Echos in the Byzantine-Russian Heirmologion. An Experience of Comparative Research

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This paper presents some preliminary results of our comparative study of the Byzantine-Russian Heirmologion melodies. The long and successful tradition of comparative research founded by famous Russian scholars such as D. Rasumovskij¹ and A. Preobrajenskij² was further developed by E. Koschmieder³, M. Velimirovič⁴, Constantin Floros⁵ and N. Konstantinova Ulff-Møller⁶. Two main approaches to the problem of relation between Russian and Byzantine liturgical chant can be distinguished. The first approach, represented mainly by Russian scholars (first by V. Metallov⁷ and S. Smolenskij⁸), defends the idea of originality of the old Rus church singing, its connection with a Byzantine origin being essentially formal. The opposite view, i.e. that the old Rus chant depended entirely on its Byzantine counterpart, was put forward a century ago in Russia and has been supported primarily by Western scholars.

Both approaches have their cases. The late Rus chant of the mid-seventeenth century being transferred into staff notation with precise rhythm and pitch characteristics represents an evident contrast to the Byzantine melodies as they appear in modern transcription. The modes are organized differently, the meaning of neumes, their graphical shape and rhythmical meaning seem to be far from the Byzantine. At the same time there is an uninterrupted tradition of Rus church singing, and only with this taken into consideration we get an opportunity to come closer to the old Rus layer of chant. The purpose of our research was to identify the early and late chants, their musical

¹Razumovskij, D.V. Tserkovnoje penije v Rossii (Church singing in Russia), Vols. I-III, Moscow 1867-1869.

 $^{^2}$ Preobrajenskij, A. Greko-russkije pevchije paralleli 12 - 13 vekov (Greek-Russian chant parallels of the 12 th and 13 th centuries), "De musica" II, Leningrad 1926, pp. 60 - 76.

³Koschmieder, E. Die ältesten Novgoroder Hirmologien-Fragmente. Abhandlungen der Bayerischen Akademie der Wissenschaften, Philosophisch-Historische Klasse 35, 37 and 45. Munich 1952, 1955 and 1958.

⁴Velimirovič, M. Byzantine Elements in Early Slavic Chant. MMB Subsidia IV, Pars principalis et Pars suppletoria. Copenhagen 1960.

⁵Floros, C. Universale Neumenkunde. Entzifferung der ältesten byzantinischen Neumenschriften und der altslavischen sematischen Notation, Vols. I - III. Kassel 1970.

⁶Ulff-Møller, N. K. Transcription of the Stichera Idiomela for the Month of April from Russian Manuscripts from the 12th Century. Slavistische Beiträge, Band 236, München 1989.

Metallov, V. Russkaja semiographija: Is oblasti tserkovno-pevcheskoj archeologii i palaeographii (Russian semiography: from liturgic chant, archeology and palaeography. Moscow 1912. -- Bogoslujebnoje penije russkoi tserkvi v period domongol'skij (Russian Church singing in the pre-Mongol period). Moscow 1912.

⁸Smolenskij, S.O. Drevnerusskich pevsheskich notatsijach (About the Old Russian chant notations). Obshestvo l'ubitelei drevnei pis'mennosti. St. Petersburg 1901.

organization, the scale, final tones and hypothetically to reconstruct the "bridge" between these two great chant traditions.

The chanted Heirmologion has been adopted for our research as it to a very high degree conforms to the demands of a comparative study. Its textual tradition, as Christian Hannick pointed out⁹, is very stable: until the 17th cent. it did not undergo a serious linguistic revision as did for example the Sticherarion. Furthermore, the Heirmologion is not too large, it can be treated as a whole, and as all eight modes are represented it is possible to obtain substantial conclusions. The melodies are very simple, a kind of melodic recitation. There are many smaller melodic variants, but as a whole the chants of the Heirmologion are very stable, and the heirmoi have preserved essential qualities such as prosody, formulas, rhythm and mode through the centuries.

For this investigation we have used three early Russian Heirmologia: Novgorod (12th cent.)10, Chilandar (13th cent.)11, Voskresenskij (12th cent.)12, three Byzantine manuscripts: Saba 83 (12th cent.)13, Coislin 220 (12th cent.)14, Ε.γ.II (A.D.1281)15 and several late Russian sources (15th - 17th centuries) in the Russian State Library in Moscow¹⁶. We have decided to work with four main melodic versions of heirmoi, Palaeobyzantine, Mediobyzantine, Old Russian (12th - 13th centuries) and late Russian (15th - 17th centuries).

Prior to the collation itself, a "coordination code" has to be settled. Therefore, we will in the following examine such categories as scale, pitch and intervals.

The scale (zvukorjad)

The scale of Byzantine monody has relative pitch. While transferring Greek neumes into staff notation the pitch level is equalized to the Western system of church modes: a central octave D-d and two conjunct tetrachords, one below and one above:

⁹Hannick, C. Razvitije znamennoj notatsii v russkom irmologii do kontsa 17 veka (The development of Znamennaja notation in the Russian Hirmologion to the end of the 17th century). Musikal'naja kul'tura crednevekovja I, Moscow 1980, pp. 141 - 150. Moscow Conservatory and the A. Rubljev Museum edition.

¹⁰Moscow, Central State Museum of Ancient Acts, Fund 381 Nos 149 and 150. Published by E. Koschmieder, see above, note 3.

¹¹Russian State Library, Fund 87 (Grigorovič Collection) No 37 and State Public Library (Petersburg), Pogodin Collection No 55. The first part of the MS is published in MMB, Series principalis Vol. Vb, Fragmenta Chilandarica Palaeoslavica (ed. R. Jakobson), Copenhagen 1957.

¹²Moscow, State Museum of History, Voskresenskij New Jerusalem Monastery Collection No 28.

¹³Hirmologium Sabbaiticum 83. MMB Série principale. Vols. VIII i - ii (ed. Jørgen Raasted), Copenhagen 1968-70.

¹⁴A part of Coislin 220 corresponding to the Novgorod Hirmologion fragments was edited by E. Koschmieder, see above, note 3.

¹⁵Hirmologium Cryptense E.γ.II, MMB. Série principale Vol. III, (ed. Lorenzo Tardo), Rome 1951.

¹⁶ Moscow, Russian State Library, Fund 178 No 8862; Fund 379 Nos 12, 14, 23, 28, 29 and some other MSS.

Each of the eight steps of this octave represents the final (and initial) tone in the different modes of the octoechos and together they form a diatonic scale. Let us, as a first hypothesis, identify the old Russian scale of the 12th and 13th cent. with the Byzantine system.

The so-called *obichodnij zvuchorjad* ("scale in church use"), found in the late Russian notated MSS and chant manuals, corresponds to the red-ink pitch marks, *pomjeti*, written together with the neumes. This scale consists of four equal trichords divided by a semitone, the so-called *soglasija* (= $\sigma \nu \mu \phi \omega \nu i \alpha$), or - according to the Greek system of four conjunct tetrachords:

This indication of pitch levels was adopted in Rus by the end of the 17th cent., and, as the Byzantine system, it is a relative one.

Obviously the *obichodnij* scale is built on a structural principle different from the diatonic Byzantine system, but it comes very close to the "enharmonic" scale of later Greek theory. This scale is characteristic of the 3rd echos which is placed a fourth higher than the *obichodnij*:

In musical practice, this *enharmonic* gender is used also in other modes, and here the b^b helps to avoid the augmented fourth. Still, the enharmonic gender can not be considered a principal scale in Byzantine chant and, thus, the Byzantine and Russian chant scales are basically different. Let us demonstrate how they can be related to each other.

At first glance a comparison of the Heirmologion chants in the different echoi shows that the Byzantine and the late Russian versions have different pitch positions, but an identification is possible if the latter is transposed one fourth upward. An illustrative example is a heirmos of the fourth ode in the first authentic mode, $P\eta\sigma\epsilon\iota\varsigma$ προφητών καὶ αἰνίγματα.

Example 1

- 1. The late Russian version in its original pitch (Wrocław Slav. 5 after Koschm. p. 25)
- 2. Same, transposed a fourth up.
- 3. The old Rus version from the Novgorod Heirmologion (Moscow, Synod. 150 after Koschm. p. 24)
- 4. The Mediobyzantine version (E.γ.II fol. 11v)
- 5. Some variants recorded in Velimirovič's edition (a = Sinai 1256; b + c = Iviron 470)¹⁷.



¹⁷Velimirovic, Byzantine Elements.. (see note 4), pl. XIX - XX.



The chants certainly display a considerable similarity, and the method of fourth transposition turns out to be the key for the pitch correlation between the different traditions.

The problem of transposition, however, appears to be more complicated, as some of the modes escape this regularity. The 5^{th} mode coincides with the Byzantine 1^{st} plagal as to pitch, the 4^{th} Russian mode is placed an octave below its Byzantine original. As an example, some passages of the heirmoi Θεὸς κύριος καὶ ἐπέφανεν ἡμῖν (4^{th} authentic, ode 9) and Τὰ ἔργα τῆς οἰκονομίας σου (1^{st} plagal, ode 4) are chosen.

Example 2

- 1. St. Petersburg, Public Library, Fund 379 no. 23
- 2. E.γ.II, fol. 138
- 3. Grigorovič Heirmologion, fol. 21v



How can this disintegration in the transposition of the octoechos be explained? We suggest two hypotheses. On the one hand, the late Russian system might reflect an original Byzantine and old Russian practice, namely that high-pitch 4th mode and low-pitch 5th mode were not sung in their theoretical position, but rather in the middle of the ambitus on the same pitch. On the other hand, there is a more reasonable explanation: the ambitus of the Byzantine scale covers two octaves, and this ambitus might have caused difficulties for the singers. Consequently, they may have shortened the scale by changing the position of these two modes in relation to the other echoi.

If our interpretation of the pitch correlation between the modes of the octoechos is accepted, we still have to deal with the consistency of intervals within the scale. The fact is that the semitone E - F in the *obichodnij* scale (as a result of the downwards fourth-transposition in relation to the Byzantine scale) corresponds to the whole tone a - b in the Byzantine scale. This dissimilarity of interval size becomes obvious if we transpose the late Rus scale to the "Byzantine" pitch - a fourth higher:

It looks, then, as if the Byzantine diatonic gender has been transformed by the Russians into the "enharmonic" obichodnij zvukorjad, a system that was built up mechanically according to the rules of Western solmization. But was it really so?

If we turn to Neobyzantine theory¹⁸, three sizes of intervals are mentioned in the diatonic scale: The μείζων τόνος (12/68 of the octave), the ἐλάσσων (9/68) and the ἐλάχιστος (7/68)¹⁹.

Thus, the $\mu\epsilon i\zeta\omega\nu$ (with 12) corresponds to the modern whole tone, the $\dot{\epsilon}\lambda\dot{\alpha}\chi\iota\sigma\tau\sigma$ (7) approximately to a semitone, and the $\dot{\epsilon}\lambda\dot{\alpha}\sigma\omega\nu$ must be explained as a "neutral" tone. This "neutral" b - and its transposed Russian equivalent, the F - seems to have been

¹⁸Chrysanthos of Madytos. Θεωρητικόν μέγα τῆς μουσικῆς. Tergeste 1832 (Third edition, Athens 1977), § 18, cf. §§ 53 - 54.

 $^{^{19}}$ In 1881, a commission changed these to 6/36, 5/36 and 4/36; now-a-days the octave is divided into 72 μορίαι or τμήματα instead of Chrysanthos' 68, yielding the figures 12/72, 10/72 and 8/72 for the three intervals occurring in the diatonic octave.

differently treated in chant practice; depending on the mode and the melodic context, we meet several options. This feature is witnessed by the tradition of the Russian old-believers, who employ a certain range of fluctuation in the interval E - F, from F sharp over F neutral to F natural, all of them corresponding to Greek b. To illustrate this point we have chosen the sticheron *Nasta dnes'* (3rd mode) from the feast of the Protection of the Theotokos (Oct. 1). T. Vladishevskaja has put her tape-recording from the Grebenshikovskaja old-believers community in the town of Riga at our disposal; the tape was transcribed by M. Shkolnik. The neumatic notation for Example 3 is reproduced from the old-believers' MS "Tresvoni"²⁰.

Example 3



²⁰Taken from T. Vladishevskaja: Rannije formi drevnerusskogo pevcheskogo iskusstva (Early forms of Old Russian chant). Dissertation. Institute of the History of Art. Moscow 1976.



The major part of the sticheron is sung in the diatonic gender with F sharp and b (Greek b and e), but twice we observe a mutation into an enharmonic system with F natural and b natural, and, occasionally, the neutral F (marked with a half-sharp) is intoned. Furthermore the step F appears to be inconvenient and is therefore frequently avoided. These places are marked with brackets. Here, E G a is sung instead of the sequence F G a indicated by the notation.

This remarkable coexistence of the diatonic and the enharmonic gender is a typical feature of oral transmission, although it is seen most frequently in the third mode. The notation does not reflect these alterations which can be heard distinctively on the tape. This intonational originality of old Rus singing gradually dissapeared before the 17th cent. About the same time the *obichodnij zvukorjad* took its final form, and by this means the actual state of affairs was reflected in the musical theory as well. Hereby the lively matter of echos was forced into a restricted solmization scheme.

Furthermore, the change of interval structure in the late Russian scale entailed some serious displacements in the pitch organization of the modes, as it is seen in a portion of the heirmos 'Ορθρίζοντες βοώμεν σοι of the 5^{th} mode:

Example 4

- 1. St. Petersburg, Public Library, Fund 379 no. 23
- 2. Grigorovič heirmologion fol. 23
- 3. E.y.II fol. 131



One of the most frequent formulas of this mode is based on the recitation tone D, transposed in the late Russian version up to a. The mode itself, however, keeps the Byzantine pitch. This situation might have been reached because this formula in late

Russian singing already had a stable sequence of intervals semitone - whole tone, instead of the Byzantine whole tone - semitone. Other late modes situated a fourth lower than the corresponding Byzantine echoi have the same formula on E F G (Byzantine a b^b c). Thus, it was not possible for the singers to place this formula on D E F without introducing E flat. On the other hand this was impossible in the framework of obichodnij zvuchorjad. Contradictions of intervals, like these, might be responsible for the transposition of some formulas in the 5th mode.

Evidently, the full identification of Byzantine and Russian scales is very complicated, but for our discussion the following main conclusion must be sufficient: the chants of the two traditions can be examined within one common musical system.

The final tones (finales)

Another important aspect of the correlation between the Byzantine and the Russian modal system in the Heirmologion is connected with the final tones of the octoechos. The strict organization of the finales in the Byzantine octoechos seems to be conflicting with the lack of a corresponding regularity in the late Russian cadences. This contradiction may be interpreted in favour of the theory of originality in late Russian singing - unless some logic of its relation with the Byzantine modal system can be discovered. Until now, however, no attempt in this field has led to convincing results²¹. Nevertheless, our method of scale transposition gives us an opportunity to state that the Russian tradition did not abandon the original Byzantine system of final tones, though by the 17th century it was partially transformed.

The primary system of finales in the old Rus Heirmologion was identical with that of the Byzantine. All eight modes had their final tone, but in the authentic modes there also existed the possibility of concluding on the final of the corresponding plagal. Besides, the second mode has a medial cadence²².

In some Byzantine Heirmologia, especially from the 14th cent. onwards, we find a number of unusual final tones. These sources present a special case and they are worth a discussion of their own. In the cadences of the Russian Heirmologion some notable

²¹Razumovskij, D., see above, note 1.
Brajnikov, M.V. Puti raxvitija i zadatchi rashifrovki znammenogo raspeva 12 - 13 vekov (The ways of development and the tasks of dechiphering the Znamennij chant of the 12th and 13th centuries). Leningrad, Moscow 1949, p. 92.
Lozovaja, I.E. "Angeloglasnoje penije i osmoglasije kak vajnejshaja storona jego muzikal'noj ikonographii" (Angelicvoice singing and octoechos as the most important factor of its musical iconography). Musica Antiqua Europae Orientalis. Acta musicologica. VIII, vol. I, pp. 649-665. Bydgoszcz 1988.

²² In some Byzantine Heirmologia, especially from the 14th century onwards, we find a number of unusual final tones. These sources present a special case and they are worth a discussion of their own.

changes gradually appeared. This process was connected with the general evolution of the znammenij rospev itself.

The development of the melodic ornamentation engendered a special device in the cadences by which the final was placed one step below the original pitch. We call this phenomenon "the falling cadence". This cadence is connected with one of the prevalent ways of ornamentation - a turning and twisting of the melody. Even special neumes were created for this lowering of the cadence. Example 5 shows one of more Byzantine final cadences which end with a tone repetition. This is a feature foreign to late Rus ornamentation which preferred "the falling cadence".





This cadence type is found in various echoi. Another group of cadences with replaced final tones appears, according to our opinion, where the endings were not considered suitable according to intonation and mode. The change of finals is most evident in the 2^{nd} and 6^{th} mode cadences on B (Greek pitch E). In the late Russian Heirmologia we do not find one single example of such a cadence, though it is rather frequent in the Byzantine and the Old Rus chant. In Example 6 the melody makes a sudden turn before the very last tone and ends on D (Greek pitch G).

The cadence on D (Greek pitch G) being actually found in these two echoi, the modal system is not broken, as is clear from Example 7. The same turn (end on D instead of on B) is recurrent in the tainozamknennije ("mysteriously locked") formulas as 1) mereja s podderjkoj, 2) kichigi, 3) chrabriza and 4) pauk.

Also another phenomenon in the late Rus Heirmologion, the absence of cadence on the theoretical finalis C (Greek F) in the 3^{rd} authentic mode, can be explained in several ways. This mode is rather high in both Byzantine and Russian Heirmoi, and the cadence in fact exceeds the modal ambitus upwards. Also acustic reasons may be involved, as the third F a was the greatest interval in the ancient system, called *pythagorean*. This interval consists of a ditone (12 + 12), and thus it could be difficult to intone properly. Yet another hypothesis may account for the replacement of the final F with a, namely an influence from the Psaltikon tradition where the latter cadence is prevailing²³.

²³Hintze, G. Das byzantinische Prokeimenon Repertoire. Hamburg 1973, p. 76.

Example 6 Μή ἐποδύρου μοι, μῆτερ (Echos 6, Ode 9).

- 1. The late Russian version (after Koschm. p. 213)
- 2. The same transposed up a fourth
- 3. E.y.II fol. 173
- 4. Paris BN, Coislin 220, fol. 8v
- 5. The old Russian version from the Novgorod Heirmologion (after Koschm. p. 212)



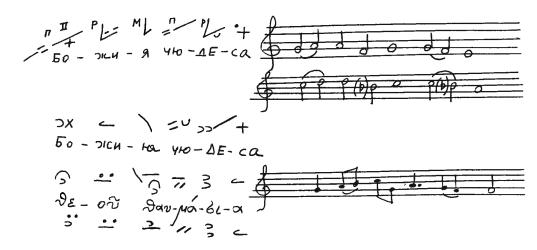
Example 7



We believe that the change in performance of the afore mentioned cadence took place very early. The most convincing evidence in favour of this view is found in some Russian 12^{th} - 13^{th} cent. sources with their constant alteration of its graphic representation, see Example 8.

Example 8

- 1. Late Russian version (after Koschm. p. 155)
- 2. The same, transposed
- 3. The Novgorod heirmologion (after Koschm. p. 154)
- 4. E.γ.II, fol. 327v
- 5. Paris BN, Coislin 220, fol. 8r



This modification of the 3rd mode cadence may have contributed to the shaping of the late Russian formula of this mode called *perevivka*. This formula, however, is most frequently found in the Sticherarion:

Example 9



Finally, to end with the "strange" final tones of the late Russian Heirmologion we shall dwell on the *kylisma* of the 4th mode that results in the final E instead of theoretical D. This cadence appears to be unfamiliar to the Byzantine system.

Example 10 'Ως ἐμψύχῷ (Mode 4, Ode 9).
1. St. Petersburg, Public Library, Fund 379 no. 23
2. E.γ.II, fol. 91v



It is worth noticing that in the fourth mode this cadence is also used in the *podobni* (automela), a very old group of chants which were used as melodic models for many texts.

Our conclusions concerning the similarities and dissimilarities between the Byzantine and the Russian modal systems of the Heirmologion show that the Russian system inherited the general features of the Byzantine one. Even in the late Rus melodies the early modal archetype can still be recognized if the correct coordination code for the comparison is used. At the same time the Byzantine modal system was developed on Russian ground, especially in the period of the so-called second South Slavonic or Byzantine influence when the melodies were embellished in a way that was called Byzantine, but was in fact genuinely Russian.

Taking into account both the stable and "changed" elements of the modes, it is possible to establish a sound basis for comparison between Byzantine, old Russian and late Russian chant. The scale and the final tones examined above are the basic, but not the only, characteristics of echos; the melodic formulas are not less important. Therefore, we hope in a future contribution to return to these questions raised by the Byzantine-Russian Heirmologion.

A Note on the late-Byzantine Ecclesiastical Composer
Angelos Gregorios sive Gregoriou, a Pupil of Manouel
Gazes

Maria Alexandru and Bjarne Schartau

Describing twice within c. 6 years the 16th century Copenhagen "Mathematarion" **Kgl. Bibl.**, **Gks 3537,8°**, I (Bjarne Schartau) have had to book a First Mode (ἦχος πρῶτος) setting of the Saturday night prokeimenon (μικρὰ δοχή) Ὁ κύριος ἑβασίλευσεν by one Angelos Gregorios (or rather Gregoriou?: ᾿Αγγέλου Γρηγορίου, of course, in the MS). ¹) This composer I have, curiously enough, as yet been unable to verify by means of the standard secondary literature accessible to me. In the recently published third volume of professor Gregorios Stathis' monumental catalogue of the MSS of Byzantine Music in Mount Athos however the name of Angelos Gregorios/ou appears twice, and what is more: One of his two compositions booked by Stathis happens to be a Third Mode (ἦχος τρίτος) setting of Ὁ κύριος ἐβασίλευσεν (MS Koutloumousiou 436, $16^{\rm c}$). ²)

Now, a few years ago leafing through our Library of Congress microfilms of MSS from the Sinaite Monastery of St. Catharine, I was able to verify that the kalophonic sticherarion Sinaiticus graecus 1566 is in its entirety an autograph of Angelos Gregorios/ou. Needless to say, I can hardly be the first person in modern times to have noticed this, but it remains a somewhat puzzling fact that scholar, Greek or Western, seems to have bothered about publishing this quite interesting piece of information. Interesting, not least because the MS also provides us with a fairly accurate chronological framework that would of course be further enhanced by some reliable data on watermarks, alas, not at my disposal for the time being. On fol. $36^{\rm r}$ of the Sinai 1566 the copyist introduces himself in the customary inconspicuous manner, so well known from a good many other musical MSS of late- and post-Byzantine

Έτερον είς τὴν αὐτὴν ἐορτὴν [8 September. Nativity of the