hand stave), also reappears in other parts of the piece. In (1,3) starting from the 2^{nd} crotchet (right hand stave) and in (2,1) starting from the 2^{nd} crotchet (left hand stave) we notice an imitation of the inversion of this melodic scheme, while in (2,2) starting from the 2^{nd} crotchet (left hand stave) we notice an inversion of the same scheme. In (3,1) and (3,2) we notice a form of intermediate termination (the appearance of longer duration notes makes it clearer). In (3,2)-(4,1) the left hand performs an *ostinato* scheme, which transforms the rhythm from 3/2 to 6/4 [(3+3)/4], while at the same time the right hands uses independent rhythmical patterns, giving the final result of multi-rhythm sense. In (4,1) starting from the 4^{th} crotchet and continuing in (4,2), the right hand plays the same melodic scheme as in (1,1) and (1,2) but in a "condensed" form. The initial melodic scheme appears for one more time starting from the 6^{th} crotchet in (4,2) and continuing in (4,3) (right hand) and the piece finally ends with a D major chord.

Additionally, we could note that at the entrance points and at the terminations of the melodic schemes, the dominating harmonic intervals are perfect consonances (octaves, unisons, 5^{ths} and 4ths), while in other points of the piece we can see any type of consonances as well as dissonances.

No.56

Here we can note the wide use of 10^{th} intervals which produce and provide rich volume and expressiveness. The formation of these intervals derives both from the melodic parts as well as from the pedal notes.

This piece can be divided into units, each consisting of 3 bars. The following table represents more clearly the structure of the piece:

		BARS (1,1)-(1,3)	BARS (1,4)-(1,6)	BARS (2,1)-(2,3)	BARS (2,4)-(2,6)
RIGHT HAND	a	Pedal Note	Melodic Scheme $\mathbf{A_2}$	Pedal Note	Pedal Note
	b	Melodic Scheme A ₁	Pedal Note	Melodic Scheme B ₁	Melodic Scheme B_2
LEFT HAND	a	Pedal Note	Melodic Scheme \mathbf{A}_1	Pedal Note	Pedal Note
	b	Melodic Scheme $\mathbf{A_2}$	Pedal Note	Melodic Scheme B_2	Melodic Scheme $\mathbf{B_{1}}$,

The melodic schemes B_1 and B_2 are related to the inversion of A_1 and A_2 , while the B_1 scheme is a slightly modified revision of the B_1 scheme (a *B natural* appears instead of *B flat* in (2,5) and also, we can notice an alteration in the ending of the scheme).

No.59

Here the F Lydian mode coexists and contradicts with the F minor scale. Namely, we have the appearance of multi-modality. Actually, the most luminous mode conjuncts with a dark one, resulting in the frequent emergence of dissonances.

In (1,1)-(2,2) the right hand plays in F minor, while at the same time the left hand plays in F Lydian mode. In (2,3)-(3,3) the right hand plays in F Lydian mode while at the same time the left hand plays in F minor. In (3,4)-(4,5) the right hand plays in F minor (actually, this becomes clear in (4,1)), while the left hand plays in F Lydian mode. In (2,3)-(3,3) we notice the unfolding of rhythmical counterpoint. In (3,4)-(4,5) we notice some imitations based on the initial melodic scheme of the right hand and one more appearance of the same scheme in the left hand part, which plays there in F Lydian mode, utilizing different note durations.

It's highly remarkable that the ascending scalar melodic schemes that occupy the distance of a 5th interval appear in F minor for the right hand, whereas similar melodic schemes appear in F Lydian mode for the left hand.

No.61

In this piece we see the harmonization of the same melody with two different ways. The melody is written in the pentatonic scale E-G-A-B-D-E, which is a form of the original pentatonic scale beginning with G (G-A-B-D-E-G).

In (1,1)-(3,4) (1st crotchet) the left hand accompanies with *ostinato* patterns, while the right hand starting from (1,4) plays the pentatonic melody. In (3,4) (2nd crotchet) - (5,2) the left hand plays exactly the same melody that was presented previously from the right hand, while at the same time the right hand up until (4,3) accompanies in G Lydian mode and in (4,4)-(5,1) in C major, utilizing repeated patterns. At the end of the piece in (5,3)-(5,8) the left hand plays in C Lydian mode and the right hand (starting from (5,2)) plays in G pentatonic scale. The piece ends with the chord C-G, G-D which is extremely sonorous and voluminous, since it consists of two overlying 5th intervals.

No.102

Here the harmonics technique is used. Some notes (with rhombic shape) are held pressed on the keyboard, but without the hammers having hit the corresponding strings. Afterwards, we can utilize various combinations to trigger the vibration of these strings (generate the harmonics effect). Thus, we can play some notes that: 1) have either some or all of the held notes in their harmonic series, resulting in the vibration of the corresponding strings (of the held notes) at their fundamental frequency, 2) are included in the harmonic series of either some or all of the held notes, resulting in the vibration of the corresponding strings (of the held notes) at their corresponding harmonic frequencies, 3) some of their first harmonics coincide with some of the first harmonics of the held notes, resulting in the

sounding of the common harmonics (this is an extremely weak sound) and 4) they have no first harmonics in common, resulting in no sound. In all cases, we should first release the notes that we play hitting the keys, in order to listen to this harmonics effect, while at the same time we should keep pressed the held notes (rhombic shape).

In this piece, in addition to the harmonics performance technique we should mention the coexistence of expressive melodic lines (mostly in the 1st page of the piece) with tense rhythmical (percussive-like) elements (mostly in the three last systems of the piece). These elements are formed (in most of the cases) of major and minor chords in closed position, which move in parallel 5th intervals and are performed in a percussive manner. Also, there are several times that we can notice intense rhythm changes as well as sudden transitions of the dynamics.

No.131

Here the wide use of 4th intervals results in atonality in two ways: 1) The harmonic coexistence of 4th intervals results in various tonal centers, each one of them being equivalent to the others. This comes in contradiction to the traditional tonal rules that premise and demand a unique tonal center. 2) The melodic motivation utilizing the 4th intervals disinclines the domination of a unique tonal center. In (I,1,1)-(II,2,4) we can notice the 1st way of resulting in atonality. Here the opposite motions are preferred along with some imitations in inversed form. In (II,2,5)-(II,4,2) the 2nd way is preferred, whereas in (II,4,2)-(II,5,1) the 1st one. At the end of the piece, we can notice a combination of both melodic and harmonic utilization of 4th intervals.

No.144

Here the minor 2^{nd} as well the major 7^{th} intervals are frequently and widely used. So, when we have chord formations consisting of 2^{nd} intervals, they function as clusters, which actually means that they constitute compact and solid formations limited in a small piano range, resulting in a tense sense of dissonance (for example (I,1,1)). The major 7^{th} intervals (which are traditionally characterized as "dissonant") are used in parallel motions in (I,2,3) (last crochet) – (I,3,2) utilizing pentatonic scales. In (I,3,3) (last minim) and in (I,4,2) (two last crochets) the stinging effect of the (traditionally characterized as) dissonances is reduced due to the far distance between the notes of the interval. In (II,2,1) and (II,2,2) we can notice a sound effect produced by utilizing the sustain pedal. Specifically speaking, frequencies deriving from a quite wide range of the piano can be heard sounding simultaneously, after the performance of a rapid passage. The 3^{rd} system of the 2^{nd} page has an extremely rhythmical character. In (III,4,1)-(III,4,2) we can notice the appearance of multi-rhythm, since although the rhythmical indication is 4/4, the grouping of the note durations gives the rhythmical sense of 3/4. In (III,4,5)-(IV,1,3) we have some imitations formed by parallel motions of major 7^{th} intervals. In the last four systems we can notice some sound effects produced by utilizing the sustain pedal and performing rapid passages. Finally, the piece ends with a dissonant chord.