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# COMPOSITION-INTERPRETATION-IMPROVISATION PROCESSES IN XO PT. II BY DINO REŠIDBEGOVIĆ: COMPARATIVE ANALYSIS OF TWO INTERPRETATIONS

**Abstract:** The composition *XO pt. II* for flute with processors, amplified cello, amplified piano and analog sound synthesizers, by Dino Rešidbegović, was published in 2016 as an electroacoustic adaptation of its previous version, XO for undetermined instrumentation. The phenomenon of the notation of both versions, presented through the graphic score, comes from the very idea of/about the composition. The score is divided into nine squares which form a network with incorporated abstract shapes of different colors. In the middle of the score is a chart of a spectral analysis of the composition *The* Impact of the Analog Synthesizer for ensemble, also by Rešidbegović. The only difference between the scores of the two versions is the instrumental parameters table involved in XO pt. II for three performers. The main task of this paper is primarily the analysis and comparison of two interpretations of XO pt. II by the same three performers, with a difference in duration of almost 19 minutes. The goal is to reconstruct and explicate the improvisation as a potential basis for a compositional-technical analysis. A compositioninterpretation-improvisation processes chain represents the main structure of the general process which forms the composition XO pt. II, involving composer and performers - interpreted as equal, interdependent creators of the musical work.

**Keywords:** composition processes, graphic score, improvisation, electroacoustic ensemble, interpretation analysis, flute with processors, amplified cello, amplified piano, analog sound synthesizers

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## Dino Rešidbegović: Pioneer of 21st-century artistic electronic/ electroacoustic music in Bosnia and Herzegovina

Dino Rešidbegović¹ is a Bosnian composer of contemporary artistic music, mostly focused on the composition of electronic and electroacoustic music, based on analog modular synthesizers (Rešidbegović 2018, 144). Rešidbegović is the pioneer of 21st-century artistic electronic/electroacoustic music in Bosnia and Herzegovina (Rešidbegović 2018, 144) but also of its new paradigm in the context of the global market of contemporary artistic music. The new paradigm is based on his musical system RMC (Reductional Music Complexity), free from pitch determination (specifically for electroacoustic instruments), built in relation to the "reductional music complexity" in computer science, which is part of the deterministic mathematical theory of possibilities. The second aspect of this paradigm is his notation system, ARGN (Approximate Reductionist Graphical Notation), the basis of improvised chamber music (Rešidbegović 2018, 144).

The composer/author himself calls this notation as ARGN (Approximate Reductionist Graphical Notation). The entire composition is conceived as a determined interaction between the sound synthesizer and the ensemble. The conductor determines the duration of the space in which the instruments agitate through the predetermined musical models. The content of the models itself is left to the interpreters, which means that it is desirable that there is no fixed content, but that it is always changeable. In the stated principle lies the simplicity and effectiveness of the aforementioned notation system. The author leaves the possibility for interpreters to be composers while acting in this work. In addition to this, the relation between the performers and the composer becomes much more intimate and connected, and the very composition becomes an act created by the composer and the performers (Rešidbegović 2017).

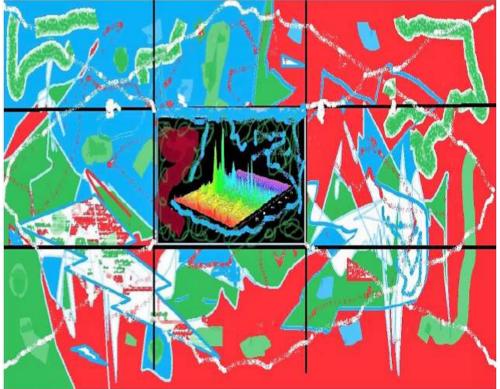
Both RMC and ARGN were presented at the festival Sound Thought 2017 in

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Glasgow, as part of the lecture *Subtractive Synthesis in Composition*.<sup>2</sup> Rešidbegović's composition *Subtractive Study for sound synthesizers and ensemble*, with an explanation of his new approach to electroacoustic/electronic music, is published by LAP Lambert Academic Publishing (Saarbrücken 2017).

## Composition XO pt. II for flute with processors, amplified cello, amplified piano and analog sound synthesizers

The phenomenon of this work, starting from the process of compositional thinking, to its instrumental interpretations, is a potentially infinite form. At the level of ideas, it is reflected in substantially the same layers as compose a spectrum of colors; the initial thought that takes the spectral analysis for its means builds a score in the form of color images and, ultimately, interpretations initiated by these colors, as the basic stimulation of improvisation/composition. Layers can be represented in the form of the three stages of creation of the composition; 1. Spectral analysis of the composition *The Impact of the Analog Synthesizer*<sup>3</sup> (originally for mezzosoprano, flute, accordion, cello, piano) – the result of the analysis as the basis of algorithmic processing, 2. Establishing the symbolic relations of the previous result of the algorithmic processing, the graphic record as the meta-language of the



Example 1: Graphic score of the composition *XO* 

<sup>2</sup> More info on: http://www.cca-glasgow.com/programme/sound-thought-2017

<sup>3</sup> Find sheet music on: https://dinoresidbegovic.musicaneo.com/sheetmusic/sm-226107\_the\_im-pact\_of\_the\_analog\_synthesizer.html

composer (an explanation of the obtained spectrum of colors), 3. Interpretation as improvisation in relation to the visual reception of the spectrum image/composition of the spectrum, the establishment of a symbolic system by the ensemble in real time. Conditionally speaking, these three layers of composition, and, from the analytical perspective, the three stages of formation/becoming of the composition, could be considered as the rhizomatic structure of the composition; a general idea that synthesizes the compositional idea as well as the idea of/about the composition.

Although the spectral analysis of *The Impact of the Analog Synthesizer* represents the starting point of the idea of *XO pt. II* (or compositional idea), the composer treats them as two different compositions, within a single idea.

When it comes to compositions *The Impact of the Analog Synthesizer* and *XO*,<sup>4</sup> this is a rounded idea that has its own stages. The first phase implies all compositional procedures and processes of formation of the final score; the second phase is the realization of this score through musicians/interpreters; the third stage is the use of a recording of the same composition for the purpose of spectral analysis of the entire composition derived on the A4 paper. The aim of this is not reduced image, but a complete, final acoustic picture of the two previous stages. The fourth phase takes this graphic representation for a sample of its formal units and places it spatially in its center and leaves other squares through abstract colors as a stimulus for interpreters. This fourth stage is called a graphic score for *XO*. The fifth phase is limiting the concept for the *XO* performers, which are limitations and explanations. The sixth phase is the use of all the previous phases with an additional parameters for electronic instruments, and this phase is called the score of *XO pt.II*. (Hadžajlić 2017a)

The infinity of the form, or the possibility of the formation of the composition, is also reflected in the future idea of the composer, about the spectral analysis of the *XO pt. II* recording, as a base for new layers of the idea of composition or even new compositions. Such potential actually means that the composition is incomplete, taking into account the factor of the indefinite time parameter in the context of interpretation.

Composition *XO pt. II* is not a composition in the classical sense, but an open work. In that sense, it cannot represent a finished composition (Hadžajlić 2017a).

#### Interpretation of the composition XO pt. II

The main subject of this paper is the analysis and comparison of two interpretations of the composition *XO pt. II*, one of which lasts 4'49 and the other 23'30. The first version was performed on September 29, 2016 as part of Rešidbegović's DMA concert, and the second version, on September 2, 2016, at the Sarajevo Chamber Music Festival. In addition to the significant differences in the duration of the performances, the challenge for the concept of interpretative analysis is set by the

<sup>4</sup> Complete score at: https://dinoresidbegovic.musicaneo.com/sheetmusic/sm-262774\_x\_o.html

following factors: the same score, the same performers, and the different selection and treatment of instruments within the framework of the written instrumental parameters. The specification of the ensemble itself, in addition to the fact that all the performers are specialized in the field of contemporary music interpretation and improvisation, is also relevant; the pianist and the person managing the sound synthesizers (and in the second interpretation, the rhythm machine), is the composer Rešidbegović. The other members of the trio are Belma Alić (amplified cello) and Hanan Hadžajlić (flutes with processors).

In many of his works, Rešidbegović expects interpreters to involve the composer's perspective. However, in his scores he determines at least one fixed parameter, usually the rhythm.

Dino Rešidbegović points to a formal approach that is classified in an individual form of an open type. In domain of macrostructure, the composer limits the co-compositional process of performer, on which he insists in material terms (...) which means that, in standard notation, bar lines mark the performances of individual parts, thus setting them in correspondent relations. The formal frame is, however, only the space within which the ideas of the interpreters are developed, bounded by the composer's instructions. The relationship between the parts is the contrast of the tempo, character, and given rhythm models, which are imposed as the only parameters (Bosnić 2016, 157).

However, this is not the case in the composition *XO pt. II* because he treats improvisation as a rationalization of the structure from the unconscious, that is, the construction of a sound structure, in relation to the visual reception of the graphic score in real time. Given that the only parameter that he defines is the instrumental parameter, which is related to the composition of the sound, excluding the composition-technical parameters in the classical sense, we can ask the question: does the interpretation, *speech* or *pronuciation* of an ensemble really match the original idea of the composer? In interview, the composer argues for the consistency of the interpretation in relation to the score and marks the composition and interpretation as one.

Without the previous spectral analysis, the composition *XO* would have no meaning, because it is possible to differentiate dominant and non-dominant frequencies through the graphic representation. Through the spectral analysis and graphic score I wanted to initiate a subconscious vision of interpreters, by which the interpreter could solve the problem of registration, without the use of classic notation. Like most of my compositions, *XO pt. II* is a composition of music and composition of interpretation, which means that it is not only the composer that composes, but the interpreter itself has the same importance. Therefore, composition and interpretation are one (Hadžajlić 2017a).

However, in addition to all interpretative parameters, the composer also determines the performers. In the interview, apart from the purpose of the

intellectual and spiritual development of individual musicians, he discards any other functionality of the *XO pt. II*, as didactic, educational or intended for students, and says that it is dedicated exclusively to musicians and audiences who are educated and live with the spirit of modern times. He believes that, in order to interpret *XO pt. II*, it is necessary for the performers to have some experience in the interpretation/improvisation of contemporary artistic music, and a similar opinion is shared by the cellist Belma Alić:

For a successful interpretation of contemporary artistic music in general - and the same is with the composition XO pt. II, the most important factor is huge performing experience. By playing music of different styles, we gain knowledge of a large number of ways of sound production, as well as a more sophisticated reception of music. (Hadžajlić 2017b)

The phenomenon of Rešidbegović's relationship with the performers, giving them the role of the composer, as well as the different interpretations of the same composition, based primarily on the mutual communication of the members of the trio, requires observing the recording as the basic material for the interpretation analysis, and, therefore, opens the possibility of compositional and technical analysis. In this regard, I recall one particular thought from Jonathan Sterne, who emphasizes that:

(...) recording has profoundly altered the improvisational idioms in music essentially by providing them with a form of notation. Besides making it possible to study the "scores" of jam sessions, reproduction – particularly in these instances – restricts interpretation to the recorded notation of specific performances of the piece. While this can be seen as contributing to the musicological temptation to reduce interpretation to execution, it is also important to recognize that the replacement of scores with records (and tapes) has been an indispensable component of the explosion in "nonprofessional" composition. (Sterne 2012, 2015)

However, to analyze the *XO* score itself would mean to analyze the programming language or the way in which the composer used algorithms in the formation of the score. Also, such an analysis would require a technical explanation of the previous spectral analysis and its connection with the programming process, as well as the score itself, which ultimately represents Rešidbegović's meta interpretation (or even a meta language) of the spectral analysis, translated into the image, i.e. graphic score. Brian Hulse also underlined the importance and peculiarity of scores saying that they:

(...) are useful carriers of information, transmitting a kind of choreography from one performance situation (composition/improvisation) to another (rehearsal /improvisation). But the medium of the score, its all-at-once

presentation of symbols, can severely distort any project of conceptualizing music. To begin with, musical works do not exist as all-present totalities the way a score appears. In relation to actual music, a score only exists per se as a slender, moving window. But even this stipulation continues to validate the score = music conception in problematic ways. Actual music far exceeds anything that could possibly be represented by conventional Western notation. This is because, during the course of listening, an extraordinary field of temporal objects – past, present and yet to come (and all these as in some sense present) – develops concurrently with whatever sound is actually engaging the ear at any given moment. It may be that in order to adequately develop material to analyze there is a considerable deal of notation yet to be done. Such notation would certainly lose its usefulness for performance. (Hulse and Nesbitt 2010, 36)

#### **Comparative Analysis of Two Interpretations**

The difference between the two interpretations of *XO pt. II* is apparent at first in their different durations (time difference cc 18, 30'), as well as in the significantly different proportion of the amount of differentiated parts within them. The first interpretation contains 11 parts and its duration is 4, 49', while the second one contains 23 parts with a general duration of 23, 30'. The differentiation of parts in the interpretation analysis has been achieved in relation to the appearances of new musical material; with the appearance of a new instrument in a specific moment through a new instrumental gesture; or new compositional gestures not dependent on instrumental techniques, such as the change of rhythmic models or the introduction of new rhythmical-melodic patterns. The following tables (Table 1 and Table 2) demonstrate the principle of part differentiation.

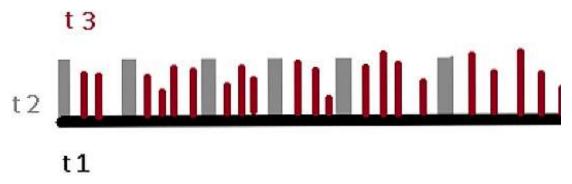
It is also possible to observe the beginning of each new section as an orientation block or the gravitational field of the musical movement, which from the aspect of the compositional-technical analysis would indicate statics – that is, the fundamental layer of the structural organization of the composition. It is logical to conclude that the stated orientation blocks are the product of communication between the ensemble (the establishment of the general process of sound transformation), through a mutual musical logic, which in turn defines a mutual concept of time in the performance. It is possible to graphically represent three basic temporal layers within both versions, which could explain the approximately similar "amount" of musical material in both performances, both in the form of instrumental gestures/techniques and all micro-structural changes.

Part number	Time	Instrumental Techniques / Effects  Dynamic range			
		Flutes & Processors	Amplified Cello	Sound Synthesizers & Piano	
1	0 - 0, 25"	- Bass Flute: harshinhale (closed mouthpiece) - Boss VE – 20: Flanger		- MOOG Sub 37: drone (loop of the envelope parameters)	
		рррр		pp - p	
2	0, 26" – 1, 04"	- Bass Flute: harshinhale (closed mouthpiece), overblowing - Boss VE - 20: Flanger	Harmonic glissando sul ponticello	- Piano: standard tone, cluster on the strings - MOOG Sub 37: drone (loop of the envelope parameters)	
		рррр - рр	pp - p	pp - p	
3	1,05'-1,21'	- Bass Flute: overblowing - Boss VE - 20: Flanger	Harmonic glissando sul ponticello	- MOOG Sub 37: drone (loop of the envelope parameters)	
		pp - mf	pp - mf	pp - p	

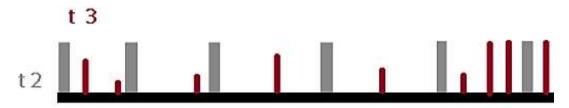
Table 1

Part number	Time	Instrumental Techniques / Effects  Dynamic range		
		Flutes & Processors	Amplified Cello	Sound Synthesizers & Piano
8	2, 45' – 3, 29'	-Flute: overblowing, pizzicato - Boss VE - 20: flanger	Harmonic glissando sul ponticello	- Piano: string glissando - MOOG Sub 37: drone (loop of the envelope parameters) - Make Noise: activating recording of piano part/granular synthesis- phonogene, feedback
		pp-mf	pp - f	pp-mf
9	3, 30' - 3, 41'	- Flute headjoint: whistle trill - Boss VE - 20: flanger	Harmonic glissando sul ponticello	- MOOG Sub 37: drone (loop of the envelope parameters) - Make Noise: granular synthesis – phonogene
		ppp-mf	ppp-mf	pp-mf
10	3, 42' – 4, 06	- Flute headjoint: multiphonic trill, voice glissando, pizzicato - Flute headjoint: whistle trill - Boss VE - 20: chorus	Detache	- MOOG Sub 37: drone (loop of the envelope parameters) - Make Noise: granular synthesis – phonogene
		ppp-f	ppp-f	pp – ff

Table 2



Example 2: Graphic representation of temporal layers in Interpretation 1



Example 3: Graphic representation of temporal layers in Interpretation 2

The first layer (t 1) represents the total duration of the performance and the spatial framework of the composition. The second layer (t 2) represents gravitational blocks of musical movements (mutual phrases of the ensemble) that are dependent on the mutual understanding of larger blocks of time. Therefore, they represent *time in time* – that is, the second temporal layer that relates to the foundations of the compositional structure. The third layer (t 3) represents a third concept of time in the interpretation, of the primary individual performer, which can be presented as multiple gestural phrases within phrases – blocks of the second temporal layer. The phenomenon of different proportions of differentiated parts in both interpretations, observing them from the aspect of a significantly different duration (both in the overall performances and their individual duration), leaves space for analyzing the amount of different musical material – musical phrases, individual interventions in structural change, and instrumental techniques.

The aspect of the amount of instrumental techniques used to form a primarily sonic image of both interpretations also confirms their similarity in the context of the music material, regardless of the final timing, that is, the duration. In the first interpretation, a larger number of instrumental techniques was used but also, a smaller number of instruments than in the second interpretation. The sound transformation process is much faster and the structure is apparently more elaborated. The second interpretation, which is almost five times longer than the first one, contains a number of different instrumental techniques and effects, as well

as instruments. However, in terms of its total duration, like the analysis of the first interpretation, their treatment is significantly different. Instrumental techniques and effects are arranged within longer phrases or time frames (t 3), which can even overlap with differentiated blocks, resulting in a more complex compositional structure from the aspect of compositional-technical analysis. However, from the point of view of interpretation analysis and the psychological effect of the first listening of both performances, the other gives the impression of a simpler approach to interpretation, a more spatial sound, and a more ambient composition than the first one, which, due to the faster flow of phrases and the more dense texture, has the characteristics of a more mechanical, multi-layered composition.

An important factor influencing the overall sound is the instrumentation itself. XO pt. II is written for flute with processors (with the possibility of substitutes, such as bass flute), amplified cello, amplified piano, and analog sound synthesizers (with possibility of using an analog rhythm machine). In the first interpretation, the flute was used in such a way that, in addition to the standard treatment of the instrument, the head and body of the flute were treated as individual instruments, while the bass flute was treated in the conventional manner, as a complete instrument. In the second interpretation, it is a similar case, only without the use of the flute body independently. The sound of the flute or alternative instrumentation was extended by the delay, the effect of the BOSS VE-20 digital processor, while in the second version the same processor was used for effects such as delay, flanger, distortion, and robot, and the sound was also modulated by the? LFO (low frequency oscillator) of the module Moogerfooger MF-108M MOOG Cluster Flux. Amplified cello is the only instrument in both performances that takes part from the beginning to the end without additional interventions through use of music technology. Amplified piano, the analog modular synthesizer Make Noise and the analog performance synthesizer MOOG Sub 37 were used in both versions, but in the second version, the composer used the rhythm machine Analog Rytm MKI. Amplified piano and MOOG Sub 37 were used in a similar way in both versions (for example, rhythmical stretching on piano strings or AMP and filter EG loop - drone of MOOG Sub 37), while the Make Noise synthesizer modules were differently connected in the second version.

The general sound of the ensemble is the result of an interactive combination of sound instruments with natural or processed sound, and electronic instruments, followed by simulation of similar sound effects on different instruments, as well as the different dynamic range of the individual performer within each time block. Since both performances were recorded by the same engineer and with the same equipment, it is possible to determine the difference between the dynamic range. The lowest dynamics in both versions is pppp (approximation), that is, the limit of audibility, while the highest in the first version is ff, and in the second is fff. The following table demonstrates differences in instrumentation, techniques and sound effects.

INTERPRETATION I	INTERPRETATION II		
Flute (headjoint, body) / Bass Flute Boss VE - 20	Flute (headjoint, body) / Bass Flute Boss VE – 20, MF – Cluster Flux		
Harshinhale (closed mouthpiece), overblowing, ala trumpet, inhale/exhale, pizzicato, trills, whistle trills, multiphonic trills, voice glissando, tongue ram, voice glissando	Harsh inhale (closed mouthpiece), overblowing, ala trumpet, inhale/exhale, pizzicato, trills, whistle trills, multiphonic trills, voice glissando, tongue ram, voice glissando, a oelian sound, jet whistle, molto vibrato, finger mutiphonic glissando		
Flanger, chorus	Flanger, distortion, robot, delay LFO		
Amplified Cello	Amplified Cello		
Bowpress, bow press sul ponticello, harmonic glissando sul ponticello, pizzicato ala Bartok, trill glissando, detache	Bowpress, bow press sul ponticello, harmonic glissando sul ponticello, pizzicato ala Bartok, trill glissando, detache, pizzicato, bowpress – ordinario, harmonics, jeté bow stroke, molto vibrato, ordinario/sul ponticello		
Piano / MOOG Sub 37 / Make Noise	Piano / MOOG Sub 37 / Make Noise / Analog Rytm		
String glissando, cluster on strings, tapping	String glissando, cluster on strings, tapping		
Drone (loop of the envelope parameters)  Recording of piano part/granular synthesis - phonogene, feedback	Drone (loop of the envelope parameters)  Recording of piano part/granular synthesis - phonogene, feedback, non-periodic sequence technique  Activation/deactivation of the preprogrammed channels		

Table 3

The comparison of these two interpretation analyses of *XO pt. II*, which have a lot of similarities, actually shows the unique characteristics of this composition. It is a continuous variation of different durations, i.e. variation of the duration of differentiated parts, breaks and rests as an equal musical material and the space between tonality and atonality. The term space between tonality and atonality corresponds to the context of this composition because of the impossibility of categorizing the relationship between the group of tones and tonality, but also the

possibility of finding a tonal center within the classical "dissonant" constructions, which is in effect a continuous tone (continuo or drone). However, the source of this space, as one of the basic characteristics of *XO pt. II*, is the nature of the sound synthesizers themselves. It is this phenomenon of their nature, that is, the becoming of music in relation to it, which Gilles Deleuze and Félix Guattari delineate in the book *A Thousand Plateaus*:

The synthesizer has taken the place of the old and "a priori synthetic judgement", and all functions change accordingly. By placing all its components in continuous variation, music itself becomes a superlinear system, a rhizome instead of a tree, and enters the service of a virtual cosmic continuum in which even holes, silences and ruptures, and breaks are a part. Thus the important thing is certainly not to establish a pseudobreak between the tonal system and atonal music; the latter, on the contrary, in breaking away from the tonal system, only carried temperament to its ultimate conclusion. (Deleuze and Guattari 1987, 95)

The freedom that musical technology gives musicians comes from its nature; characteristics, possibilities, logic, solutions etc. It is not only a performing resource, but also a compositional one; a resource of musical material and the logic of its development. In the case of *XO pt. II*, the characteristics of music technology become the characteristics of music, and in relation to the same, the real time reaction of the performers is the basis of composition – of the composition *XO pt. II*.

#### **Potentials**

This comparison of interpretational analyses of two interpretations of XO pt. II presented the perspective of music composition analysis based on the recording. This analysis is approximate, which means that it does not rely on certain analytical programs, but is based on the experience of the author in the field of composition, interpretations, reception and analysis of music. There is potential for the implementation of a more exact analysis – for example, through some spectral analysis software, and then a comparison of the results obtained with the score, which was also created after an exact analysis of the composition The Impact of the *Analog Synthesizer*, but in the form of an image and, therefore, as an approximation. Such a chain of "checking" the relationships between all aspects that make up this composition, definitely allows the implementation of new research. It could also include an experiment in which the graphic score of XO pt. II is performed by musicians who have no experience in the interpretation/improvisation of contemporary artistic music. The result would also become the subject of analysis and comparison with the previous aspects of the composition, for the purpose of discovering "the composition itself", in the most similar elements that all of these aspects contain.

This work also raises the possibility of many questions relating to the parameter of the performer's freedom, which represents the improvisation itself, but also to its limitations, which may only represent the experience of the ensemble in the interpretation of contemporary artistic music. In addition, an important, perhaps even crucial factor in the context of limitations, is the need for electronic instruments, many of which can still not be found on the Balkan market, or even in wider markets. Can the composer's need for exclusively specialized artists in the field of contemporary artistic music (who equally participate in the composition process) and the need for almost inaccessible music technology (which has the ability to independently establish musical processes), characterize this composition as a prototype of "composer conformism in the world of capitalism"?

#### **List of References**

**Bosnić**, Amra. 2016. *Kompozitorstvo u Bosni i Hercegovini*. Sarajevo: Music Academy of the University of Sarajevo.

**Casti**, John, Karlqvist, Anders. 2003. *Art and Complexity*. Amsterdam: Elsevier Science B.V. Hulse, Brian, Nesbitt, Nick. Sounding the Virtual: Gilles Deleuze and the Theory and Philosophy of Music. Farnham: Ashgate Publishing Limited, 2010.

**Rešidbegović**, Dino. 2018. Biography. 11th International Symposium "Music in Society". Collection of Abstract. Sarajevo: Musicological Society of The Federation of Bosnia and Herzegovina/Academy of Music in Sarajevo.

Sterne, Jonathan. 2012. The Sound Studies Reader. New York: Routledge.

#### **Personal Archive**

Hadžajlić, Hanan. 2017a. Interview with composer Dino Rešidbegović. Sarajevo: Personal correspondence, 05. 01. 2017.

Hadžajlić, Hanan. 2017b. Interview with cellist Belma Alić. Sarajevo: Personal correspondence, 05. 01. 2017.

#### **Web Sources**

https://www.youtube.com/watch?v=LN6D8uy7Wsc, 29. 09. 2018

https://dinoresidbegovic.musicaneo.com/sheetmusic/sm-26107\_the\_impact\_of\_the\_analog\_synthesizer.html, 29. 09. 2018

https://dinoresidbegovic.musicaneo.com/sheetmusic/sm-262774\_x\_o.html, 29. 09. 2018 https://dinoresidbegovic.musicaneo.com, 10. 11. 2018

http://www.mas.unsa.ba/sites/default/files/Dino%20Residbegovic-%20CV%20eng.pdf, 10. 11. 2018

https://www.lap-publishing.com/catalog/details//store/gb/book/978-620-2-06253-4/subtractive-study-for-sound-synthesizers-and-ensemble, 10. 11. 2018 http://www.cca-glasgow.com/programme/sound-thought-2017, 10. 11. 2018

# COMPOSITION-INTERPRETATION-IMPROVISATION PROCESSES IN XO PT. II BY DINO REŠIDBEGOVIĆ: COMPARATIVE ANALYSIS OF TWO INTERPRETATIONS (Summary)

Contemporary artistic musical improvisation today is an inevitable segment of the field of instrumental interpretation. It incorporates contemporary performing techniques and elements of artistic, extra-musical performance, as well as a high level of communication among performers in chamber music. It represents the basics of musical composition, that is, compositional logic as the specific and most sophisticated model of musical thinking. As such, it has the potential to become the object of a compositional-technical analysis; analysis of compositional/improvisational procedures and techniques. However, the following questions need to be asked: How does the ensemble determine the starting material, establish a common musical language, and ultimately establish the musical process? Is the interpreter/improviser at the same time a composer? Is it possible to use the recording of a certain interpretation/improvisation, and possibly, real time composition, as an object of compositional-technical analysis and in what way? Does the analyst need to be experienced in interpretation, improvisation, composition and analysis of contemporary artistic music?

XO by Dino Rešidbegović, originally written for undetermined ensemble and later for flute with processors, amplified cello, amplified piano and analog sound synthesizers, under the title XO pt. II, is primarily represented through a graphic score. That specific form of notation is actually a result of the spectral analysis of his previous composition, The Impact of The Analog Synthesizer for mezzo-soprano, flute, accordion, cello and piano. For performers of XO, the score represents stimulation, a source of musical and extra-musical associations which should be transformed and incorporated in the musical language and essentially, the beginning of the composition-interpretation-improvisation processes chain. This type of general process of XO, or its formation/becoming, that essentially forms a rhizomatic structure, can be recognized and explained by its analysis.

This paper demonstrates the analysis and comparison of two interpretations of the composition *XO pt. II* (the version for flutes with processors, amplified cello, piano with analog modular synthesizers and rhythm machine in the second interpretation), by the same three performers (Hanan Hadžajlić, Belma Alić and Dino Rešidbegović), with a difference in duration of almost 19 minutes. The first version was performed on June 29, 2016 as the part of Rešidbegović's DMA concert in the Army Hall, Sarajevo, and the second version, on September 2, 2016, at the Sarajevo Chamber Music Festival. Both interpretations are reconstructed and explicated primarily through differentiation of the piece's sections, represented through the time range and based on the formation of micro-processes by performers, mostly differentiated with the use of specific instrumentation and instrumental techniques/

sound effects. The comparison of analyses refers to the representation of difference in the instrumentation used, the instrumental techniques/sound effects, the general musical process and the conceptions of time in both interpretations and their individual aesthetics.

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