
STUDIES

Article received on 15th March 2015

Article accepted on 12th May 2015

UDC: 781.65:159.9

782.2(497.11)

Marina Marković*

University of Arts in Belgrade

Faculty of Music, Department of Musicology

Blanka Bogunović**

University of Arts in Belgrade

Faculty of Music, Department for Soffleggio and Music Pedagogy

KROJENJE IN SERBIAN CHANT: APPLICATION OF COGNITIVE STRUCTURAL MODELS OF IMPROVISATION¹

Abstract: Serbian chant, which was formed on the territory of the Metropolitanate of Karlovci in the late 18th century, has been transmitted primarily by oral tradition for a long time, despite numerous attempts to make church melodies available for liturgical use by

* Author's contact information: marinajmarkovic@gmail.com.

** Author's contact information: bbogunovic@rcub.bg.ac.rs

¹ This paper is the result of the scientific projects *Identities of Serbian Music in the World Cultural Context* (No. 177019) and *Identification, measurement and development of the cognitive and emotional competencies important for a Europe-oriented society* (No. 179018), both supported by the Ministry of Education and Science of the Republic of Serbia. It is an extended version of a paper presented at a conference *Psaltiki as an autonomous science: Scientific branches – Related Scientific Fields – Interdisciplinary Collaboration and Interaction*, organized by the Department of Psaltic Art and Musicology of the Volos Academy for Theological Studies (Greece, June 30th – July 2nd 2014.), under the title “Serbian Chant: Aspect of Improvisation in a Process of *Krojenje*.”

producing miscellaneous collections. In the process of the oral transmission of the melodies belonging to the so-called short chant (i. e. less melismatic chant), hymns of the *Osmoglasnik* (Octoechos) serve as a basis for *krojenje* (literally: *tailoring*), which means the adaptation of the melody to a text. Since the procedure of *krojenje* involves simultaneously detaching *Osmoglasnik* melodies from their original texts and attaching them to the texts from other liturgical books without notation and realized orally, improvisation is an inherent feature of the *krojenje* process. Improvisation is an integral part of the creative procedure during the act of performing, even in cases when the musical work is not altogether created by improvisation, as is the case with hymns of contemporary Serbian chant. The relation between *krojenje* and certain levels of creation, initiated our interdisciplinary – musicological and psychological – research, with the aim of determining the structure of the improvisational process in shaping the melodies in Serbian chant, based on the analysis and application of musical-cognitive structural models.

Keywords: Serbian chant, *Osmoglasnik*, Octoechos, *krojenje*, structural cognitive models of improvisation, musicology, cognitive psychology of music, interdisciplinarity

This article presents research that assumes an interdisciplinary perspective in an attempt to understand and explain the structural cognitive mechanisms that lie at the root of a very specific performing field, Serbian Orthodox Church chant, and that is the process of *krojenje*. It endeavours to arrive at answers joining the strength of two scientific areas of close research interest, namely musicology and the cognitive psychology of music. This work thus represents another example of a continual multidisciplinary integration into scientific research, where musicologists, musicians and psychologists (and other scientists) work together in equal partnerships so that each would greatly benefit from it,² with the aim of integrating strengths in order to reach a deeper understanding of musical phenomenon.³ The phenomenon of musical thinking itself is directly or indirectly one of the fundamental problems encountered in musicological research, while at the same time being the subject of research in the cognitive psychology of music.⁴ So, cognitive processes are the special, common or ‘overlapping’ point or the point of closely connected or intertwined competences of these two sciences.⁵

² Cf. Adam Ockelford, “Beyond Music Psychology”, in: Susan Hallam, Ian Cross, Michael Thaut (eds.), *The Oxford Handbook of Music Psychology*, New York, Oxford University Press, 2009, 539.

³ Tijana Popović Mladjenović, Blanka Bogunović, “On Interdisciplinarity in the Studies of Musical Phenomena in Interdisciplinary Approach to Music”, in: Tijana Popović Mladjenović, Blanka Bogunović, Ivana Perković, *Interdisciplinary Approach to Music: Listening, Performing, Composing*, Belgrade, Faculty of Music, 2014, 18.

⁴ *Ibid.*, 11–12.

⁵ *Ibid.*, 12.

The aim of this research is to investigate whether structural cognitive models of the improvisation process could be used in order to understand and explain Serbian chant singing performed by psalms. We intend to show that the procedure of *krojenje* is based on the established principles of improvisation and to determine cognitive models that could give an appropriate framework for explaining the processes that unfold during the psalm's singing. As research methods we used relevant music analysis of a sample of Serbian chant example where *krojenje* occurred, as well as the interpretation of some of their psychological aspects by applying existing cognitive structural models of improvisation.

Our study is focused on the procedural nature of *krojenje*, but this process is considered on the basis of the existing melographic records of Serbian chant, which constitute the outcomes of the already finalised acts of *krojenje*. In other words, the procedure of *krojenje* is considered by focusing on the result, based on the analysis of the process itself. As examples of Serbian chant that represent the process of *krojenje*, we used the hymns of *Srbljak*,⁶ written down in the first half of the 20th century by archpriest Branko Cvejić (1882–1951), who was a well known Serbian psalmist in the Serbian Orthodox tradition.

Serbian Chant and the Aspect of Improvisation in a Process of *krojenje*

The fact that the melodies from the *Osmoglasnik* (Octoechos) represent the dominant basis for *krojenje* in Serbian church singing practice is derived from the significance of the hymns of the *Osmoglasnik* in the Orthodox ritual context: they are repeated multiple times during the church year, thus enabling psalms to remember tunes easily. Although a number of texts from various service books have been written down in notation form,⁷ the daily usage of anthologies of church melodies is still not customary in the liturgical practice of the Serbian Orthodox Church. Instead, psalms sing melodies that belong to different church modes, by heart. The necessity of dealing skillfully with the complex order of performing songs from different service books, which are used alternately during the service, is one of the reasons why psalms mostly do not sing from notated sources. Instead, in shaping liturgical texts musically, they rely on the process of *krojenje* in whose essence one can recognize the improvisation principle.

⁶ *Srbljak* is a church service book that contains the services to Serbian saints and their biographies, arranged by the months and days of the church year. It had great significance for the preservation and dissemination of the centuries-long tradition of Serbian saints' cults. The hymns of the *Srbljak* belong to the group of Serbian church songs that are subjected to the principles of *krojenje*. Cf. Марина Марковић, *Песме Србљака у једногласним записима српских мелографа*, Београд, Сигнатуре, 2006, 9.

⁷ The first records of Serbian chant, which were made using modern musical notation, originate from the second half of the 19th century.

Cognitive Structural Models of Improvisation

Improvisation is an act of spontaneous and flexible creativity, which takes place within the limits imposed not only by conventions but also by implicit rules, thus making improvisation an organized totality that is both understandable and interesting.⁸ Therefore, it is often emphasized that, unlike composition, improvisation must *function* right away, resisting gradual shaping and refining. According to John Sloboda, the essential difference between composition and improvisation lies in the fact that the composer selects the best solution from many different solutions available to him, whereas the improviser uses the first solution *at hand*, which often does not have to be the best one.⁹ However, as emphasized by John Sloboda, previously acquired knowledge and experience always enable a talented, competent and well-trained performer to find acceptable solutions that will fill in the framework.¹⁰

The musicological point of view emphasizes in the first place the implicitness of activity which unfolds without preparation in a process of improvising, i. e. activity which represents the existential situation unprepared, unpredictable and irreversible participation in a singular individual occurrence of music.¹¹ In other words, the performativity of music, its ‘live occurrence’, as well as the very act of performing and the impossibility of its ‘live’ reversibility, are understood as prerequisites for improvising.¹²

Numerous investigations into the cognitive aspects of improvisation are geared toward the identification of the rules on the basis of which *objective* presentation (the adopted musical text or auditory presentation of sensory data in the form of sets of hierarchically, differently organized groups of tones, in terms of shaping, motifs, themes or phrases, etc.) is translated into a *subjective* mental representation and its creative superstructure that enjoys varying degrees of freedom.¹³ The attention of researchers is hence directed to the principles on which different ‘input – output’ models of improvisation as a form of music experience

⁸ Cf. Aaron Berkowitz, *The Improvising Mind: Cognition and Creativity in the Musical Moment*, New York, Oxford University Press Inc., 2010, 1–2.

⁹ Cf. Ksenija Radoš, *Psihologija muzike*, Beograd, Zavod za udžbenike, 2010, 216.

¹⁰ Cf. John A. Sloboda, *The Musical Mind: The Cognitive Psychology of Music*, New York, Oxford University Press Inc., 1987, 149.

¹¹ Cf. Tijana Popović Mladenović, “Improvisation as a Call for Communication”, *New Sound – International Magazine for Music*, 32, 2009, 16.

¹² Ibid.

¹³ Cf. Ksenija Radoš, op. cit., 2010, 141–142.

are based, and therefore also towards the description of basic operations which represent the cognitive basis of the improvisation process.¹⁴

An attempt to formulate and confirm the regularities on which the psychological aspects of the improvisation process are based, has resulted in the emergence of a certain number of the relevant cognitive models of the improvisation process. All of them take into account the fact that the result of improvisation is the direct product of a spontaneous creative impulse, thus having an individual creative touch. At the same time, it is determined by both, temporal and stylistic limitations or, in other words, it is limited by acquired musical knowledge.

The knowledge one uses, as an unavoidable starting point in a process of improvising, should be encoded in procedural (know-how-to), rather than declarative (know-about) form.¹⁵ The reasons for this mostly have to do with the speed of cognitive improvisational processes, concerning the fact that it is taking place in real time. Namely, *declarative knowledge* is generally applicable, but slow: it must be interpreted in order to be used. *Procedural knowledge*, on the other hand, is recoded into a tighter, more efficient form, to be used quickly enough, but must also make use of the implicit knowledge of musical structure in order to make their in-the-moment compositions coherent and stylistically appropriate.¹⁶ Improvisation therefore implies a certain music knowledge encoded in procedural form, so that the demand for speedy action is fulfilled, but it also requires knowledge about musical structure to be applied, so that the musical piece shaped by improvisation is coherent and performed in the manner of the appropriate style, and is therefore recognizable, and respectively understandable to the public. Accordingly, the important element in the process of improvising is a balance between using the procedural form and stylistically determined structural units from previous knowledge, on the one side and the application of newly generated procedures and new musical material, respectively new combinations of the existing factors of musical structure, on the other. An improvised musical flow, therefore, is not self originated; it assumes the existence of certain

¹⁴ The cognitive process assumes a chain of time limited operations, which present separate stages (levels), hence, by using so-called, cognitive elaboration of data, the intention is to define processes going on during subsequent stages, i.e. between input and output. In order to generalize experimental findings, the cognitive elaboration of data creates structural models of a certain cognitive process: it describes more simple operations and their mutual relations. The basics of the cognitive elaboration of data approach could be represented by analogy with computer processing. Cf. Ksenija Radoš, op. cit., 139.

¹⁵ Cf. Richard Ashley, "Musical Improvisation", in: Susan Hallam, Ian Cross, Michael Thaut (eds), *The Oxford Handbook of Music Psychology*, New York, Oxford University Press, 2009, 414.

¹⁶ Ibid.

personal clichés, typical of the improviser, so that the novelty of his/her product depends in the first place, on a broadness of the spectrum of known patterns, and then on the degree of transformation during performance, which brings an individual creative character.¹⁷ Related to this, Aaron Berkowitz points out that certain rules and constraints determined by style converted into the practice of music improvisation, allow unlimited possibilities of operating and indicate an analogy with the possibility of shaping an unlimited number of sentences on the basis of the limited number of words (lexic) and the limited number of grammatical rules (syntax) in language.¹⁸ Berkowitz refers to this phenomenon as isolated infinity and emphasizes that in music, as in language, limitations of different provenance form the basis for communication between performer and public (in the case of language it is a matter of communication between speaker and listeners).¹⁹ As for Sloboda, the existing knowledge forms mental schemata, which he calls superordinate plans or mental representations. Their role is to assimilate and transform new data, respectively to generate clusters of new information, which will be integrated into the individual cognitive construct.²⁰

One of the models of referent-based improvisation, whose authors are Milman Parry and Albert Lord, was founded as the result of their research in the field of folklore and its peculiar oral tradition in shaping and transmitting (folk) literature, and has been developed on the basis of their study of the Homeric epics and oral epic traditions of the peoples constituting the former Yugoslavia.²¹ According to this model, the performer creates a new poetic product whenever he performs it. In so doing, he selects its constituent elements from a corpus of themes and group of so-called formulae, while at the same time using the appropriate composition technique, based on the repetition of the selected units. Formulae represent fundamental semantic entities consisting of a group of words, used regularly within the limits of the identical metrical circumstances in order to express the given basic idea that has its own metric, syntactic and acoustic dimensions.²²

¹⁷ Cf. Hazel Smith, Roger Dean, *Improvisation, Hypermedia and the Arts since 1945*, Amsterdam, OPA, 1997, 29.

¹⁸ Cf. Aaron Berkowitz, op. cit., 3.

¹⁹ Ibid.

²⁰ Cf. David J. Hargreaves, *The Developmental Psychology of Music*, New York, Cambridge University Press, 1986. 151.

²¹ Cf. Jeff Pressing, "Improvisation: Methods and Models: Oral Traditions and Folklore", in: John A. Sloboda (ed.), *Generative Processes in Music: The Psychology of Performance, Improvisation and Composition*, New York, Oxford University Press, 1988, 146.

²² For example, the performer may dispose of a set of formulae, depicting dawn. However, in order to depict the part of the plot occurring at dawn, he will select the formula that best corresponds not only to his own aesthetic criteria and the given context, but also to the

On the other hand, themes are defined as types of events, described by means of formulae and are characteristic of a multitude of different poems.²³

By selecting more or less similar formulae from the repertoire and combining them in different ways, an experienced performer creates a new version of a known epic poem in real time or, in other words, he improvises. Consequently, there is no absolutely fixed version of a poetic work; each performance represents a new product shaped in such a way that it corresponds to the essentially unrepeatable performative situation.

The significance of the Parry-Lord model also lies in the fact that its application is not limited to a literature that has been created and transmitted orally. It is also applicable in the field of music, including different musical genres to which improvisation is immanent. The music structure based on combining the units taken from a rich corpus of melodic patterns that have been preserved and transmitted orally over the centuries, characterizes, for example, works in the tradition of the Persian *radif*, but can also be found in the musical heritage of Ghana.²⁴ There are opinions that Gregorian chant was also created and transmitted in the same manner as epic poetry.²⁵ The existence of a corpus of patterns, which are transformed in the course of performance to varying degrees and in different ways, is also characteristic of improvisation in jazz music.

While speaking about the interrelationships of structural elements in the improvisation process within his own musical improvisation model, Eric Clarke points out that the organization of structural events in the course of improvisation is achieved according to three principles:

- a) Hierarchical principle, when an element forms part of a multilayered structure, which is partially known and partially developed in the course of performance;

global metrical organisation of the performed song. Cf. John Sloboda, op. cit., 141.

²³ Those are, for example, the session of the war council, arming of warriors, return of heroes after a disaster, etc. Ibid.

²⁴ Cf. Jeff Pressing, op. cit., 146.

²⁵ The Parry-Lord model experienced many upgrades in the field of research into the various traditions of church music in the last fifty years, especially in the works of Leo Treitler, Peter Jeffery, Regina Randhofer and Theodore Carp. The issues of orality in Serbian chant, discussed from the standpoint of Walter Ong's theory of orality, are one of the main research interests of Ivana Perković. Cf. Ivana Perković, "Serbian Chant on the Threshold: the Dialogue between Orality and Literacy", in: Laura Vasiliu et al. (eds.), *Musical Romania and the Neighbouring Cultures. Traditions – Influences – Identities*, Frankfurt am Main, Peter Lang, 2014, 81–87; Ivana Perković, "The Written-Oral Paradigm in the Transcriptions of Church Music of Stevan Stojanović Mokranjac", *New Sound – International Magazine for Music*, 2014, 44/II, 133–142.

- b) Associative principle, when each new event is derived from the previous sequence by the forward transfer of information; and
- c) The selection of a certain number of elements from the performer's repertoire, with a varying degree of relatedness between selections, which represents the principle equivalent to the Parry-Lord improvisation model in a broader sense.

The author points out that these three principles are often interrelated, which contributes to the quality of improvisation.²⁶

In his information-based model of musical improvisation, Jeff Pressing explains the improvisation process by means of a *closed-loop* theory. In contrast to an *open-loop* theory, it includes the process of obtaining return information about the accuracy, quality and effect of the performed, so-called *feedback*, which occurs simultaneously with the musical performance, in addition to sensor *input*, that is, the adoption of musical entities relevant for the current act of improvisation, cognitive processing of perceived data and motor *output*, presented during the improvisation process.²⁷ Apart from enabling a peculiar overseeing of something that occurs in the course of improvisation and thus the detection, that is, correction of errors in the current performative situation, *feedback* functions over the long term as a cognitive mechanism for decision making concerning the selection of structural elements or, more exactly, the method for shaping the musical flow and its interpretation. Therefore, it can be considered the key component of the creative aspect of musical improvisation as a whole.²⁸ Pressing's model is based on an analogy with computer-based processing and perceives improvisation as the process of solving a succession of problems. Since this process is connected with a specific temporal continuum, it is segmented in a set of temporal points representing the moments of decision making concerning the selection of musical entities, formal procedures and performing methods. Pressing points out that improvisation implies enhanced attention to the specified structural and performative parameters of a piece of music. However, as a result of gaining improvisation experience, controlled processing gives way to automatic motor processing, which contributes to the quality and integration of the newly created musical product.²⁹ Automatism is, therefore always appropriate in cases when performed actions are precisely coordinated with the demands of a task. Con-

²⁶ Cf. Eric F. Clarke, "Generative Principles in Music Performance", in: John A. Sloboda (ed.), *Generative Processes in Music: The Psychology of Performance, Improvisation and Composition*, New York, Oxford University Press, 1988, 135.

²⁷ Cf. Jeff Pressing, op. cit., 135.

²⁸ Ibid.

²⁹ Cf. Jeff Pressing, op. cit., 150.

sidering that they are often the result of the individual choice of the performer himself/herself, automatism in improvisation occurs often in a free, as well as in a structured context.³⁰

Process of *krojenje* and Cognitive Structural Models of Improvisation

As the fundamental principle of shaping songs in Serbian church singing practice, on which psalms rely during a ritual (consequently, in real time and with temporal limitations!), *krojenje* not only points to the problem concerning the degree of preservation of the basic musical characteristics of melodies from the *Osmoglasnik* in the complex process of adaptation to new texts, but also raises the question of their determination by the improvisational aspect being inherent to the aforementioned process.

Analogously to the notion of theme in epic poetry, defined by the already described Parry-Lord improvisation model, each mode in Serbian chant represents a peculiar melodic type, which implies the existence of a group of melodic sections, with one characteristic formula within each of them. A group of melodic phrases encompassed by a specified church mode can be regarded as a corpus of musical entities from which the psalm selects the constituent elements for shaping a melody and harmonizing it with the selected text. One result of this process is shown in Example 1.³¹

Like a textual formula in an epic poem, a melodic formula in a church melody represents the basic semantic unit, but also functions as the key identification element of a specified melodic section, that is, church mode to which a given musical phrase belongs, since it is conceived as a “melodic or melodic-rhythmic model, which is repeated unchanged or partly varies during the melody.”³² The aspect of regularity of using a melodic formula in Serbian chant, which is reflected in its consistent connection to the same melodic section, that is, one church mode, is equivalent to the content and metric contextualization of the formula having a specified meaning in epic poetry.

³⁰ Ibid.

³¹ In accordance with the adopted analytical methodology, the sections in Serbian chant melodies are designated alphabetically: ABC...F (final section). If the final section represents the established variant of one of the existing melodic phrases, its designation is given in parentheses. In notational examples the place within each section where the characteristic formula begins, is designated by an arrow. Cf. Ивана Перковић Радак, *Музика српског Осмогласника између 1850. и 1914. године*, Београд, Факултет музичке уметности, 2004, 30–42.

³² Cf. Ивана Перковић, „Сродност гласова српског Осмогласника“, у: Мишко Шуваковић (ур.), *Изузетност и сапостојање: V међународни симпозијум „Фолклор – Музика – Дело“*, Београд, Факултет музичке уметности, 1997, 69.

Ex. 1: *Srbljak*: Service to St Stefan Štiljanović, Sticheron at “Lord, I have cried”, No. 2, 1st Mode³³, Musical form of the hymn

Чу-дио пре-бы-ва-ни-е и-мъль-с-си Сте-фа-

не пре-по-доб-не, древ-ныхъ и по-быхъ по-дра-

жа-я до-бро-дъ-тед-ми, А-вра-

ма стра-но-лю-би-емъ, и Ио-си-фа жи-то-

раз-да-я-ни-емъ, Ио-ва ми-ло-сты-ня-ми

и Кор-ни-ли-а мо-ли-тва-ми,

гъм-же и по кон-чи-нъ не оч-та-и-ша-ся тво-я

не-пра-вле-ни-я, Го-спо-ду со-хра-нив-шу

тя-цъ-ла-не-ру-ши-ма.

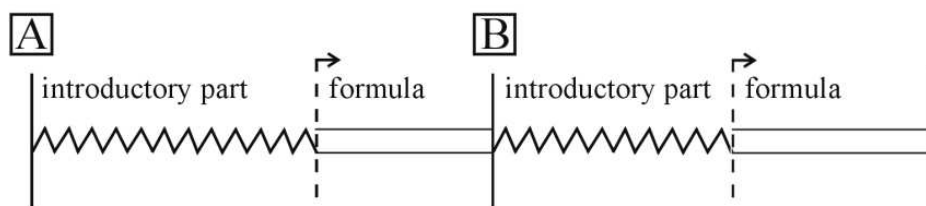
³³ Cf. Бранко Цвејић, *Карловачко појање: Србљак*, Београд, 1970, 8–9. Published by Dimitrije Stefanović, Collaborator of the Institute of Musicology in Belgrade, with the help of subscribers. On CD this example is sung by the Student’s Choir of the Orthodox Theological Faculty in Belgrade. The same sticheron is melodically shaped by the contemporary Serbian psalms too, who are trained in church singing in various local theological schools. These are: Vladimir Antić (b. 1984 – Seminary of St Arsenius in Sremski Karlovci), Mladen Andrejić (b. 1993 – Seminary of St Arsenius in Sremski Karlovci), Božidar M. Vasiljević (b. 1995 – Seminary of St Sava in Belgrade/), Miljan Kocanović (b. 1994 – Seminary of St Sava in Belgrade), Milorad Delić (b. 1989 – Prizren Seminary of St Cyril and Methodius in Niš), and Aleksandar Artukov (b. 1994 – Prizren Seminary of St Cyril and Methodius in Niš).

The formula represents the fixed part of a melodic section and always occurs at the end of the phrase; it is preceded by the essentially variable introductory part, which fills the melodic flow from the beginning of the section to the initial tone of the characteristic formula, as it is shown in Example 2.

Ex. 2: *Srbljak*: Service to St Stefan Štiljanović, Sticheron at “Lord, I have cried”, No. 2, 1st Mode³⁴, The structure of the melodic sections A and B

Чу- дно пре- бы- ва- ни- е и- мѣль є- си Сте- фа-
не пре- по- доб- не, древ- ныхъ и но- быхъ по- дра-
жа- я до- бро- дѣ- тел- ми,

A schematic illustration of the structure of the melodic sections A and B



The possibility of breaking down melodic sections into parts, which are different in terms of their expressiveness and the degree of determination of their melodic and rhythmic characteristics, is of special importance to psalts in the process of *krojenje*. Namely, the psalt memorizes a melodic section primarily on the basis of its characteristic formula, so that it has the significance of the basic cognitive stronghold for his memorization process.

³⁴ Cf. Бранко Цвејић, op. cit.

In the process of harmonizing the melody with the text, which is accompanied by a relatively consistent observation of the global structural organization principle of the musical flow in the *Osmoglasnik* songs, the psalt is always guided by the principle that a sequence of completed reflective entities in the text should be fitted into the musical flow of the melody, so that one melodic section corresponds to one textual phrase, whereby the duration of a melodic section is conditioned by the duration of the textual syntactic-semantic entity. Consequently, the psalt shapes the sectionally segmented musical flow, bearing primarily in mind the structure of the text. However, the number of melodic sections is not the same in all modes nor is it compulsory that each melody contains all sections of the relevant mode, based on the established number of melodic phrases.

The psalt begins the process of *krojenje* by reading the text *silently* because – for the success of adaptation of the existing melody to a new text – it is necessary to have advance knowledge about the delineation points of textual phrases, so that each of them is correctly fitted into the selected melodic section of the relevant mode. What is typical for the process of *krojenje*, however, is its flexibility in determining the boundaries of the text parts because psalts often interpret different parts of the same text as phrases, almost independently of the existing or non-existing punctuation marks. Therefore, the text segmentation process can be understood as the process of continuous problem-solving in Pressing's meaning of this notion which, in this case, involves the problems associated with determining the delineation points of the reflective text entities, that is, the points in the temporal continuum, which represent the most appropriate moments to decide where would be best for the textual phrases to begin and end. On the other hand, the psalt views formulae as almost unchangeable structural elements in the learned melodic material. Thus, he almost automatically observes the place in the known musical flow, as well as the syllable within the new textual phrase where the characteristic formula should logically begin because it most often encompasses six syllables of the text. After the melodic shaping of the first textual phrase, the psalt continues reading the text ahead and, almost at the same time, combines the melodic sections with the textual phrases, thus creating the melopoetic entity of the song. The end of each melodic-textual phrase is also the moment of the decision concerning the selection of the melodic section that will be connected to the subsequent textual phrase, which is also found in Pressing's model of musical improvisation.

The dominant periodicity in the occurrence of melodic sections is also perceived by the psalt as one of the structural constants of the musical flow of church melodies. Consequently, he uses the process of *krojenje* according to the learned melodic patterns and, depending on the length of the textual phrase, supplements the introductory parts and characteristic formulae with passing or

auxiliary tones. He selects them on the basis of his experience with tone sequences, shaped in a given 'style', and fits them into the existing melody according to the hierarchical principle of interconnecting structural elements, defined within the framework of Clarke's improvisation model. Consequently, by fulfilling the present expectations related to the flow of melodic movement to a lesser or greater degree, the psalt uses *krojenje* according to the Gestalt principle, that is, on the basis of recognizing the entirety (based on previously learned musical material). In this case, recognition of the entirety unfolds both at the level of local perceptual organization, i.e. on the plane of the structure of melodic sections, and the level of its global perceptual organization, i.e. on the plane of the structure of the melody as a whole.

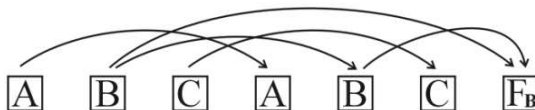
In the process of *krojenje*, the psalt aspires towards maximum control over the accompanying improvisation process or, to use church singing terminology, tries to remain *in mode*. In this way, he varies the melody and creates an unrepeatable totality each time. Throughout his performance, however, he is concentrated on the received feedback about the degree of harmonization of the new musical material with the basic melodic characteristics of a given mode and length of the textual phrase, correcting any excessive addition of novelties. Therefore, the psalt always bears in mind both the physiognomy of the melodic formulae being typical of a given mode and the characteristic tones of its melodic sections, i.e. the initialis, finalis and tones of the melodic dominant³⁵ which, in a functional sense, represent the substitute of a strongly established tonal stronghold. These tones are most often emphasized by a melodic or rhythmical accent or, like the tones of the melodic dominant, repeated a few times during the musical section, thus representing support in the case of intonative instability, that is, one of the ways in which the psalt remains *in mode*.

In view of the fact that the melodic structure of Serbian church melodies is based on the sequence of sections according to the relatively established order of their occurrence, the aim set by the psalt to himself – already in the process of adopting the structural elements relevant for shaping the musical flow of the melody – is that enhanced attention to the global formal and structural determinants of the musical flow or, better said, to controlled processing, should give way to automatic motor processing (mentioned by Pressing in his improvisation model), which is achieved by rehearsing, that is, gaining experience in *krojenje*. In the process of *krojenje*, the psalt shapes a church melody by grouping the

³⁵ The term "melodic dominant" implies the tones that are most often repeated in the prominent places and represent the mainstay of the melody. In Serbian chant, each melodic section contains one or two such tones. Cf. Danica Petrović, *Osmoglasnik u muzičkoj tradiciji Južnih Slovena*, Beograd, Muzikološki institut SANU, 1982, 203.

sections primarily as ABA, ABC, ABCD and the like, with the order of occurrence of phrases that is largely based on the “cyclical repetition of the group of sections being characteristic of a given mode and the number of repetitions determined by the number of sections in the text.”³⁶ This means, for example, that a song consisting of seven textual entities in the mode with three characteristic melodic sections and the final phrase will have the ABC ABC F form in most records, which is based on the associative connection of structural elements, implying the introduction of new parts by their transfer from the previous sequence of elements, which is consistent with Clarke’s model of musical improvisation (Ex. 3).

Ex. 3: *Srbljak*: Service to St Stefan Štiljanović, Sticheron at “Lord, I have cried” No. 2, 1st Mode³⁷, Associative relations of structural elements



The dominant principles in sequencing melodic sections result mainly in the identical musical form of songs with the same text in different melographic records, which refers to both the songs from the *Osmoglasnik* and melodies with the texts from other service books. However, despite peculiar automatism, which accompanies the process of connecting the text with the melody of the appropriate mode, the psalt is not obliged to connect a specified melodic section with the same textual phrase due to which the identical text’s totality in different melographic records may be ‘covered’ by different melodic sections. It is also possible to have different forms of deviation from the rule involving the cyclical repetition of a group of melodic sections typical of a specified mode, which confirms our previously presented stance that melodic models in Serbian chant function as musical entities, whose selection in the process of *krojenje* is partially subject to the psalt’s creative individualism, in the manner explained by Parry-Lord’s improvisation model.

³⁶ Cf. Ivana Perković, “On the Eschatological Aspect of Serbian Church Chanting”, *New Sound – International Magazine for Music*, 2000, 16, 37.

³⁷ Cf. Бранко Цвејић, op. cit.

Conclusion

From the analysis of the process of *krojenje* it is clear that it is not possible to transmit melodies through oral tradition without melodic variants. In the procedure of *krojenje* improvisation manifests itself as a controlled and referent-based process, which relies on varying and combining the given elements of music structure according to the pre-established, known rules concerning the shaping of musical flow in Serbian chant. In a cognitive sense, the creation of the final form of a church melody in the course of performance, that is, the achievement of its melopoetic completeness in real time is based on the simultaneous effect and interrelationship of the relevant improvisation models. In other words, improvisation in Serbian chant is subject to the universal laws of cognitive functioning in the field of music creation, that is, to the same psychological principles according to which a spontaneous creative activity is carried out within the framework of other musical genres. The improvisation process can be viewed as one of the fundamental qualitative determinants of a newly emerging creative product in Serbian chant or, more exactly, as a crucial guarantor of melody and text correspondence obtained by *krojenje*. Therefore, the psalt's art lies in his skill of adapting the existing melody to a text that has constant syntactic and semantic characteristics, whereby the degrees of success and peculiar originality of the result depend directly on the psalt's experience. In that way, cognitive activity in the process of *krojenje* or, in other words, within the limits of its inherent improvisation, is also determined by the psalt's dual action, that is, the fact that the psalt is both the performer of a melody and its creator at the same time.³⁸

Translated by Vera Gligorijević

References:

- Ashley, Richard, "Musical Improvisation", in: Susan Hallam, Ian Cross, Michael Thaut (eds), *The Oxford Handbook of Music Psychology*, New York, Oxford University Press, 2009, 408–419.
- Berkowitz, Aaron, *The Improvising Mind: Cognition and Creativity in the Musical Moment*, New York, Oxford University Press, 2010.

³⁸ We express our special gratitude to Dr Dragan Ašković, Assistant Professor of Church Chant and Musicology, at the Orthodox Theological Faculty, University of Belgrade, and Deacon at St Mark's Church in Belgrade, as well as to BTh Ognjen Kozlina, Religion Teacher at the St Sava Elementary School in Veliki Crljeni, for sharing their precious information related to the practical side of the process of *krojenje* in the rituals of the Serbian Orthodox Church.

- Clarke, Eric F., "Generative Principles in Music Performance", in: John A. Sloboda (ed.), *Generative Processes in Music: The Psychology of Performance, Improvisation and Composition*, New York, Oxford University Press, 1988, 101–146.
- Цвејић, Бранко, *Карловачко појање: Србљак*, Београд, 1970. Published by Dimitrije Stefanović, collaborator of the Institute of Musicology in Belgrade, with the help of subscribers.
- Hargreaves, David J., *The Developmental Psychology of Music*, New York, Cambridge University Press, 1986.
- Марковић, Марина, *Песме Србљака у једногласним записима српских мелографа*, Београд, Сигнатуре, 2006.
- Ockelford, Adam, "Beyond Music Psychology", in: Susan Hallam, Ian Cross, Michael Thaut (eds.), *The Oxford Handbook of Music Psychology*, New York, Oxford University Press, 2009, 539–551.
- Перковић, Ивана, „Сродност гласова српског Осмогласника“, у: Мишко Шуваковић (ур.), *Изузетност и сапостојање: V међународни симпозијум „Фолклор – Музика – Дело“*, Београд, Факултет музичке уметности, 1997, 65–77.
- Perković, Ivana, "On the Eschatological Aspect of Serbian Church Chanting", *New Sound – International Magazine for Music*, 16, 2000, 35–40.
- Перковић Радак, Ивана, *Музика српског Осмогласника између 1850. и 1914. године*, Београд, Факултет музичке уметности, 2004.
- Perković, Ivana, "Serbian Chant on the Threshold: the Dialogue between Orality and Literacy", in: Laura Vasiliu et al. (eds.), *Musical Romania and the Neighbouring Cultures. Traditions – Influences – Identities*, Frankfurt am Mein, Peter Lang, 2014, 81–87;
- Perković, Ivana "The Written-Oral Paradigm in the Transcriptions of Church Music of Stevan Stojanović Mokranjac", *New Sound – International Magazine for Music*, 2014, 40/II, 133–142.
- Petrović, Danica, *Osmoglasnik u muzičkoj tradiciji Južnih Slovena*, Beograd, Muzikološki institut SANU, 1982.
- Popović Mladenović, Tijana, "Improvisation as a Call for Comunication", *New Sound – International Magazine for Music*, 32, 2009, 16–24.
- Popović Mladjenović, Tijana, Blanka Bogunović, Ivana Perković, *Interdisciplinary approach to music: Listening, performing, composing*, Belgrade, Faculty of Music, 2014.
- Pressing, Jeff, "Improvisation: Methods and Models: Oral Traditions and Folklore", in: John A. Sloboda (ed.), *Generative Processes in Music: The Psychology of Performance, Improvisation and Composition*, New York, Oxford University Press, 1988, 129–178.
- Radoš, Ksenija, *Psihologija muzike*, Beograd, Zavod za udžbenike, 2010.
- Sloboda, John A., *The Musical Mind: The Cognitive Psychology of Music*, New York, Oxford University Press, 1987.
- Smith, Hazel, Roger Dean, *Improvisation, Hypermedia and the Arts since 1945*, Amsterdam, OPA, 1997.