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ON TRIPHONY – KNOWNS AND UNKNOWN

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Abstract: *Triphonia is an integral part of Byzantine musical system with a crucial importance for Byzantine music. Triphonia is explored on structural level. Stemming from tetraphonia, it generates the meaning of a secondary structural entity of three phonai (φωναὶ) and a fourth one that repeats the function of the initial one on a new pitch level. Because of its dependence on tetraphonia, triphonia is traditionally considered as a system within a system.*

Keywords: *triphonia, tetraphonia, system*

INTRODUCTION

In the process of studying, aimed at examining the Byzantine system of octoechos, particularly in its part relating to the structural unit of tetraphony [5, 230], it was observed that authentic theoretical texts devoted to Byzantine echos make active use of another similar term – triphony. Although marginal at the time, the phenomenon designated as triphony has always been regarded in analogy to tetraphony, i.e. of the same structural order. This conception of triphony was only formed due to a word formation very similar to tetraphony that seemingly presupposes proximity in content of the two terms. The aspiration to penetrate the music theory logic of reasoning of medieval Byzantine East brings the focus of attention of this paper to precisely this phenomenon – *triphony*.

STATEMENT

In contemporary science no research has been conducted on triphony, and we can say that it is a completely unknown phenomenon. Contemporary researchers, leaning on the prominent 19th c. theoretician Chrisant of Madit [3, 88, 90], discern a system of unified tetrachords in triphony, or briefly, the tetrachord system [4] [12, 53].

The original idea was to conduct this research exclusively by induction, i.e. by drawing on the actual musical sources. In the course of work, however, applying this method posed a number of difficulties the surmounting of which has proved impossible without resorting to theoretical sources – the so called *papadiki* and methods. Therefore, the research process was reverted to the field of source theoretical texts. [6, 151–154]**,** [10]**,** [11]**,** [9], [8], [2], [7, 21–27]. Their style inherently unintelligible, allegorical, and impervious to interpretation and explanation, they also contain the knowledge of triphony, identifiable by its peculiar manner of presentation and terminology. Working simultaneously with musical and theoretical sources by utilising a hermeneutic and analytical method, the concept of triphony began to slowly take shape.

The aim of this paper is to form a clear theoretical concept of the phenomenon as an integral part of Byzantine musical system in direct dependence on its main structural unit – tetraphony. Therefore, before we proceed, we shall remind that in the tetraphonic organisation of the Byzantine musical system each echo is reproduced on a new pitch level from the fifth phonai (φωνή)[157] descending or ascending, i.e. after chanting four consecutive phonai from the initial echo (upwards or downwards). The echo, positioned four phonai from the initial, is the same echo in another register, in the manner of the classical system each scale from the same tone, one octave up or

[157] The term phonai expresses the concept of Byzantine musicians for a building element of the musical system. We believe that phonai is the smallest meaningful indivisible part of musical space that contains three sub-elements: basic sound, interval part of the phonai, and the attained sound [Mechkova: 2009, 49-54].

down, is the same scale in a new octave. This is the customary initial basis of the Byzantine octoechos system.

Although triphony is a sub-level in the Byzantine musical system, we shall think of it as a relatively independent system, or a system within a system. Whereas in the tetraphonic organisation of echos the supports are offset by four phonai, here they are offset by three phonai from one another. Consequently, if we should briefly borrow the popular term "modulation", we have before us a peculiar phenomenon that we could designate "systemic modulation", i.e. alteration of the system. The following thesis emerges: **triphony means a change in the authentic nature of the echo by changing the main echo support from four to three phonai in comparison to the initial, in an ascending or descending direction. It is a "distance" of three phonai – actual or implied – which sets new supporting sound parameters of the echo.**

As already mentioned, the Byzantine musical system has a tetraphonic (pentachord[158]) structure. The main tetraphony contains three intervals of varied quantity for which we shall provisionally introduce the designations large, medium, and small. The large interval always appears twice. Thus, tetraphony, in its meaning of measure, contains four intervals. In this manner, regardless of their position, their sum total is always equal, meaning that in the pentachord system the fifth interval is fixed (a mandatory acoustic quality for every systemic unit).

The same cannot, however, be said of the issue of internal division of the fourths in the pentachord formations produced by every degree of the systemic unit. The size of the fourths in two of the pentachords is identical to the size of the perfect fourth. In the other two pentachords, the fourths will prove, on the one hand, different from the first two, and on the other, different from each other. Thus in the tetraphonic system (based on fifths equal in acoustic quantity) we come across the phenomenon of **unequal fourths.**

Affected by these "unequal fourths" are the internal echos of the system – the second and third echo: the size of the triphonic interval in the third echo resembles tritonus, and is between the perfect fourth and the tritonus in the second echo. The system deals with the "unequal fourths" case by producing triphonic formations that pack the acoustically problematic zones. They are connected to the terms νανά (nana), νενανώ (nenano) and λέγετος (legetos) and invariably accompany triphony in the affected echos.

Overcoming the tritonus in the third echo (between the first and fourth phonai (provisionally $F^1 – B^1$) requires changing the acoustic position of the third and fourth tone of the echo tetraphony, which results in the emergence of an echo that is simultaneously third and fourth – third in terms of pitch position, fourth in terms of scale. This variation, ensuing from the third echo, was referred to by Byzantine musicians as "middle third" [2, 507] or nana [6, 153]. In the same place, but descending (provisionally B1 – F1), the "unequal fourths" problem affects the triphony in plagal second echo, and its solution is a descending scale with F-sharp (provisionally: B1, A1, G1, F-sharp1), which is called legetos [6, 152]. Although not of the order of the tritonus, dealing with the problematic fourth in the second echo is reason to change the tonal genus. In the conditions of ascending triphony of second echo there sounds the "sweetest" change, as the chromatic nenano (E1 – F1 – G-sharp1 A1) [8, 64] scale is called.

Triphony gives rise to another phenomenon that theoretical sources designate using the *double parallagi* [2, 675] term. Let us remind that parallagi is used to designate a specific type of medieval solfeggio technique where the tones marked with their respective martyria are sung gradually with their melos and their polysyllabic designations [5, 75, 63]. In a solfeggio scale, a double parallagi occurs at a moment when, instead of the fourth tone of the tetraphonic scale of the echo (descending or ascending), the monofunctional of the initial tone is sung. Thus the same tone is given a different function and, accordingly, a different designation and melos, i.e. it seems as if two tones are located at the same pitch position, hence is parallagi called double. The term parallagi now appears in a different meaning: that of an echo change which preserves the systemic scale and alters the position of the support, which is the essence of the term parallagi in Greek –

[158] A system where every fifth tone is **monofunctional** to the initial, from which it is offset by a fifth interval.

succession, change, i.e. parallagi is a type of echo change in the conditions of the main system – tetraphony. In double parallagi we are once again talking about a change in supports but of the same echo. Or, if parallagi affects two echos within the same system, then double parallagi affects the same echo within two systems. Except the double parallagi, in the course of work, other familiar terms receive further clarification, including *parallagi*, *enallagi*, *ftore*, since analysing musical manuscripts without making use of said terms would be impossible.

The music sources we have summoned to study triphony are the manuscript books of the sticheron type, with Medieval Byzantine notation, from the 12th, 13th, and 14th century, stored in Bulgarian repositories – the Prof. Ivan Duychev Slavonic and Byzantine Research Centre and the Central Historical and Archaelogical Institute [1]. The sticheron is a chorus singing book of chants in a moderate melismatic style for daily use. All of this speaks of a repertoire of not a particularly high degree of complexity. In this sense, some researchers even attribute a didactic function to the sticheron: this book helped singers study the versions of stichera and notation, while the formulaic language of the sticheron merely aided this process, Christian Troelsgaard believes. The non-complicated, from a stylistic point of view, melos of the stichera in chant books that have been studied proves beneficial to studying this complex and completely unknown phenomenon that triphony is.

The established concept of triphony, its connection with tetraphony and its behaviour in its relationship with other sub-system levels, but most of all the operation of the entire system, can be traced in one of the most emblematic stichera of the sticherarion contents – the octaecho Θεαρχίω νεύματι (Tearchio Nevmati) (on 15th August, Assumption Day), using comparative analysis based on nine musical samples from the manuscript sticherarions with Medieval Byzantine notation from both of Bulgaria's main repositories – the Prof. Ivan Duychev Slavonic and Byzantine Research Centre and the Central Historical and Archaelogical Institute. The choice of material for comparative analysis fell on the octoechos sticheron due to its specific echo structure: the melos of the sticheron runs across all echos of the octoechos in a certain logical progression: I – Pl. I – II – Pl. II – III – Pl. III – IV – Пл. IV – I. The return to the initial echo at the end of the sticheron puts it in a peculiar framework. One particularly important reason to choose the prominent sticheron is, of course, the special emotional and professional value it has to the author of this paper. This sticheron occupies a central position in the oeuvre of the Bulgarian National Revival music teacher Nikola Zlatarski of Tarnovo, whose works have inspired the early professional work of the author in the field of Musical Medieval Studies and Byzantine Studies.

The idea of triphony is further affirmed in both graphic aids, deciphered for the first time and dedicated mainly to its problems – the chart of Ioan Plusiadinos (15th c.) [11, 259], called *The Wisest Parallagi* and the diagram of Ioan Laskaris (15th c.) [7, 21-27].

Plusiadinos puts the triphonies of the octoechos in their natural tetraphonic context in the centre of the chart. Navigating the chart is characterised by an exceptionally high degree of complexity: walking in it reminds one of navigating a maze. Although externally the shape of the chart resembles a rhombus, it is navigated in a circle – a token of the liturgical purpose of Byzantine music.

The diagram of Laskaris practically reflects all echo connections of the octoechos based on the main system of tetraphony and the resulting triphony. All echos, the result of the effect of triphonies, receive additional peculiar designations (parakirios, paramesos, and paraplagios), listed in the theoretical text accompanying the diagram.

CONCLUSION

Understanding the meanings of these unique graphical aids is more than the mere decryption of ciphers. This is a quest for revived knowledge, for the correct approach to "music – the resonant liturgy" in the conditions of contemporary musical theory logic.

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