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Idea of space in music in intercultural perspective

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Abstract:

Idea of space in music is the leading topic of my latest musical research. I have concentrated on problems of space in music in the historical and philosophical European perspective and I tried to discover similarities between meaning of space in different cultural moments and musical form dominating in these times. I singled out the turning points that determined the changes in the understanding of space in the humanistic thought and the accompanying transformations in the organization of musical space. These turning points can be also referred to the trans-cultural idea of space in music. They are described here on the following musical examples: the idea of liberation of space in music is shown with reference to Andrzej Panufnik's Landscape which presents a new vision of musical form of landscape and Mieczysław Karłowicz's Eternal Songs which introduces a "light narration" and spatial construction in musical form. The idea of space as an entity of cultural integration in music can be observed in Panufnik's Sinfonia di Sfere as an inspiration of the geometrical shape of nature mirrored in the symphony's elements and in Karol Szymanowski's correspondence of arts and cultures (ex. Myths, King Roger, the 3rd Symphony "Song of the Night"). The idea of concentration on the sound's shape can be discerned in connection to Witold Lutosławski's Chain II.

Keywords: Idea of space in music, intercultural perspective, Polish contemporary music

Idea of space in music is the leading topic of my latest musical research. I focus on problems of space in music in the historical and philosophical European perspective. I look for similarities between idea of space in different cultural and historical moments and musical concept dominating in these times. Musical form seems to be a mirror for the sense of space expressed in human scientific discourse and artistic performance.

In the light of the above I singled out the following turning points that determined changes in the understanding of space in the humanistic thought and the accompanying transformations in the organization of musical space. They can be also referred to the trans-cultural idea of space and trans-cultural concept of space in music (Table 1).

Table 1. Concept of space in music on the background of European humanities (by author of the paper).

European humanities source/inspiration	Trans-cultural idea of space	European concept of space in music	Trans-cultural concept of space in music
1. Aristotle's <i>Topos</i> – concept of space as a place in local perspective	Concepts of a closed universe; concept of a place and its limits	Narrow-range melodies, traditional music, music form, tone as a border between the internal structure and the external manifestation of music, music form as a form of tone, sonology and sonorism	Musical form, narrow-range melodies, music as a place

2. Plato's <i>chora</i> – understanding of space as a reflection of an idea	Syncretism, combination of art and human thought	Moments without sound in music, extramusical concepts in composition	Extramusical concepts in composition
3.Space as an entity, <i>logos</i> of Parmenides of Elea	Icon, mosaic, directness of artistic presentation	Concept of musical integrity, <i>cantus planus</i>, geometrical shapes in Panufnik's composition, vision of musical form, Szymanowski's vision of cultural integration in music	Concept of musical integrity, vision of cultural integration in music
4.Antique concepts of atoms and particles as forming the structure of space	Universal phenomena as the structure and system of connections	Punctual constructions of musical structure (from chorale to punctualism and minimal music, idea of cell-construction in contemporary music)	Point, single element in musical construction
5. <i>Harmonia mundi</i> in Pythagorean thought	Renaissance symmetry and perspective	Concepts of harmonics, symmetry, and proportion in music as a reflection of the universal order (Renaissance polyphony), harmonics and counterpoint, classical tonality and harmonics, Neoclassicism	Concepts of harmonics, symmetry, and proportion in music as a reflection of the universal order
6. Situation in space and its manifestations in Thomas Aquinas' reflections	Late-Mediaeval scholasticism as liberation of sensual perception of reality, Gothic architecture	Organum as liberation of the space of voices, a new concept of landscape form in Panufnik's music	liberation of the space in music
6.Extensiveness as the main attribute of space in Descartes' philosophy (space of position, form and size)	Light and shade contrasts	Articulation in music, sound form, sensitivity to expression and tone (17th-century <i>musica prattica</i>), architecture of sound in Lutoslawski's music	sound architecture (inner space of music, outer space of musical construction)
7.Newton's absolute space, dynamics, gravity, continuum	New world order, modern 'arrow of time'(entropy)	Concept of absolute in music, sound continuum, dynamics as an element of music, structure of music as movement, 'drive at' (motet, Beethoven)	Concept of absolute in music, sound continuum
8.Leibniz's space as a system of locations	Organization of space as regards the form and order of locations	Spatial forms in music (fugue), idea of spatial form in Karłowicz's music	Idea of spatial form
9.Going beyond the three-dimensionality of space in Riemann's geometry	Phenomenological concepts, space as an experience, internal experience of space, onirist topographies and interiorization of space (Bachelard), Cubist experiments with space, experiments with a new order in visual arts	Experiments with new sounds, harmonics and new dimensions in music (Chopin, Liszt, Mahler, Lutosławski)	Experimental area, widening and deepening the sound space
10. Einstein's theory of relativity, space-time continuum	New world order in time-space perspective	Music as a substantiation of time-space interrelations (Szymanowski, Panufnik)	Music as a substantiation of time-space interrelations
11. Hilbe	Division of space,	Musical abstraction,	Colorism, sensuality

rt's quantum mechanics and spaces 12. 12. Bergson's spatialization of time 13. Alain Connes' noncommutative geometry	concept of duration of the universe, multi- dimensional man, concepts of unlimited universe, frozen form, intermingling of various kinds of arts and their characteristics, a change in priorities	atonality, colorism in music, concepts of spatial music (Varèse, Stockhausen, Xenakis), spectralism in music, fractal structures, static form, musical image and landscape	in music, sense of sound itself, study of sound concept
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I choose four of them to present them now. They seem to be universal for intercultural approach, not only for European background. They are typical for the moment when they aroused and for contemporary music as well. I am going to illustrate it with examples from Polish contemporary music.

I. Liberation of the space in music

1. Andrzej Panufnik's *Landscape* - a new concept of form – paysage

Landscape as the turning point of Panufnik's output is strictly connected with a new vision of musical form in composer's creative meaning¹. It is a proof of composing a musical countryside which is created by memories of Polish Mazovian landscapes of flat lands, meadows and fields combining with the English Suffolk one. This is a kind of landscape with no limits which brings melancholy, far and fleeting horizon evokes the sense of space and boundless contemplation².

Panufnik creates his composition as a landscape. Sudden impulsive inspiration is pierced into the musical piece of the same form and construction. Landscape here is not only inspiration but it is blended into the composition structure. Landscape here is treated as the individual and separate musical form. There is not landscape illustrated with music but landscape is the goal of music itself.

Elements of countryside are musically recomposed and used to construct musical order of the piece. Composer called his work as "interlude for the string orchestra". He mentions that *Landscape* contains the echo of Poland in his musical facture and it is composed in three parts where the second one mirrors the first one and it gives an impression of the landscape seen from the opposite end. The third fragment comes back to the first one but it brings another close-up of the landscape. This next image of the landscape is saturated with heavy clouds cumulated under the earth. The last bars are a moment of gazing on one point of the blurring horizon as far as it disappears in infinity (Example 1)³.

Example 1. Andrzej Panfunik, *Landscape*, London, Boosey & Hawkes, 1991, p.1.

¹ *Landscape* – a large area of countryside, especially in relation to its appearance; a view or a picture of the countryside (*Cambridge International Dictionary of English*, Cambridge University Press, 1995, p. 795); *-scape* – combining form used to form nouns referring to a wide view of a place, often one represented in a picture: a landscape, a seascape, a cityscape, a moonscape (*Cambridge...*, p. 1262), *Landscape* – a painting or photograph of a piece of inland scenery; such a piece of scenery (*The New Lexicon Webster's Encyclopedic Dictionary of the English Language*, Lexicon Publications 1988, p. 554).

² Composer's note to the score of *Landscape* by Ewa Siemadaj, *Andrzej Panufnik. Twórczość symfoniczna*, Kraków, 2003.

³ Composer's note to the score of *Landscape* by Ewa Siemadaj, *Andrzej Panufnik. Twórczość symfoniczna*, Kraków, 2003.

To my wife
LANDSCAPE
Interlude for Stringed Orchestra *)

ANDRZEJ PANUFNIK

$\frac{3}{8}$ $\text{♩} = c. 36$ (a tre battute, ma molto lento)

The musical score is for a stringed orchestra. It features three parts: Violini (Violins), Viole (Violas), and Violoncelli (Violoncellos). The Violini part is divided into two staves (1 and 2), both marked 'div. a 3'. The Viole part is marked 'div. a 2'. The Violoncelli part is marked 'div. a 2'. The score includes dynamic markings such as *ppp* and *p*, and performance instructions like 'sul tasto con sord.' and 'p espr. (poco marc.)'. There are also asterisks and a boxed 'II' in the score.

*) A large stringed orchestra is preferred.
**) tremolo parte d'arco a molto rallent.

Panufnik used elements corresponding with paintings to transfer the sight sensations in music. The colour of sound is composed here with strings only which gives monochromatic shades of timbre diversifying with different tints of sounds. Close plans are composed in bright light colours and far plans are shown in dark and low registers. Chromatic element of landscape is reached by the harmony of semitones. Vibration of the air is reflected in the strings tremolo. The other elements of landscape are generated by the static rhythmic sequences of minims and melody in supertonic and thirds steps creating the standing sounds structures.

Weaving motifs of sounds picture and the changing sequences of clouds in the sky appear all the time in new scenes. Dynamic fluctuations evokes sensation of frozen puffs of winds and the tempo reduction brings the atmosphere of calm contemplation. Changing narration suggests diversifying view which is modified by natural factors like density of clouds and sounds.

2. Spatial form in Mieczysław Karłowicz's *Eternal Songs*

In Karłowicz's symphonic poems we can observe spatial construction with reference to the musical form opening and widening like space by different presentations of a musical theme. In the same moment a theme is lighten up by bright colors of instruments and high registers.

This form of creating appears also when a musical form is shaping in the mood of terrace and steps when observer can see or hear wider and more intense structures of musical sounds. This is a kind of musical projections coming in a sequence order.

Example 2. Mieczysław Karłowicz, *Odwieczne Pieśni Poemat Symfoniczny (Eternal Songs Symphonic Poem)* op. 10, Part III, *Pieśń o wszechbycie (Song of Eternal Being)*, Kraków PWM, 1981.

The image displays a page from a musical score, specifically page 54 and 55. The title is "III Pieśń o wszechbycie". The score is for a symphonic poem and includes a vocal line. The tempo is marked "Moderato (♩ = 100)". The score is written for a large orchestra and voice. The instruments listed on the left include Flauti I e II, Flauto III (piccolo), Oboi, Corno inglese, Clarinetto in B, Clarinetto basso in B, Fagotti, Contrafagotto, Trombe in F (I, II, III, IV), Tromboni tenori, Trombone basso e Tuba, Timpani, Triangolo, Piatto, Violini I, Violini II, Viola, Violoncelli, and Contrabbassi. The vocal line is marked with "poco a poco accel." and "rit." (ritardando). The score shows complex rhythmic patterns and dynamic markings such as "mf" (mezzo-forte) and "f" (forte).

Example 3. The open space consisting of terraces and steps (picture by Mieczysław Karłowicz [Karłowicz 1957, 55]).



Kieżmarski, Widły, Łomnica i Durny
z Małego Kołowego Szczytu

Spatial construction in Karłowicz's composition could be inspired by the mountains space visions during his excursions in Tatra Mountains. Composer described them as follows:

"As I climbed up the mountains the wider and more distant view was stretched beyond my eyes, the Miller's Peak turned to me with its huge breast impressed me the most. The way to Polish Crest is compounded by the huge **terraces** creating **something like steps**." [Karłowicz 1957, 55]⁴

The musical widening and opening of space in orchestra could be heard in *Song of Eternal Being* (Example 2, 3) particularly in its initial phrases as far as the choral theme appears leading to the opening of space, and in *Song of Love and Death*, where the opening of the space is reached together with the contrast of light and darkness.

II. Space as an entity - Concept of musical integrity, vision of cultural integration in music

1. Panufnik's *Sinfonia di sfera* – as an inspiration of the geometrical shape of nature

Two Panufnik's symphonies: *Sinfonia di Sfere* and *Sinfonia Mistica* outlines an interesting passage between inspiration of space of nature, shapes of surrounding world and enter to the abstract space, compiled with blocks of sounds and compositional lines as well as space which is imagined and mystic in its essence.

Together with *Metasinfonia* they tend to fully penetrate possibilities of musical construction formed around some geometric core [Panufnik 1990, 341]. It reflects a composer's admiration to geometry and his tendency to reach the transcultural perspective in music.

Panufnik mentioned that geometric shapes influenced his imagination with a hypnotic power – secret drawings on pre-Columbian ceramics, striking forms existing in nature, ideal pentagon of a five-petal rose, logarithmic spiral in the middle of the sunflower construction, rainbow, parabola of waterfalls, hexagon of a snow flake...he wrote:

"I felt that geometric shapes could provide my compositions with an invisible skeleton bringing my harmonic, melodic and rhythmic ideas together into one, create and organize musical structure." [Panufnik 1990, 341]⁵

Sinfonia di Sfere is a kind of geometrical contemplation of sound construction. Composer expressed it as a reference to the structure of antique temples basing on the geometric symbols and

⁴ Mieczysław Karłowicz, *W Tatrach. Pisma taternickie i zdjęcia fotograficzne*. ed. Jerzy Młodziejowski, Kraków, PWM, 1957, p. 55.

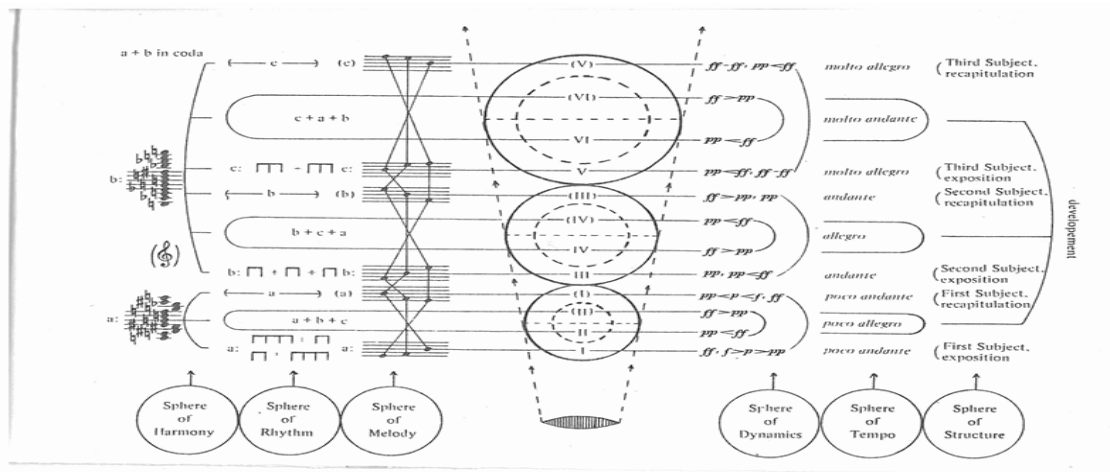
⁵ Andrzej Panufnik, *Panufnik o sobie*, transl. Marta Glińska, Warszawa, Niezależna Oficyna Wydawnicza, 1990, p. 341.

patterns which were used in different civilizations to arouse contemplation state of mind and to reach higher levels of consciousness [Panufnik 1976]⁶.

Sphere here is a locus, a special area, a symbol of the world and cosmic vision of reality.

In *Sinfonia di Sfere* composer intended to create a musical structure of a wider size permeated with geometric order. The title had to suggest a listener a kind of journey in inner and outer space. The main index of composition's structure was a geometric shape modeled of 3 spheres containing a smaller one concentric sphere (Example 4, Diagram).

Example 4. Andrzej Panufnik, Diagram to *Sinfonia di Sfere*, London, Boosey&Hawkes 1977.



As far as musical form symphony is a system of spheres (see Diagram), the following spheres are distinguished:

- Sphere of harmony – basing on two cords, one built of 9 thirds minor and 2 supertonic, the composed of 8 thirds major and 3 minor thirds in symmetric order,
- Sphere of rhythm – compounded of 3 6-note module (a, b, c) in transpositions,
- Sphere of melody – on the Panufnik's triad in transpositions, rotations and reflections,
- Sphere of dynamic – operating of dynamic values from *pp-p-f-ff* in low and high culminations of *ff* and symmetric flows *crescendo (pp-ff)* i *diminuendo (f-p-pp)*,
- Sphere of tempo – in slow and fast tempo in graduated phases (*np. allegro, molto allegro; andante, poco andante*)
- Sphere of structure – in the area of development and transformation, patterned after the modified sonata form.

Spherical idea is established by the balanced layout of musicians – the substantial parts are played by strings and wind located in the inner part of sphere. Its centre, core, is given to the piano part and the lines are defined by the solo-treated instruments – brass instruments and symmetrically divided percussion. Composer propose 3 different shots of dynamic space in the line of the sphere. The beginning of the piece operates with the substantial motives in Violins I and II. (Example 7, p. 1, 7). Sound motifs create different “views” of dynamic space enclosed with the line of the sphere.

Example 5. Andrzej Panufnik, *Sinfonia di Sfere*, London, Boosey&Hawkes, 1976, p. 1.

⁶ Andrzej Panufnik, *Sinfonia di Sfere*, Composer's note, score, London, Boosey & Hawkes, 1976.

To my wife
Sinfonia di Sfere

ANDRZEJ PANÓFNIK

Handwritten musical score for "Sinfonia di Sfere" by Andrzej Panófnik. The score includes staves for piccolo, flutes (Fl.), oboes (Ob.), bassoon (Cb.), and strings (Str.).

Key markings and instructions include:

- ff marc.* (fortissimo marcato)
- molto* (musical tempo)
- solo* (musical instruction)
- f cantab., sempre appassionato* (forte cantabile, sempre appassionato)
- 3, poco andante (1=c.58)** (musical tempo)
- pp sub.* (pianissimo sordato)
- ff* (fortissimo)
- F sost., sempre appassionato* (forte sostenuto, sempre appassionato)

Time signatures include (in 6) and (in 3).

Handwritten musical score for Percussion and Violins, measures 7-10. The score includes parts for Tr. (Trumpet), Perc. II (Percussion II), and Vni (Violin I and II). The notation is in G major and 4/4 time. The Perc. II part features a complex rhythmic pattern with dynamic markings such as *pp*, *pp (bico)*, and *pp molto dolce*. The Vni parts include dynamic markings like *pp* and *pp arco*. The Tr. part has a melodic line with dynamic markings like *pp* and *pp cantab.*. The score is marked with *(quasi solo)* and *(A)* at the beginning of measure 7. A vertical dashed line is drawn between measures 7 and 8.

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The idea of space as an entity referred to the concept of musical integrity, vision of cultural integration in music can be observed in Panufnik's *Sinfonia di Sfere* – as an inspiration of the geometrical shape of nature mirrored in the symphony's elements and in Karol Szymanowski's esthetics concerned a modern correspondence of arts and cultures (ex. *Myths King Roger, 3rd Symphony "Song of the Night"*).

III. Sound architecture in Witold Lutosławski's *Chain II (Łańcuch II)*

Lutosławski is one of the modern composers who can be named the architect of sound because the study of sound color and sound dynamics in the inner space of sound seems to be an important tendency in his composers' technique, especially in his late compositions.

Chain II (Łańcuch II) devoted to violin and orchestra is a kind of the sound contemplation from one hand and the sound examination from the other. The idea of sound contemplation comes together with sophisticated and expanded sphere of technical measures of composition which makes the immersion in the essence of sound possible.

The idea of sound contemplation appears in the first phrases of a composition already. The violin solo designs the spaces between high and low registers by a motive of seconds in scenes *crescendo-piano* with an exemption and descent melody accented by staccato (p. 3-5 in a score [Lutosławski 1996]). This fragment is highly diverse in the area of sound colours and plasticity of musical process.

The player creates the sound using the forms displayed by the composer and he forms the thematic line in a free narration. Number 14 in a score is an example of interweaving the violin line with the punctual tissue of winds, brass and percussion (Example 6, p. 1, 16).

Numerous *fermatas* give space for resounding of long sounds in the variation of their intensity. The last phase of the 1st part brings the tissue which is made of short complexes of sounds – rather sounding points in fast tempo. However it is built on strict rules it resembles the structure of freely falling particles. We can say that this example sum up all the previous examples, which are as follows:

Example 6. Witold Lutosławski, *Łańcuch II*, (*Chain II*), Kraków, PWM, 1996, p. 1, 16.

ŁAŃCUCH II
Dialog na skrzypce i orkiestrę
CHAIN 2
Dialogue for violin and orchestra

Paulowi Sacherowi

1. AD LIBITUM

WITOLD LUTOSŁAWSKI (1985)

1) ritenuto dotyczy tylko partii solowej
ritenuto concerns the solo part only

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16

The musical score on page 16 is arranged in a standard orchestral layout. At the top left, a circled number '14' is positioned above the oboe staff. The woodwind section includes oboe (ob), flute piccolo (fl pc), flute 1 (fl 1), clarinet 1 (cl 1), clarinet 2 (cl 2), and bassoon (fg). The brass section consists of trumpet (trbe), trumpet in B-flat (trb ni), and trombone (tmb c.c.). The percussion section includes two bass drums (2 bng) and three toms (3 tomt). The string section includes violin solo (vno solo), violin I (vni I), violin II (vni II), viola (vle), violoncello (vc), and double bass (cb). The score features various dynamic markings such as *f*, *ff*, *p*, and *pizz.*, along with performance instructions like *unilt* and *div.*. A circled '3' is located in the middle of the score, above the string staves.

Liberation of musical form, spatial sounds construction, sound architecture and space as an entity – in the vision of the concept which may be common for different cultures.

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