



ELEMENTS IN THE DEVELOPMENT OF HOW THE GREAT DOXOLOGIES WERE SUNG FROM THE 18TH TO THE 19TH CENTURY

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1 INTRODUCTION

It is known that in the early nineteenth century in Constantinople, the “Three Teachers”¹ were protagonists of a musical reformation of the so-called “Byzantine Music”. A new notational system – called “The New Method” – was established, through which the intervals of the melodies and the time expressed in beats were well defined. At the same time, chanters of that era observed that the melody of a given old piece known through oral tradition had many more notes than those indicated by the interval signs² of the previous notational system, known as “The Old Method”. Since they believed that the hymns had always the same melody, they were led to the conclusion that the old notational system was diachronically stenographic.

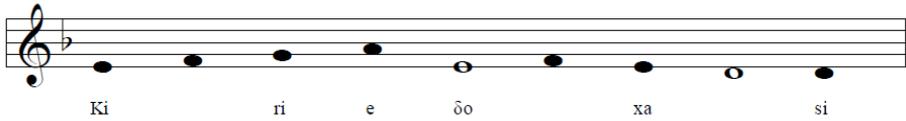
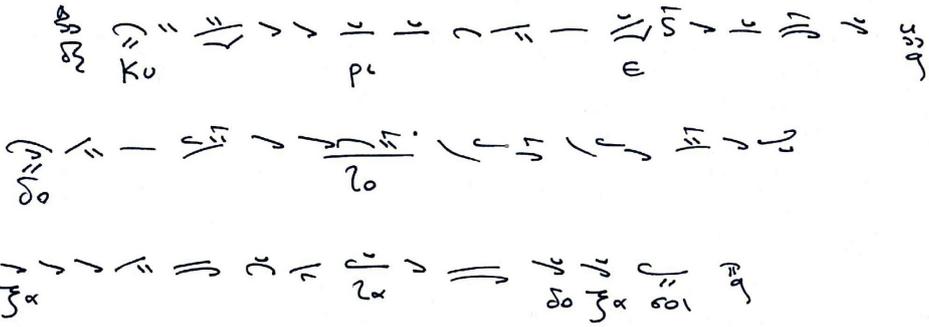
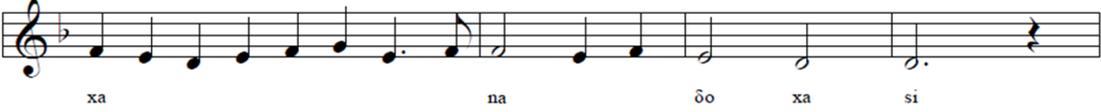
The New Method reformation was closely connected to the process of *exegesis*, which literally means “interpretation”. Through this process, a nineteenth century *exegetes* (i.e. interpreter), using the new notational system, wrote down the way in which the chanters of his era used to perform compositions notated in the old

1 Chrysanthos Bishop of Madyta (appr. 1770-1846), Gregorios the Protosaltis (1778-1821), Chourmouziou Chartofylax (appr. 1765-1840).

2 The signs of the Old Notation are classified in two main categories: the interval signs (*φωνητικά σημάδια*) and the subsidiary signs (*άφωνα* or *μεγάλες υποστάσεις* or *χειρονομίες*). The former indicated the melodic contour in a relative way, while the latter were responsible for extra musical information, the exact meaning of each of which remains obscure.

system. The result of this process – also called *exegesis* – can help us to see clearly the contrast regarding the number of notes indicated by the two systems (see Ex. 1).

EXAMPLE 1: The end-phrase of the sticheron of Triodion “Θαυμαστή τοῦ Σωτήρος” notated in the Old Method and its *exegesis* in the New Method

Old Method NLG 884 f. 272v, 1341	
	
	
New Method Chourmouzos, NLG-MPT 715, ff. 103v-104r (19th c.)	
	
	
	
	

The belief of the invariability of Byzantine melodies is implied by Chrysanthos in his theoretical treatise³, while Constantinos Psachos⁴ and later Gregorios Stathis⁵ developed and transformed this idea into a scientific position. Since the term *exegesis* was widely used by post-Byzantine composers from the seventeenth century onwards, these scholars claimed that this term had diachronically the very same meaning as a process of transcribing a single invariable melody in a more analytical way.

Great Doxologies form a group of compositions that belong to the papadic genre. Their current compositional style was established in the early seventeenth century by Melchizedek, Bishop of Raidestos.⁶ Until the New Method era, many Great Doxologies were composed by various chanters, who wrote them down in the old system. Some of them were “interpreted” in the new system by various *exegetes*.

According to the previous position, the melody indicated by the *exeges* of the old Doxologies should be identical to their original melody, which would remain unchanged. In order to examine this theory, we compared two old Doxologies recorded in Partes notation⁷ in the mid-eighteenth century (coming from Sinai 1477), with their nineteenth century *exeges* in the New Method. Their melody should be identical. Surprisingly, we observed that the two versions of both the Doxologies show marked differences. Furthermore, we observed that even other old Doxologies, when transcribed by different nineteenth century *exegetes*, show notable differences, particularly regarding the time duration of syllables and ornamentation.

These observations led us to the general suspicion that the interpretation of the old notation was evolved through time and acquired more than one possible variations. In our research, we attempt to examine thoroughly these observations in order to interpret the *ambiguity* of the Old Method in the early nineteenth century, focusing exclusively to the development of how the Great Doxologies were sung from the eighteenth to the nineteenth century.

3 “Ecclesiastical musicians [...] composed theses of musical neumes in order to write the synopsis of the piece to be chanted and deliver methodically their work to their students. [...] If one wishes to understand the *melos* written in the fifteen neumes mentioned and the *hypostaseis* enumerated, he may accomplish this by comparison.” Χρυσανθος, *Θεωρητικόν Μέγα της Μουσικής* (Trieste: Michele Weis, 1832), 1st Part, §400: “So, today music is offered to music lovers as it was initiated by Ioannes Damascenos and improved up to our days. It preserves the first and ancient mele but approaches also the more recent mele; it applies among the old neumes those that are efficient, but has also acquired some new neumes, that were necessary. So, what is it, old or new? It is neither old or new. It is one and the same perfected in the course of time.” *Ibid.*, 2nd Part, §81.

4 “[Byzantine Ecclesiastical Music,] the beginning of which dates back to the times of the Apostles, and which reached its highest degree of perfection during Byzantine times, was preserved unchanged until our time, through the occasional analyses and exeges of its stenographic notational system.” Κωνσταντίνος Ψάχος, *Η παρασημαντική της Βυζαντινής μουσικής* (Athens: Σακελαρίου, 1917), 236.

5 “The original - old - notation is a method that combines optical and sound symbols with memorized melodies. You see a graphical-optical presentation and you must “interpret” and sing what the presentation indicates. You need many phonetic signs [of The New Method] in order to write down the melody you sing by using the old notation. The melody is exactly the same; it remains unchanged. What is changed is the garment [i.e. how it is presented].” Γρηγόριος Στάθης, *Ερωταποκρίσεις και Ακριβολογήματα της Ψαλτικής Τέχνης εν έτει σωτηρίω, βιβ’* (Athens: Ίδρυμα Βυζαντινής Μουσικολογίας, 2015), 66-7. See also Γρηγόριος Στάθης, *Τα Πρωτόγραφα της Εξηγήσεως εις την Νέαν Μέθοδον Σημειογραφίας* (Athens: Ίδρυμα Βυζαντινής Μουσικολογίας, 2016), 122.

6 See Γρηγόριος Στάθης, *Μορφές και Μορφές της Ψαλτικής Τέχνης* (Athens: Ίδρυμα Βυζαντινής Μουσικολογίας, 2011), 42. For further information about the Great Doxologies tradition, see Δημήτριος Μπαλαγεώργος, “Η πρωτοφανέρωση του μέλους της Μεγάλης Δοξολογίας στις χειρόγραφες πηγές του ιδ’ αι.”, in *Συμβολή στη μνήμη Γεωργίου Στ. Αμαργιανάκη (1936-2003)*, ed. University of Athens (Athens, 2013), 110-28.

7 *Partes* is an eighteenth-century five-line notation used in Russia for writing down polyphonic partes church music.

2 OUR SAMPLE

Old Great Doxologies transcribed in the New Method by various *exegetes* or recorded in *partes* notation in the eighteenth century, make up the corpus from which we took our sample. In particular, we compare different nineteenth century *exeges* of four old Doxologies, and then we compare the nineteenth century *exeges* of two other Doxologies with their mid-eighteenth century versions (see Table 1).

TABLE 1: Our sample of six old Doxologies and their versions on which we based our analysis

	<i>composer</i>	<i>mode</i>	<i>version of...</i>	<i>MS</i>
19 th c. variations	Germanos bishop of New Patras	1st [plagal]	Ioasaf Dionysiates (?)	Dion. 680, ff. 235v-238v
			Nikolaos Docheiarites	Doch. 360, ff. 423v-428r
			Chourmouzos Chartofylax	NLG-MPT 704, ff. 237r-238r
	Balases the Priest	4th	Ioasaf Dionysiates (?)	Dion. 681, ff. 278r-283r
			Nikolaos Docheiarites	Doch. 360, ff. 418r-423v
			Chourmouzos Chartofylax	NLG-MPT 704, ff. 244r-245v
	varys	Gregorios Protopsalt	BKX 175, ff. 93r-96v	
		Chourmouzos Chartofylax	NLG-MPT 704, ff. 250v-251v	
19 th c. vs 18 th c.	Petros Bereketes	1st [plagal]	Nikolaos Docheiarites	Doch. 360, ff. 405r-411v
			Gregorios Protopsalt	NLG-MPT 744, ff. 136v-139r
			Chourmouzos Chartofylax	NLG-MPT 712, ff. 45v-47r
19 th c. vs 18 th c.	Melchizedek bishop of Raides-tos	1st plagal	Chourmouzos Chartofylax (19 th c.)	NLG-MPT 704, ff. 229r-230r
			Unknown (mid-18 th c.)	Sinai 1477, ff. 84r-88r
19 th c. vs 18 th c.	Panayiotes Chrysaphes	4th plagal	Chourmouzos Chartofylax (19 th c.)	NLG-MPT 704, ff. 231r-232r
			Unknown (mid-18 th c.)	Sinai 1477, ff. 88r-90r

3 THE VORLAGE ISSUE

Embarking on our research, the first question we had to deal with was whether the differences between the various versions of each Doxology are due to the usage of a different *Vorlage*⁸ by the *exegetes*. Hence, we checked at least five manuscripts of each of the six Doxologies.

On the one hand, we observed that all the copies of each Doxology are almost identical regarding the Interval signs, i.e. their melodic skeleton (*metrophonia*). On the other hand, we noticed some differences regarding the use of the subsidiary signs: In the various Mss, a given intervallic figure would be accompanied with either different subsidiary signs or the same subsidiary sign but with different a colour (red instead of black and vice versa) or no subsidiary sign. Nevertheless, our general impression is that the flexibility in the use of the subsidiary signs does not correspond to the differences between the various versions of Doxologies (see Exx. 2 and 3). The entire subject needs further, more systematic research.

EXAMPLE 2: The first part of the 1st verse of the Bereketes' Doxology, notated in the Old Notation (10 MSS) and its exegesis by three various exegetes. (Note that Doch. 341 is written by Docheiarites himself.)

Old Method	
	<p>NLG 893, f. 133v. 894, f. 228r. 921, f. 50v. 925, f. 33r. 926, f. 63r. 971, p. 273. Doch. 341, f. 167r</p>
	<p>NLG 936, f. 109r</p>
	<p>NLG 2216, f. 93v</p>
	<p>NLG 2301, p. 149</p>

8 *Vorlage* is a technical term that refers to the original manuscript on which a scribe based his copy.

	<p>NLG 926, f. 64v</p>
	<p>NLG 936, f. 111v 2216, f. 95v</p>
	<p>NLG 925, f. 34v</p>
	<p>NLG 971, p. 154</p>
<p>New Method</p>	
	<p>Gregorios NLG-MPT 744, f. 138v</p>
	<p>Chourmouziou NLG-MPT 712, f. 45v</p>
	<p>Docheiarites Doch. 360, f. 408v</p>

4 NINETEENTH-CENTURY VARIATIONS

When we compare the *exegeses* of the nineteenth century, we observe three main types of variation: a) addition of extra melismata, b) different starting points of neumatization, and c) differences concerning the distribution of the beats per syllable (*texture*). We shall now analyse each type of variation separately.

4.1. EXTRA MELISMATA

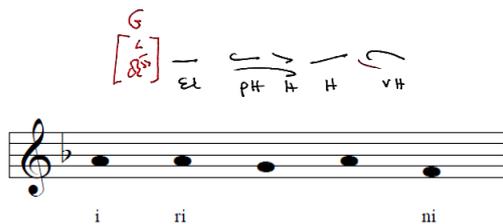
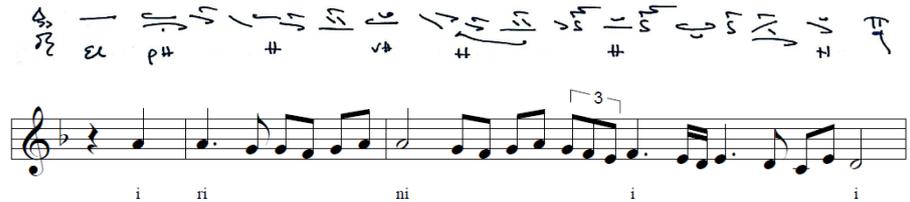
In some cases, we see that *exegetes* from Athos add melismata at the end of some phrases with no interval signs to suggest this.⁹ What is even more striking is that when Dochiareites, who added extra melismata at the end of some phrases, uses the Old method to record the same Doxology, does not indicate any of these extra

⁹ One could argue that some specific cadential subsidiary signs (such as *apoderma* or *kratema*) are responsible for these extra melismata. The point is that the exegetes do not add extra melisma every time they see such a sign, and this is precisely what illustrates the ambiguity the old notation had at that time.

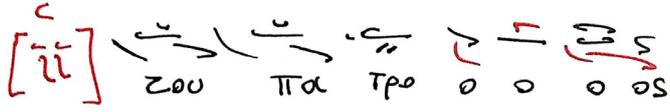
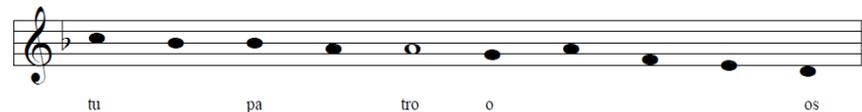
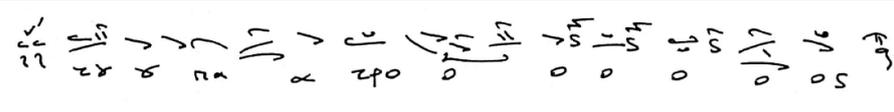
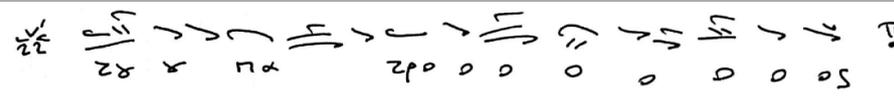
melismata (see Ex. 2 and 4). Therefore, we can see clearly that we are not dealing with *Vorlage*. A further observation is that *exegetes* often use as extra melismata cadential phrases that are indicated through the interval signs in other parts of the composition (see Ex. 4).

EXAMPLE 4: The third part of the 1st verse and the penultimate part of the 5th verse of the Germanos' Doxology notated in the Old Notation and their *exegetes* by three various exegetes. (You can see that the extra melisma added at the 1st verse by both Athonite exegetes, is similar to a cadential phrase found in the middle of the 5th verse of the original composition.)

A.

Old Method	
 <p style="text-align: center;">i ri ni</p>	<p><i>Doch. 341,</i> <i>f. 188v</i></p>
New Method	
 <p style="text-align: center;">i ri ni i i</p>	<p>Ioasaf <i>Dion. 680,</i> <i>f. 236r</i></p>
 <p style="text-align: center;">i ri ni i i</p>	<p>Docheiarites <i>Doch. 360,</i> <i>f. 423v</i></p>
 <p style="text-align: center;">i ri</p>	<p>Chourmouzios <i>NLG-MPT 704,</i> <i>f. 237r</i></p>

B.

Old Method	
 	<p><i>Doch. 341,</i> <i>f. 194r</i></p>
New Method	
 	<p>Ioasaf <i>Dion. 680,</i> <i>f. 236v</i></p>
 	<p>Docheiarites <i>Doch. 360,</i> <i>f. 424v-425r</i></p>
 	<p>Chourmouzos <i>NLG-MPT 704,</i> <i>f. 237v</i></p>

4.2 STARTING NEUMATIZATION AT DIFFERENT POINTS

The melody of a verse can be morphologically divided into a number of individual phrases. On many occasions, the initial part of a melodic phrase is *syllabic* (a beat per syllable) while the rest part is *neumatic* (two-four beats per syllable). We observed that very often the various *exegetes* start their neumatization at different points of a given phrase.

In order to deal with this, we split the various *exeges* of the Doxologies into phrases. We then juxtaposed each phrase of each *exegesis* and compared them by two. Finally, we counted the number of times the starting points of neumatization coincided (see Table 2). The deviation between the various *exeges* suggests that there is no exact indication in the Old Notation for starting neumatization. *Exegetes* choose their starting point intuitively and subjectively.

TABLE 2: The percentage of phrases per exegesis of each old Doxology, of which the starting point of neumatization coincides. Here we have highlighted the comparisons that showed a percentage of coincidence lower than 70%. It is impressive that Gregorios' and Chourmouzios' exegeses of Balases' Doxology in varys mode show a 65.9% deviation.

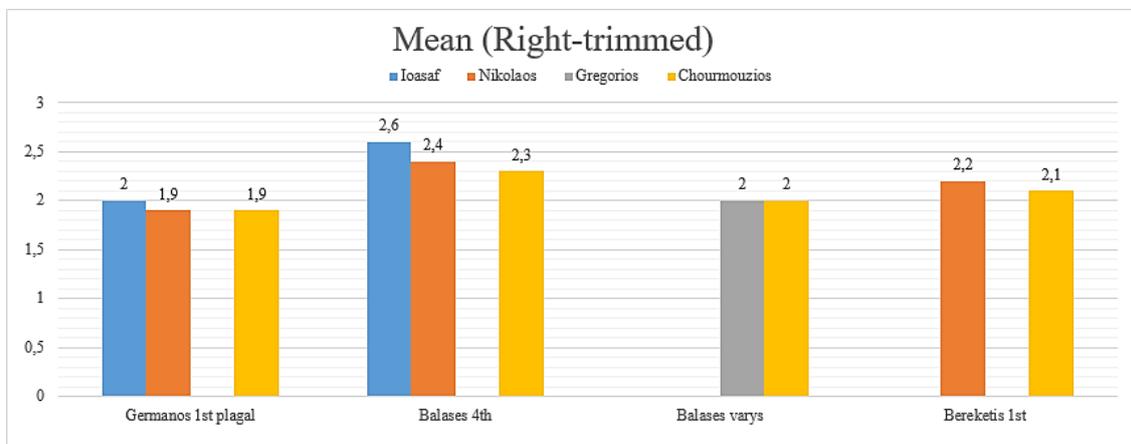
Germanos, 1st [plagal] mode	
Ioasaf - Docheiarites	59/69 (85.5 %)
Ioasaf - Chourmouzios	48/69 (69.6%)
Docheiarites - Chourmouzios	53/69 (76.8%)
Balases, 4th mode	
Ioasaf - Docheiarites	56/70 (80.0 %)
Ioasaf - Chourmouzios	56/70 (80.0 %)
Docheiarites - Chourmouzios	65/70 (92.9%)
Balases, varys mode	
Gregorios - Chourmouzios	30/68 (44.1 %)
Bereketes, 1st [plagal] mode	
Gregorios - Chourmouzios	35/73 (47.9 %)
Gregorios - Docheiarites	45/73 (61.6%)
Docheiarites - Chourmouzios	61/73 (83.6%)

4.3 DIFFERENT TEXTURE

The third type of variation is found in the texture of the Doxologies' *exegeses*; that is the ratio of beats per syllable. For the purposes of our project, we compared the texture of various *exegeses* of the same Doxology in both a general and a more specific way. We excluded from our examination the final syllable of each phrase of all the *exegeses*. This was necessary firstly to be able to examine the *exegeses* without any extra melismata, and secondly because *exegetes* often determine the duration of the final syllable without taking into consideration the rhythmic context of the phrases.

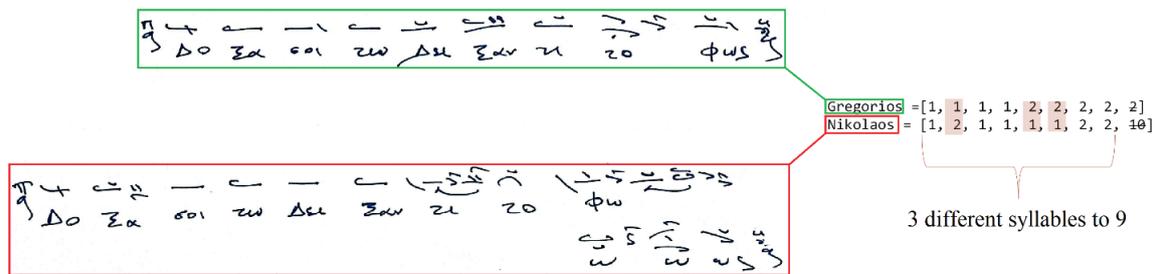
Our general comparison was based on the two well-known statistical methods, ANOVA and T-test, through which we concluded that the differences between the general textures of the various *exegeses* are not statistically significant. As may be seen in Table 3, the average ratio for all the *exegetes* is about two beats per syllable. That means that all the *exegetes* consider old Doxologies having a general *neumatic* character clearly distinct from that of the *syllabic* Doxologies (usually called *syntomes*, i.e. short) composed in their time.

TABLE 3: The average ratio of beats per syllable for each old Doxology according to the various *exegeses*



Furthermore, we estimated the similarity of the texture of the various *exeges* in a more specific way. In particular, we firstly counted the duration (i.e. the number of beats) of each syllable of a given *exegesis*. Then, we juxtaposed our results with the syllable duration of another *exegesis* of the same Doxology. Finally, we counted how many syllables share the same duration (see Ex. 5).

EXAMPLE 5: The process of estimating in a more specific way the similarity of texture between the Gregorios' and Docheiarites' *exegesis* of the 1st phrase of the 1st verse of Bereketes' Doxology



As may be seen in Table 4, the percentage of similarity shown is between 72-90% in all cases. The minimum 10% of differentiation indicates that *exegetes* are to a small extent based on their intuition and subjectivity in order to give specific duration to the old signs or group of signs.

TABLE 4: The percentage of syllables per *exegesis* of each old Doxology (except the final syllables of phrases), of which the number of beats coincides

Germanos, 1st [plagal] mode	
Ioasaf - Docheiarites	367/419 (87.6%)
Ioasaf - Chourmouzios	338/419 (80.7%)
Docheiarites - Chourmouzios	347/419 (82.8%)
Balases, 4 th mode	
Ioasaf - Docheiarites	349/418 (83.5%)
Ioasaf - Chourmouzios	344/418 (82.3%)
Docheiarites - Chourmouzios	378/418 (90.4%)
Balases, varys mode	
Gregorios - Chourmouzios	304/420 (72.4%)
Bereketes, 1 st [plagal] mode	
Gregorios - Chourmouzios	323/415 (77.8%)
Gregorios - Docheiarites	320/415 (77.1%)
Docheiarites - Chourmouzios	364/415 (87.7%)

5 EIGHTEENTH-CENTURY DIFFERENTIATION

Moving now to the eighteenth century, we repeated the whole process but only selected the Doxologies for which we have both transcriptions from the eighteenth century and *exeges* from the nineteenth century. Our source for eighteenth century is Ms Sinai 1477, where we found Melchizedek's and Chrysaphes's Doxologies recorded in *partes* notation. This way of interpreting this system sparked an interesting discussion between some scholars and us after the publication of our announcement, and thus we will dedicate the following subsection to developing our interpretive approach.

5.1 INTERPRETING MS SINAI 1477 VERSIONS

Ms Sinai 1477 is notated in *partes* notation, which is a specific version of Kievan notation, a system developed in late sixteenth century in Ukraine and Belarus. Gregorios Stathis¹⁰, based on the contents of the manuscript, dates it between 1700-60, while Irina Chudinova¹¹ connects it to the spiritual movement of Paisius Velichkovsky, which occurred during the second half of the eighteenth century. Combining the two scholars, we can place the manuscript between 1750-60.

During the analysis of Sinai 1477, we found some melodic movements very different from those indicated by the tradition of the old manuscripts¹², as well as some strange mistakes in the texts¹³. These observations led us to the conclusion that this manuscript is the result of a record by the scribe of a chanter singing (at least some of) the pieces by heart, including the Doxologies.¹⁴ Since Velichkovsky had close relations with the Holy Mountain¹⁵, the source of the scribe could be an Athonite monk.

Doxologies from Sinai 1477 will be compared to their New Method *exeges* made by Chourmouzios. Hence, we had the idea of transcribing the *partes* versions into the New Method in order to make the comparison more tangible. To carry out our transcription, we have taken into account previous transcriptions of Kievan scores into modern staff notation, the way current chanters interpret Kievan notation in actual performance, as well as some theoretical approaches from the previous centuries.

Firstly, we checked transcriptions made by eight different scholars. Five of them transcribe the Kievan *tactus* as a minim (Pichura¹⁶, Simons¹⁷, Sibiryakova¹⁸,

10 See Γρηγόριος Στάθης, "Το μουσικό χειρόγραφο Σινά 1477," in *Τιμή προς τον Διδάσκαλον*, ed. Αχιλλέας Χαλδαϊάκης (Athens: Ανατολής το Περίχημα, 2001), 473-5.

11 See Irina Chudinova, "Greek Chant in the Russian North," in *Crossroads. Greece as an intercultural pole of musical thought and creativity*, ed. Evi Nika-Sampson, Giorgos Sakallieros, Maria Alexandru, Giorgos Kitsios & Emmanouil Giannopoulos (Thessaloniki, 2013), 255.

12 See e.g. the beginning of the phrase "και άγιον πνεύμα" of the 3rd verse of the Chrysaphes's Doxology or the phrase "ο καθήμενος" of the 5th verse of the same Doxology.

13 In the 2nd verse of Melchizedek's Doxology, the scribe omits the phrase "δοξολογούμεν σοι", the melody of which is found investing the next phrase, "ευχαριστούμεν σοι", the melody of which is missing. See also in the 4th verse of Chrysaphes's Doxology, where instead of "την αμαρτίαν" we have "τας αμαρτίας" (see Ex. 7).

14 Therefore, we excluded the possibility that MS Sinai 1477 may be a *transnotation* from the Old Method to *partes* notation, where some parts could be transcribed "analytically" and some others "stenographically".

15 See Chudinova, "Greek Chant", 254.

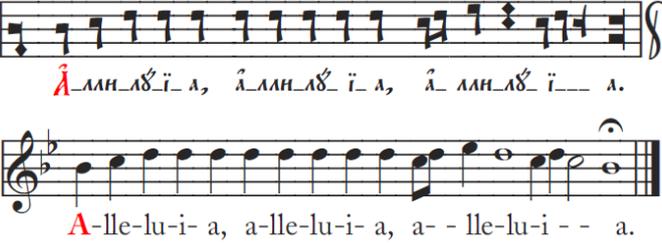
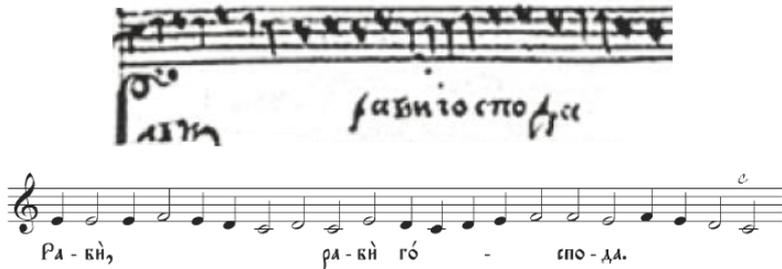
16 Gabriel Pichura, "The Podobny Texts and Chants of the Suprasl Irmologion of 1601," *The Journal of Belarusian Studies* II, no. 2 (1970): 192-221.

17 Nikita Simmons, "A Primer of Kievan Square-note (Quadratic or Synodal) Musical Notation" (2004). Accessed 21 May 2020. http://www.synaxis.info/psalom/research/simmons/Kievan_notation.pdf.

18 Nun Judif (Sibiryakova), "Great Polyeleos of Multan (by the Heirmologion of the Suprasl Monastery, XVI century)," *Вестник ПСТГУ V: Музыкальное искусство христианского мира* II, no. 3 (2008): 163-216.

Ignatenko¹⁹, Kachmar²⁰), while the rest transcribe it as a crotchet (Dragoumis²¹, Rolando²², Makris²³) (see Table 5). Even the same Ms is found transcribed in both ways by different scholars.²⁴

TABLE 5: Transcriptions from Kievan to Western staff notation made by eight scholars from the 20th and 21st century

Scholar	Transcriptional approach
Pichura	<p>The Supraśl <i>Irmologion</i> comprises the following notes:</p> <p>  =  <i>takt</i> or <i>breve</i>  =  <i>četverty</i> or <i>minim</i> </p> <p>  =  <i>polutakt</i> or <i>semibreve</i>  =  <i>polučetverty</i> or <i>crotchet</i> </p> <p>  =  <i>pol-polučetverty</i> or <i>quaver</i> </p>
Simons	 <p> ΑΛΛΗΛΟΥΪ Α, ΑΛΛΗΛΟΥΪ Α, ΑΛΛΗΛΟΥΪ Α. </p> <p> A-lle-lu-i- a, a-lle-lu-i- a, a - lle-lu-i - - a. </p>
Sibiryakova	 <p> ΑΛΛΗΛΟΥΪ Α, ΑΛΛΗΛΟΥΪ Α, ΑΛΛΗΛΟΥΪ Α. </p> <p> A-lle-lu-i- a, a-lle-lu-i- a, a - lle-lu-i - - a. </p> <p>(<i>Suprasl Heirmologion</i>, 1598-1601)</p>

19 Evgeniya Ignatenko, “Griechisch-byzantinische Quellen der Oktoechos 1769 von Kallistrat aus Kiew” in *Theorie und Geschichte der Monodie Bericht der Internationalen Tagung 2014*, ed. Martin Czernin & Maria Pischlöger (Brno, 2016), 245-93.

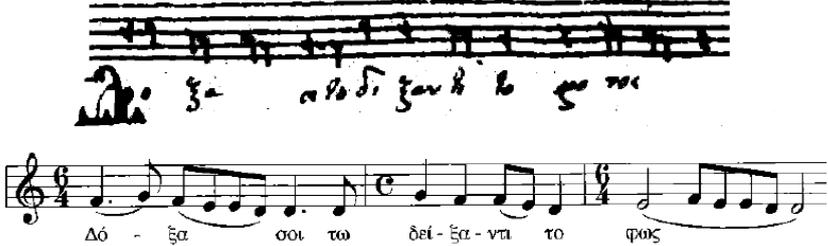
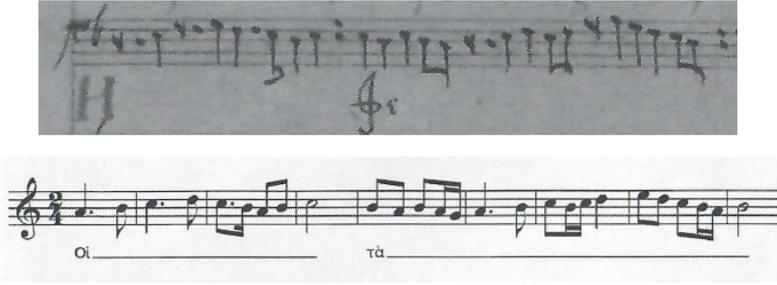
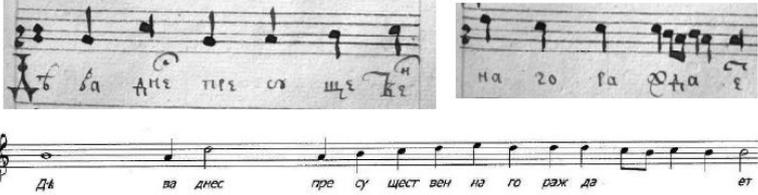
20 Μαρία Качмар, “Стихира на Різдва Христове Днесь Христос во Вифлеємі (музично-аналітичні спостереження),” in *Καλοφονία: Науковий збірник з історії церковної монодії та гимнографії*, ed. Μαρία Качмар (2016), 67-79.

21 Μάρκος Δραγούμης, “Οι Μεταγραφές της Μεγάλης Δοξολογίας του Μελχισεδέκ,” in *Η Παραδοσιακή μας Μουσική II*, ed. Μάρκος Δραγούμης (Athens: Κέντρο Μικρασιατικών Σπουδών Φίλοι Μουσικού Λαογραφικού Αρχείου Μέλπωσ Μερλιέ, 2009), 31-61.

22 Sloan Rolando, “Uncovering the Place and Origin of Carpatho-Rusyn Chant,” (2010). Accessed 21 May 21 2020. <http://www.synaxis.info/psalom/research/rolando/CRChantFullArt.PDF>.

23 Ευστάθιος Μακρής, “Χερουβικόν «πολίτικον».” Μια πρώιμη «μεταγραφή» ελληνικού εκκλησιαστικού μέλους,” in *Psaltike. Neue Studien zur Byzantinischen Musik: Festschrift für Gerda Wolfram*, ed. Nina-Maria Wanek (Wien: Praesens, 2011), 205-18.

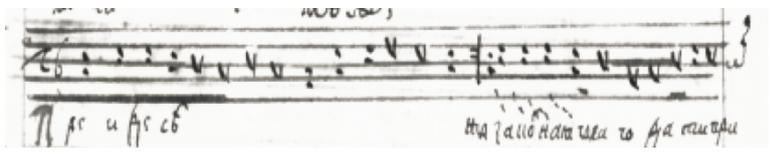
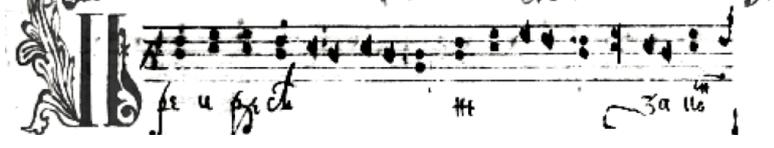
24 Compare the transcriptions of the Suprasl Heirmologion made by Sibiryakova and Kachmar with those of Makris.

<p>Dragoumis (based on Anto- nowycz)</p>	 <p>(Sinai 1477, 1750-60)</p>
<p>Rolando</p>	 <p>(L'vov Irmologion, 1709)</p>
<p>Makris</p>	 <p>(Suprasl Heirmologion, 1598-1601)</p>
<p>Ignatenko</p>	 <p>(Octoechos of Kallistrat, 1769)</p>
<p>Kachmar</p>	 <p>(Suprasl Heirmologion, 1598-1601)</p>

Beyond this, we discovered that some pieces are found recorded in some Heirmologia with durations double those in some other Heirmologia of the same period (see Ex. 6). This leads to the conclusion that Kievan notation itself shows

ambiguity as to its *tactus*. The question is whether this ambiguity is related to a differentiation in performance or whether it consists a pure notational convention.

EXAMPLE 6: The second mode dogmatic “Преиде стънь законная” (gr. Παρήλθεν η σκιά του νόμου) recorded in four different Heirmologia in Kievan notation²⁵

late 16 th c.	Heirmologion of Lviv MB 50 (doubled <i>tactus</i>)	
	Heirmologion of Suprasl (single <i>tactus</i>)	
17 th c.	Kanchuzky's Heirmologion (single <i>tactus</i>)	
	Heirmologion O17 (doubled <i>tactus</i>)	

Nikita Simmons (ibid., 2) informs us that “the values of the Kievan notes are double their equivalents in the modern system, so we should sing all the chants as if they were given a time signature of ‘cut time’ (♩)”. This statement implies that transcriptions having the minim as their *tactus* follow a mere notational convention, a suspicion confirmed by contemporary chanting practices. If one surfs the YouTube channel “CarpathoRuthenica”²⁶, one may see several videos displaying Kievan scores accompanied by recordings of the corresponding pieces performed by various chanters. In their interpretation, the chanters keep a conventional *tactus* that is identical to a typical crotchet of a Western score in 4/4, following various tempi.

Beyond current approaches, we also took into account elements from the theoretical treatise “Music Grammar” written in 1677 by Nikolay Diletsky²⁷, where the sign  is described as “the *tactus*” that needs “two ‘calmly’ hand movements (one up, one down)”, thus corresponding to one minim with a relatively slow tempo. This information is repeated two centuries later by Nikolai Mikhailovich Potulov²⁸, who makes a further distinction between “the *tactus* of the beginners”,

25 From Maria Kachmar, “Особливості музичного тексту догматика другого гласу в нотолінійних Ірмологіонах XVI–XVIII ст. (до питання запису мугації),” *Українська Музика* I, no. 27 (2018), 5-10.

26 See <https://www.youtube.com/user/CarpathoRuthenica> (17 May 2020).

27 See Николая Дилецкаго, *Музикіиска Грамматика*, Посмертний Трудъ С.В. Смоленскаго (1910), 56-7.

28 See Николай Михайлович Потулов, *Руководство Къ Практическому Изученію* (Moscow: Свнодальной Типографіи, 1888).

which has four movements for educational purposes, in contrast to the actual “tactus of the chanters”, which includes only two movements.

Moving on to the transcription of the Doxologies recorded in Sinai 1477, we had two options: either to follow a double tactus and somehow indicate a ‘cut time’ (which is actually a very quick tempo), or to keep a single tactus and keep a normal or relatively slow tempo (according to Diletsky). The first option is very unusual in current New Method tradition, appearing exclusively in kratemata and in some chants for the Liturgy of St Basil, and never in Doxologies. A doubled-tactus score would also tempt a modern chanter to “analyse” the durations, adding ornamentations, and thus totally changing the original melodies. Furthermore, we observed that several excerpts from the Sinai versions are almost identical to Chourmouzos’s *exegesis*, and so a double-duration transcription in New Method would be misleading (see Ex. 7).

EXAMPLE 7: The 4th verse of Chrysaphes’s Doxology from Sinai 1477 version and its two possible New Method transcriptions, and Chourmouzos’s *exegesis*

Sinai 1477, ff. 84v, 85r

The image displays a page of handwritten musical notation from the Sinai 1477 manuscript, folios 84 verso and 85 recto. It features five staves of music. Each staff contains rhythmic notation (vertical lines with flags) and Greek text written below it. The text is:

Staff 1: VEHUSI ε ο θεος ο αριστος

Staff 2: του θεου ο υιος του ζητος

Staff 3: ο ε σεν πασ αμαρτιαν αν αν του νοσ φυα

Staff 4: ε λεη σεν η φυα ο ε σεν πασ αμαρτιαν

Staff 5: αν αν του νοσ φυα

New Method transcription in **double** tactus

Handwritten musical notation for double tactus, consisting of seven lines of rhythmic symbols and Greek letters. The notation includes various note values, stems, and accents, with Greek letters such as alpha (α), beta (β), gamma (γ), delta (δ), epsilon (ε), zeta (ζ), eta (η), theta (θ), iota (ι), kappa (κ), lambda (λ), mu (μ), nu (ν), xi (ξ), omicron (ο), pi (π), rho (ρ), sigma (σ), tau (τ), upsilon (υ), phi (φ), chi (χ), psi (ψ), omega (ω), and the letter sigma with a subscript (σ₂) used throughout. The symbols are arranged in a structured, rhythmic pattern across the lines.

New Method transcription in **single** tactus

Handwritten musical notation for single tactus, consisting of seven lines of rhythmic symbols and Greek letters. The notation is similar to the double tactus section but adapted for a single tactus. It features various note values, stems, and accents, with Greek letters such as alpha (α), beta (β), gamma (γ), delta (δ), epsilon (ε), zeta (ζ), eta (η), theta (θ), iota (ι), kappa (κ), lambda (λ), mu (μ), nu (ν), xi (ξ), omicron (ο), pi (π), rho (ρ), sigma (σ), tau (τ), upsilon (υ), phi (φ), chi (χ), psi (ψ), omega (ω), and the letter sigma with a subscript (σ₂) used throughout. The symbols are arranged in a structured, rhythmic pattern across the lines.

Chourmouziou's version, NLG-MPT 704, f. 231r

Handwritten musical notation in Greek script with rhythmic markings above the text. The text is:

Κι ρι ε ο θε ος ο αμ νο ος τυ θε

υ ο ι ο ος τυ πα τρ ος ο

ε ρ ον τιν α μα αρ τι α αν τυ

κο οζ μυ ε λε ι σο ον ι

μας ο ε ρ ον τας α μα αρ

τι α ασ τυ κο οζ μυ

Printed musical notation in staff notation with lyrics below. The text is:

Ki ri e o the os o am no os tu the

u o i o os tu pa tros o

e ron tin a ma ar ti a an tu

ko oz mu e le i so on i

mas o e ron tas a ma ar

ti a as tu ko oz mu

Our final decision was to transcribe Doxologies in a *single tactus*. In order to confirm our decision, we asked chanter and researcher Irina Starikova to chant and record for us the first verse of Melchizedek’s Doxology as notated in Sinai 1477. The result was exactly what we expected: she sang it as having a normal crotchet tactus, but keeping a slow tempo of about 73 bpm, which if transcribed in double tactus in the New Method would be sung in the unusual, unnatural and non-traditional tempo of 146 bpm²⁹! After all, this is the way Chrysanthos himself transcribes a cut time score into the New Method in his treatise (see Fig. 1). Let us now move on to our analysis.

FIGURE 1: The way in which Chrysanthos (ibid, p. 222) transcribes into the New Method a Western score in cut time



5.2 COMPARING THE SINAI 1477 VERSIONS WITH CHOURMOUZIOS’ EXEGESES

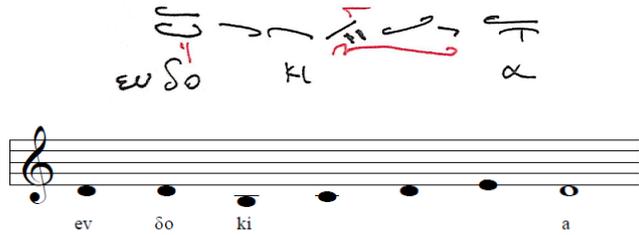
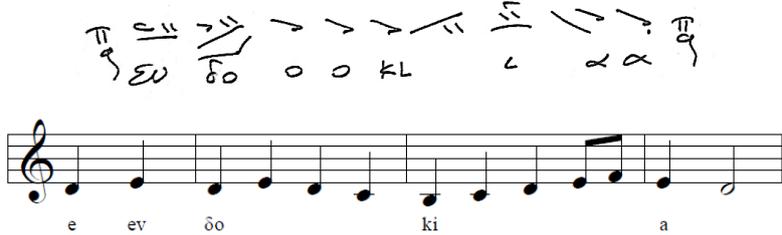
Our initial observations are the same as in the previous comparison: in eighteenth-century versions extra melismata, different neumatizing points and different texture may be observed.

Extra melismata are found exclusively in seven phrase-endings of Melchizedek’s Doxology, some of which are similar to melismata written elsewhere in the original Old Method manuscript (see Ex. 8).

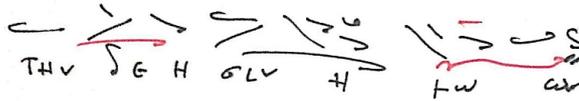
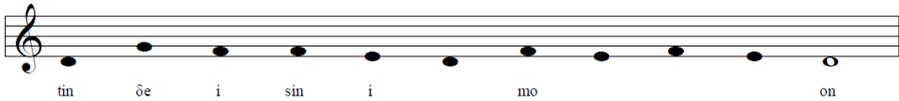
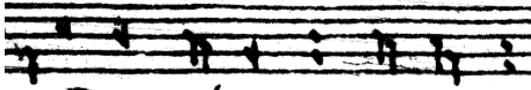
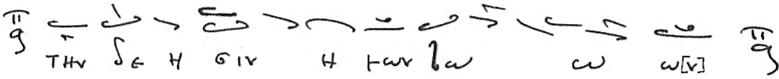
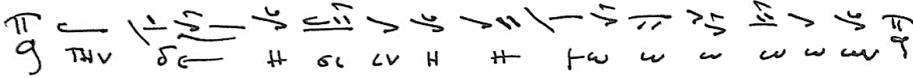
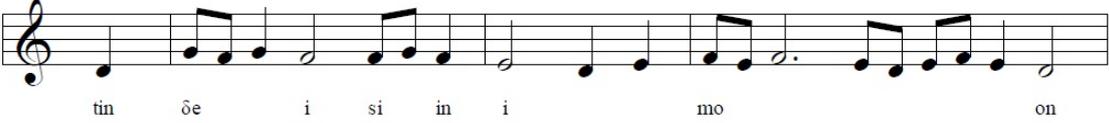
29 The extreme case of the hymn for the Liturgy of St Basil, “Την γαρ σην μήτραν” is chanted by the Protopsaltis Thrasyvoulos Stanitsas (1910-1987) in a tempo of about 138 bpm (see <https://www.youtube.com/watch?v=BXO9yCwNTHA>).

EXAMPLE 8: The last part of the first verse and the end of the first phrase of the fifth verse of Melchizedek's Doxology notated in the Old Notation and its 18th and 19th c. versions. One can see that the extra melisma added at the first verse in the 18th c. version, is similar to a cadential phrase at the beginning of the fifth verse of the original composition.

A.

<p>Old Method <i>Bucharest 52, f. 105r</i></p> 
<p>mid-18th c. version <i>Sinai 1477, f. 88r</i></p> 
<p>early 19th c. version <i>Chourmouzos, NLG-MPT 704, f. 229r</i></p> 

B.

<p>Old Method</p> <p><i>Bucharest 52, f. 105v</i></p>
 
<p>mid-18th c. version</p> <p><i>Sinai 1477, f. 88v</i></p>
  
<p>early 19th c. version</p> <p><i>Chourmouzos, NLG-MPT 704, f. 229r</i></p>
 

The two versions of Melchizedek’s Doxology coincides in 66.2 % regarding their starting point of neumatization, while the two versions of Chrysaphes’s Doxology coincides in 60%. The deviation again suggests the absence of any indication in the old notation for starting neumatization.

The most obvious difference between the two versions is found in their texture. While in Chourmouzos’s *exegeses* all the phrases are mainly neumatic, Sinai 1477 versions have many purely syllabic phrases (see Ex. 9). Specifically, 25.3% of the phrases in Melchizedek’s Doxology and 13.3% in Chrysaphes’s Doxology are syllabic.

The textural differentiation of the two versions is displayed in Tables 5 and 6, the horizontal line of which presents the number of beats, while the vertical one presents the number of syllables.

EXAMPLE 9: The difference in texture between the two versions of the 3rd verse of Melchizedek’s Doxology. The syllabic parts of the Sinai version are in frames.

Old Method
Iviron 1039, f. 149v-150r

Kυ ρι ε Βα ρυ λου ε που ρα νι ε θε

ε ε ε πα τερ παν το κρα α τερ κυ ρι

ε υλ ε μο νο θε υε ς λ η σου

α ρι σε ε ε κρα α τι ου νου ε υ τ

Ki ri e va si lef e pu ra ni e

the e pa ter pan do kra

tor ki ri e i e mo no ye nes

i i su hri ste ke a yi on

pne ev ma

mid-18th c. version
Sinai 1477, f. 88r, 88v

Handwritten musical notation on three staves. The first staff has a red box around the final notes and the Greek text "βασιλευς". The second and third staves are fully enclosed in red boxes. The lyrics are in Greek: "βασιλευς πατρις παντος κτιστου ουρανου και γης", "ουρανοσπορευσην σου χριστε", and "και αριστον".

Handwritten musical notation with Greek lyrics, likely a transcription or analysis of the original manuscript. The lyrics are: "Κυριε εβασιλευς παντων ουρανοσπορευσην σου χριστε και αριστον".

Three staves of modern musical notation with Latin lyrics. The lyrics are: "Ki ri e va si le ef e pu ra ni e the e pa ter pan do kra tor ki ri e i e mo no ye nes i i su hri ste ke a yi on pne ev ma".

early 19th c. version
Chourmouzos, *NLG-MPT 704, f. 229r*

ΚΟΥΡΕ ΒΑ ΟΛ ΔΕΥ Ε ΝΥ ΡΑ Χ ΒΙ Ε Ε Φ Ε
 ΠΑ ΤΗ ΠΑΥ ΤΟ ΚΡΑ Χ ΤΑΥ ΚΟΥ Ο
 ΠΛ Ε ΟΛ Ε Ε ΧΟ ΒΟ Ο ΤΕ ΤΕΣ Ι Ν ΣΟΥ ΟΥ
 ΧΡΕ ΓΕ Ε Ε ΚΑ Χ ΤΟ ΟΥ ΝΥΕ ΟΥ ΤΑ

Ki ri e va si lef e pu ra ni e the
 e pa ter pa an do kra tor
 ki ri e i e mo no ye nes i i su hri
 ste ke a yi o on pne ev ma

TABLE 5: The texture of the two versions of Melchizedek’s Doxology

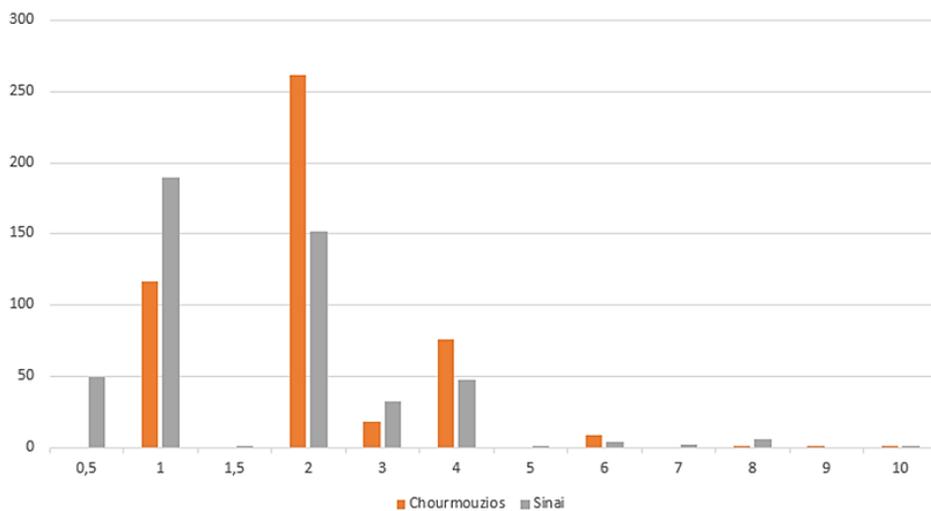
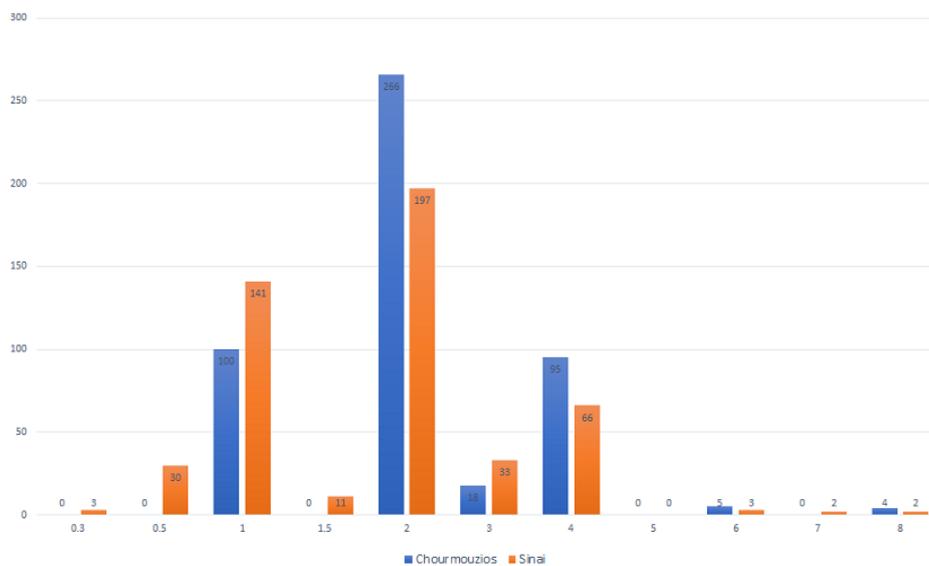


TABLE 6: The texture of the two versions of Chrysaphes's Doxology



Applying the Hypothesis Testing to the two different versions of the Doxologies, we found them considered non-similar. Specifically, the probability of the Sinai versions being similar to Chourmouziou's *exegeses* is less than 0.001! Counting now the similarities between the two versions of the Doxologies, we found deviation of 63.3% for Melchizedek's Doxology and 55.1% for that by Chrysaphes. Combining our observations with the statistical results, we arrived at the general idea of a distinct mixed syllabo-neumatic texture in the eighteenth-century versions of the old Doxologies.

6 CONCLUSIONS

Based on the analysis of our sample, we came to the following conclusions:

1. There is no indication for beginning neumatization in the Old Method.
2. Moving from the eighteenth to the nineteenth century, we observe a development from a mixed syllabo-neumatic to a mainly neumatic style in the way of chanting Doxologies based on the same Old Method score.³⁰ This development most likely led to the creation of the two distinct styles of chanting and, consequently, composing Doxologies (as well as of other genres): the syllabic style called *syntomon* (i.e. short) and the neumatic style called *argon* (i.e. slow).
3. In our analysis of the various versions of the Doxologies, we spot three different features, the flexibility of which determines the whole temperament of each version:
 - a. the interchangeability between syllabic and neumatic approach,
 - b. the addition of extra melismata at the end of some phrases,
 - c. the choice of the point where neumatization starts. The mid-eighteenth century chanter of Sinai 1477 is flexible in all features. Early-nineteenth century Athonite *exegetes* follow this tradition except for the interchangeability, while Gregorios and Chourmouziou, attempting to be more systematic and faithful to the Old Method score, show flexibility exclusively in starting neumatization.

³⁰ We should also take into account the existence of local traditions in different chanting centers. Probably this process had already begun in Constantinople, while on Mount Athos an older practice is preserved.

It can be reasonably assumed that a semantic shifting of the term *exegesis* occurred at the end of the eighteenth or the beginning of nineteenth century. For the hypothetical Athonite chanter of Sinai 1477, practicing *exegesis* seems to mean a kind of musical elaboration of the indicated by the old notation melody, based on subjective aesthetic criteria, perhaps in combination with local traditional techniques, or vice versa. This elaboration includes partial neumatizations and addition of extra melismata at the end of some verses. Nineteenth-century *exegetes* from Athos seem to maintain the old concept, being more intent on a mainly neumatic temperament. In contrast, Gregorios and Chourmouzios try to give as much objectivity and as much of a “scientific approach” as possible to the process of *exegesis*. Hence, they re-conceptualize the term as a process that has much more to do with the transcription from what is considered as a more synoptic notation to a more analytical one, with the very melody remaining unchanged.³¹

In addition, during our research, we developed two ideas that need further examination: Firstly, we suspect that in eighteenth century, some syllabic or mixed syllabo-neumatic pieces were chanted very slowly. This gradually led to re-analysis of their tempo, and thus a very slow tactus became two very fast tacti. This new very fast tempo became normal and gave space to the development of ornamentation. Thus, a new style of interpreting the old pieces emerged. This can be detected in a few chants that are found recorded in New Method in both syllabic and neumatic way by different scribes/editors (see Ex. 10). Note that a similar process happened during this period in Ottoman secular music from Constantinople³² (see Ex.11), with which the Rum chanters had close relationships. Hence, an Ottoman influence can be considered very likely.

31 Schartau & Troelsgård claim that even the New Method teachers used the term *exegesis* to describe “a variety of different procedures of embellished performance or re-composition in the later Byzantine repertoires”, distinguishing it to the process of transcribing late Byzantine chants from the old into the new notation, for which they used the term *metafrasis* (i.e. translation) (see Bjarne Schartau & Christian Troelsgård, “The Translation of Byzantine Chants into the “New Method”: Joasaph Pantokratorinos - Composer and Scribe of Musical Manuscripts,” *Acta Musicologica* 69, No 2 (July-December 1997): 138.

32 See Owen Wright, “Aspects of Historical Change in the Turkish Classical Repertoire,” *Musica Asiatica* 5 (1988), 1-109; Jacob Olley, “Rhythmic Augmentation and the Transformation of the Ottoman Peşrev, 18th – 19th Centuries,” in *Rhythmic Cycles and Structures in the Art Music of the Middle East*, ed. Zeynep Helvacı, Jacob Olley & Ralf Martin Jäger (Würzburg: Orient-Institut Istanbul, 2017), 177-87.

EXAMPLE 10: A. The common melody of the troparion of the East “Χριστός ανέστη” notated both syllabically and neumatically³³

syllabic version

Rom. 13, f. 65, before 1834, BMN

neumatic version

Emmanouel Farlekas, *Πεντηκοστάριον* (Athens: Μέλισσα, 1935), 4

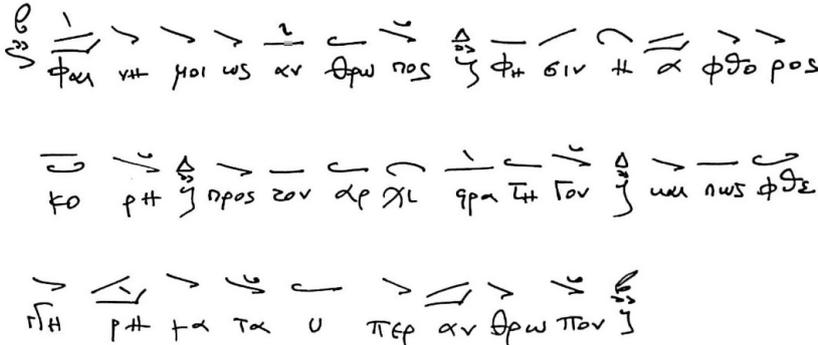
33

Farlekas characterizes this version as “the commonly chanted by the people”.

B. The beginning of the sticheron prosomoion of the Annunciation “Φαίνη μοι ως άνθρωπος” notated in simple syllabic, ornamented syllabic and neumatic way

simple syllabic version

Chourmouzios, *BKΨ*, folder I, 1826?, p. 23



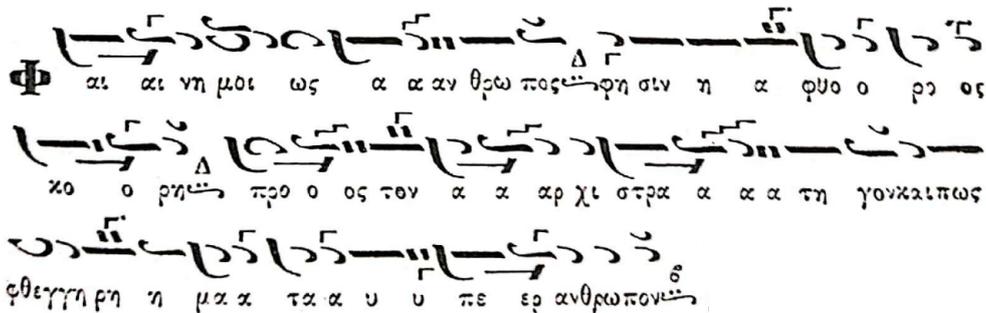
Φαι νη μοι ως ανθρωπος φησιν η α φθο ρος κο ρι
 ρο ρη προ ο ρς τον α α ρχι στρα τι γον κε ποσ φθη νγι ρι μα τα ι πε ρ αν thro pon



Fe ni mi os an thro pos fi sin i a ftho ros ko ri
 pros ton ar chi stra ti γon ke pos fthe ngi ri ma ta i per an thro pon

syllabic version with ornamentation

Stefanos Lampadarios, *Μουσική Κυψέλη Α'* (1883), 325

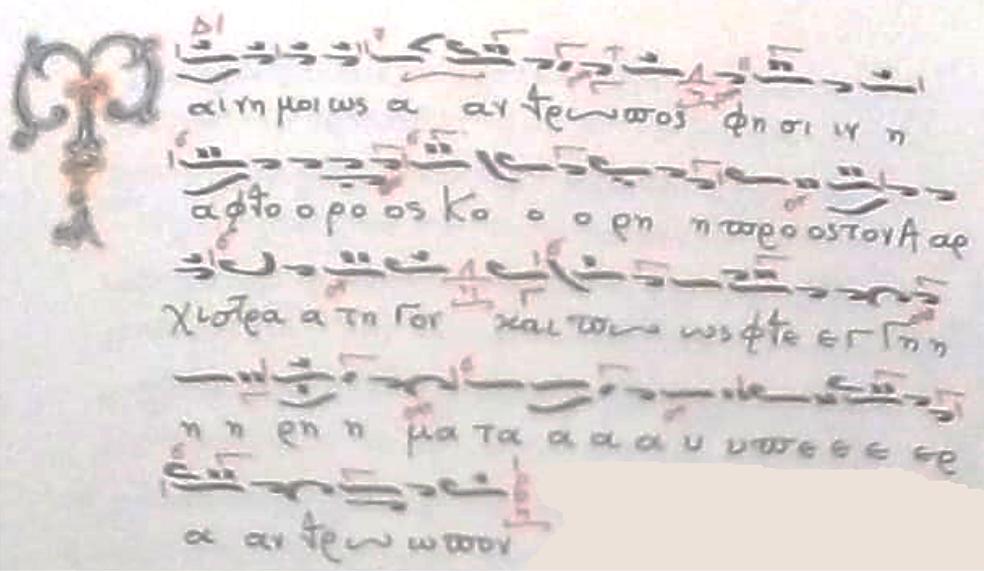


Φ αι αι νη μοι ως α α ανθρωπος φησιν η α φθο ο ρο ρος
 χο ο ρη προ ο ρς τον α α ρχι στρα α α α τη γονκατωσ
 φθειγγη ρη η μα α τα α υ υ πε ερ ανθρωπων



Fe ni mi os an thro pos fi sin i a ftho ros
 ko ri pros ton ar chi stra ti γon ke pos
 fthen gi ri ma ta i pe er an thro pon

neumatic version
 Mattheos Vatopedinos (1774-1849), *Πανηγυρική Α'* (Athos: Vatopedi, 1997), 335



αιτημοιως α ανθρωπος φησι ιη
 αφθοροσ κοσ ο ρη η προστον Αα
 χλοτρα ατη γοι και πως ως φτε εγγη
 η η ρη η ματα α α α υ υ ω ε ε ε ε
 α ανθρωπων



EXAMPLE 11: The beginning of “Bestenigar berefşan” recorded by Dimitrie Cantemir (*Collection* no. 281) in the late 17th c. and by Charles Fonton in 1751. You can see how the simple melody of 16/4 rhythm became ornamented in the doubled 32/4 rhythm.³⁴

Cantemir version



Fonton version



34 From Walter Feldman, *Music of the Ottoman Court* (Berlin: VWB, 1996), 445.

We also observed that Sinai 1477 versions are written in a kind of free sense of time. Someone had partly to change several of the durations of the notes in order to chant the melodies in a strict mensuralist way. There are two possible explanations for this feature: either the scribe had a bad sense of tempo, or the chanter sang in a freer rhythm, i.e. *rubato*. However, it seems reasonable that a mensuralist performance could be easily recorded, even by someone having a bad sense of tempo. The presence of *rubato* interpretation in many musical idioms originating from old Byzantine music (e.g. Italo-Albanian³⁵, the tradition of the Ionian Islands³⁶, Kievan Chant³⁷, Cunțana Chant³⁸, Znamenny Chant³⁹, Rizitiko song⁴⁰ etc.) supports the hypothesis of a freer interpretation of Byzantine pieces before the mid-eighteenth century. Possible influences of Ottoman secular and Sufi music (in which rhythm plays an important role as a mnemotechnical and denatural tool, respectively) may led to a more mensuralist chanting. Thus, traditional (free) ornamentations possibly connected to particular subsidiary signs acquired a specific melodic form within the strict tempo. In addition, quick syllabic beginnings also stretched in order to fit the beat. Inevitably, this led to an increase in the duration of pieces, and paved the way for the development of a distinct neumatic style in which Great Doxologies came to be sung in the early nineteenth century.

35 See Giuseppe Sanfratello, "Oral performances in a (post-)literate society," *M&STE - elektronisk tidskrift för konferensen musik & samhälle*, no 1 (2016): 78.

36 See Σωτήρης Δεσπότης, "Η Παραδοσιακή Κερκυραϊκή Ψαλτική Τέχνη," Γρηγόριος Παλαμάς, vol. 812 (Thessaloniki 2006): 1034.

37 According to Dimitri Razumovskij, Kievan notation never had a mensuralist interpretation (see Димитрий Васильевич Разумовский, *Богослужбное пение Православной Греко-Российской Церкви*. - М. (1886): 30.

38 See Costin Moisil, "'You have to sing them correctly!' Notation and Performance in Cunțana Chant," *Musicology Today* 19 (2014).

39 See Alfred Swan, "The Znamenny Chant of the Russian Church," *The Musical Quarterly* 26, no. 2 (April 1940): 15.

40 See Γεώργιος Χατζηθεοδώρου, "Τα Ριζίτικα Τραγούδια της Κρήτης και η Βυζαντινή Εκκλησιαστική Μουσική," *Μελολογία* I (Thessaloniki, 2008): 346.