# OBSERVATIONS ON THE TECHNIQUE OF TRANSCRIPTION ( $E\Xi H\Gamma H\Sigma I\Sigma$ ) INTO THE NEW METHOD OF ANALYTICAL MUSIC NOTATION OF THE SUNDAY KOINONIKON OF THE 18<sup>TH</sup> CENTURY

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#### Abstract

The phenomenon of exegesis ( $\varepsilon\xi\eta\eta\eta\sigma\iota\varsigma$ ) of Byzantine music and of transcribing the old musical settings into the New Method of analytical music notation since the beginning of the 19<sup>th</sup> century is one of the extremely disputed subjects amongst musicologists. A true "apple of discord", perhaps the practice of translating or interpreting the Byzantine music semiographic system is the best example to describe the totally irreducible mentality which has characterized and is still characterizing part of the researchers in the field with regards to this point. The discussions started from the difficulties in understanding the stenographic and mnemo-technical features of this notation and from the fact that both the oral tradition and the written one accredit the idea that the motivic formulas (*theseis*) in the old Byzantine music notation were semiographic units that focused on the *melos* or the real, truthful melody.

As it is well known, the construction system of the Byzantine *melos* and, implicitly, of the Sunday koinonikon, is one in which the basic unit is the *thesis* (the motivic formula) and the succession of *theseis*. Thus, I chose to study the exegesis technique for the Sunday koinonikon in the 18<sup>th</sup> century on basis of the formulaic character of this music and its relation with the psalm text. This analysis method is known as regressive collations ( $\partial v a \delta \rho \rho \mu \kappa \delta \varsigma \pi a \rho a \lambda \lambda \eta \lambda i \sigma \mu \delta \varsigma$ ), *i.e.* starting from the received tradition and going back, step by step, until reaching the medieval sources.

The current study presents the conclusions regarding the translation (interpretation) technique in the New Semiography of the eleven most important formulas (*theseis*) existent in the Sunday koinonika during the 18<sup>th</sup> century, beginning with the 42 Sunday creations of Daniel Protopsaltes (8 koinonika), Petros Lampadarios Peloponnesios (26 koinonika) and Petros Byzantios (8 koinonika), in the "interpretations" offered by the "fathers" of the New Semiography in the beginning of the 19<sup>th</sup> century: Gregorios Protopsaltes (1778–1821) and Chourmouzios Chartophylax (1770–1840).

*Keywords*: Church music, Byzantine chant, Sunday koinonikon, New semiography, Old system, exegesis (εξήγησις) of Byzantine music, motivic formulas (*theseis*).

#### **1. INTRODUCTION**

The phenomenon of exegesis ( $\dot{\epsilon}\zeta\dot{\eta}\gamma\eta\sigma\iota\zeta$ ) of Byzantine music and of transcribing the old musical settings into the New Method of analytical music notation since the beginning of the 19<sup>th</sup> century is one of the extremely disputed subjects amongst musicologists. A true "apple of discord", perhaps the practice of translating or interpreting the Byzantine music semiographic system is the best example to describe the totally irreducible mentality which has characterized and is still characterizing part of the researchers in the field with regards to this point.<sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> See, especially, the famous comment of H. J. W. TILLYARD ("The Stenographic Theory of Byzantine Music", in: Laudate 2, 4 (1924), 216–225, and Laudate 3, 9 (1925), 28–32; IDEM, "The Stenographic Theory of Byzantine Music", in: Byzantinische Zeitschrift 25 (1925), 333–338 to the book of K. PSACHOS, Η Παρασημαντική τῆς Βυζαντινῆς Μουσικῆς, Athens (1917). See also H. J. W. TILLYARD, "The Modes in Byzantine Music", in: Annual of the British School of Athens 22 (1916–1917 and 1917–1918), 147; IDEM, Handbook of the Middle Byzantine Notation, Monumenta Musicae Byzantiae, Subsidia 1. Copenhagen (1935),

The discussions started from the difficulties in understanding the stenographic and mnemo-technical features of this notation and from the fact that both the oral tradition and the written one accredit the idea that the motivic formulas (*theseis*) in the old Byzantine music notation were semiographic units that focused on the *melos* or the real, truthful melody.

For more than five centuries, the practice of exegesis was inscribed in the Byzantine music codices through two terms:  $\hat{\epsilon}\rho\mu\eta\nu\epsilon\hat{i}\alpha$  (interpretation) or  $\hat{\epsilon}\zeta\dot{\eta}\eta\eta\sigma\imath\zeta$  (exegesis) and  $\hat{\alpha}\nu\dot{\alpha}\lambda\eta\sigma\imath\zeta$  (writing/analytic transcription). It is worth mentioning that while the two terms ( $\hat{\epsilon}\rho\mu\eta\nu\epsilon\hat{i}\alpha$  and  $\hat{\epsilon}\zeta\dot{\eta}\eta\eta\sigma\imath\zeta$ ) have the same meaning, the term  $\hat{\alpha}\nu\dot{\alpha}\lambda\eta\sigma\imath\zeta$  refers especially to the analytical transcriptions of the old music repertoires into the New Method.<sup>2</sup>

#### **2. METHODOLOGY**

The Sunday koinonikon ( $Aivei \tau \epsilon \tau \delta v K \delta \rho i o v \epsilon \kappa \tau \omega v o \delta \rho a v \omega v$ ,  $\delta \lambda \lambda \eta \lambda \delta \delta i a$ , Praise the Lord from the heavens, Psalm 148.1) is one of the most important classes of compositions of the papadic idiom (*melos*). It is also the creation mostly represented in the manuscript tradition at the level of this category of chants.<sup>3</sup>

As it is well known, the construction system of the Byzantine *melos* and, implicitly, of the Sunday koinonikon, is one in which the basic unit is the *thesis* (the motivic formula) and the succession of *theseis*.<sup>4</sup> Thus, I chose to study the exegesis technique for the Sunday koinonikon in the 18<sup>th</sup> century on basis of the formulaic character of this music and its relation with the psalm text.<sup>5</sup> This analysis method is known as

The liturgical-musical problem of the koinonika (not only the Sunday one) during the Byzantine period was debated by H. LECLERQ, "Communion", Dictionnaire d'archéologie chrétienne et de liturgie 3/II. Paris 1914, cols. 2427-2435; K. LEVY, "The Byzantine Communion Cycle and its Slavic Counterpart", in: Actes du XII congrès international des études byzantines, Ochride (1961), col. 2, Belgrade (1964), 571-574; H. BRESLICH-ERICKSON, "The Communion Hymn of the Byzantine Liturgy of the Presanctified Gifts", Studies in Eastern Chant 3 (1973), 51-73; N. K. MORAN, The Ordinary Chants of the Byzantine Mass, vol. I (Investigations), Hamburger Beiträge zur Musikwissenschaft, Begründet von Georg von Dadelsen, Herausgegeben von Constantin Floros, Band 12, Verlagt der Musikalienhandlung, Karl Dieter Wagner, Hamburg (1975), 170-174; D. E. CONOMOS, "Psalmody and Communion Cycle", in: Saint Vladimir's Theological Quarterly, vol. 25 (1981), no. 1, 35-62 and no. 2, 95-123; IDEM, "Communion Chants in Magna Graecia and Byzantium", Journal of the American Musicological Society 33 (1980), 241-263; IDEM, The Late Byzantine and Slavonic Communion Cycle: Liturgy and Music, Dumbarton Oaks Studies 21 (Washington, D.C., 1985); R.F. TAFT, S. J., "Byzantine Communion Rites" I, in: Orientalia Christiana Periodica 65 (1999), 307-345 and II, in: Orientalia Christiana Periodica 67 (2001), 275-352; TH. SCHATTAUER, "The Koinonicon of the Byzantine Liturgy: An Historical Study", in: Orientalia Christiana Periodica 49 (1983), 91–129; S. HARRIS, The Communion Chant of the Thirteenth-Century Byzantine Asmatikon, în: Music Archive Publications, A1, Amsterdam, 1999; R. TAFT, S.J., A History of the Liturgy of St. John Chrysostom, vol. 5, Rome (2000). CHR. TROELSGÅRD, "Koinonikon", in: The New Grove Dictionary of Music and Musicians, edited by Stanley Sadie, (<sup>2</sup>2002), vol. 13, 744–745. The musical analysis of the Sunday koinonikon during the Post-Byzantine period can be studied in: N. GHEORGHIŢĂ, "The Kalophonic Idiom in the Second Half of the XVIII<sup>th</sup> Century. The Koinonika Aiveire tov Kúpiov in the first authentic mode", in: Acta Musicae Byzantinae 5 (2003), 45–50; IDEM, Chinonicul duminical în perioada post-bizantină (1453–1821). Liturgică și muzică, Bucharest (2009); IDEM, "The Structure of Sunday Koinonikon in the Post-Byzantine Era", in: Tradition and Innovation in the Late and Post-byzantine Chant, Acta of the Congress Held at Hernen Castle, the Netherlands, in April 2005 (ed. G. WOLFRAM). Leuven 2008, 331-355.

<sup>4</sup> The definition of the term *thesis* can be studied in Manuel Chrysaphes the Lampadarios: On the Theory of the Art of Chanting and on Certain Erroneous Views That Some Hold About it (Edited from Mount Athos, Iviron Monastery MS 1120 [July, 1458]). Text, Translation and Commentary by D.E. CONOMOS, Corpus Scriptorum de Re Musica 2, Wien (1985), 41.

<sup>5</sup> For an in depth analysis, see GHEORGHIŢĂ, "The kalophonic Idiom..."; IDEM, *Chinonicul duminical*..., 127–229. For the 17<sup>th</sup> century, see IDEM, *Chinonicul duminical*..., 230–253.

especially p. 15. An excellent book regarding the extremely complex problematic of Byzantine Music transcription is by Maria ALEXANDRU,  $E\Xi H\Gamma H\Sigma EI\Sigma$  KAI METAΓPAΦEΣ THΣ BYZANTINHΣ MOYΣIKHΣ. Σύντομη εισαγωγή στον προβληματισμό τους. University Studio Press, Thessaloniki (2010). See also A. LINGAS, "Performance Practice and the Politics of Transcribing Byzantine Chant", in: Le chant byzantin: état des recherches. Actes du colloque tenu du 12 au 15 décembre 1996 à l'Abbaye de Royaumont, Acta Musicae Byzantinae 6 (2003), 56–76.

<sup>&</sup>lt;sup>2</sup> The terminology defining the last stage of the Byzantine music circulates with several denominations: *New Method, New System, Method of the New System, New Way* (of writing down the music), *Analytical Method of Byzantine Music, Chrysantine Theory and Notation.* For the Byzantine music notations before the Chrysantine Reform of 1814, the terminology is the following: *Old Method, Old Way, Old System, Synoptic Manner of Writing of Byzantine Music, Old Method of the Synoptic (i.e.* stenographic) *Notation.* See GR. TH. STATHES, "An Analysis of the Sticheron *Tòv ἥλιον κρύψαντα* by Germanos bishop of New Patras [The Old "Synoptic" and the New "Analytical" Method of Byzantine Notation]", in: *Studies in Eastern Chant* 4 (1979), 180.

regressive collations ( $\dot{\alpha}v\alpha\delta\rho\rho\mu\kappa\delta\varsigma\pi\alpha\rho\alpha\lambda\lambda\eta\lambda\iota\sigma\mu\delta\varsigma$ ), *i.e.* starting from the received tradition and going back, step by step, until reaching the medieval sources.<sup>6</sup>

The current study presents the conclusions regarding the translation (interpretation) technique in the "New Semiography" of the eleven most important formulas (*theseis*) existent in the Sunday koinonika during the 18<sup>th</sup> century, beginning with the 42 Sunday creations of Daniel Protopsaltes (8 koinonika), Petros Lampadarios Peloponnesios (26 koinonika) and Petros Byzantios (8 koinonika), in the "interpretations" offered by the "fathers" of the New Semiography in the beginning of the 19<sup>th</sup> century: Gregorios Protopsaltes (1778–1821) and Chourmouzios Chartophylax (1770–1840).

The manuscripts and the imprinted editions also used for the study were the following: Gr. MS 955 (Παπαδικὴ νέα, τόμος B', 18<sup>th</sup> c. [end] – 19<sup>th</sup> c. [beg.], ff. 97r – 129r, Library of the Romanian Academy in Bucharest); MS 735 (Ανθολογία ἐξηγήσεων, dated 1822, ff. 87r – 104ν, EBE (ΜΠΤ) autograph Gregorios Protopsaltes?); MS 1289 (Ανθολογία, ff. 311r – 351ν, dated 1802, Monastery of Vatopedi – Mount Athos, autograph Mathaios Ephesios Vatopedinos); MS 1458 (Πανδέκτη, ff. 398r – 440ν, 19<sup>th</sup> c. [beg.], Monastery of Vatopedi – Mount Athos, autograph Apostolos Konstas Chios); Gr. MS 4920 (Ανθολογία, New Notation, 19<sup>th</sup> c. [first half], ff. 96r – 146ν, National Library in Bucharest); Ταμεῖον Ανθολογίας (Constantinople, 1854).

#### **3. ANALYSIS**

#### 3.1. CONCLUSIONS 1

The chapter *Conclusions 1* presents the examples which have the value of a norm, *i.e.* of a rule. The standard formulas and not the exceptions were taken into account.

#### FORMULA I: THESIS WITH KYLISMA

The *thesis* including the great cheironomic sign of *kylisma* is one of the most representative formulas of the papadic *melos* during the 18<sup>th</sup> century. Its presence is exclusively related to the melos of the first part (Aiveire  $\tau \delta v K i\rho i ov \dot{e}\kappa \tau av o \dot{v}\rho av av$ ), marking the final cadence segments of Aiveire and the hemistiches (the first hemistich [Aiveire  $\tau \delta v K i\rho i ov$ ], the second hemistich [ $\dot{e}\kappa \tau av o \dot{v}\rho av av$ ]). In this case, its musical profile acquires the characteristic features for each mode and the modal stage the cadence is building up. Most times, it functions on basis of the principle of pentachord transposition.

In the non-cadence context, the *thesis* with *kylisma* loses its melismatic effect. It is worth mentioning that Mode IV Plagal and Mode III (which takes over the scale from the Mode IV Plagal), have the modulator inflection (a short transition) towards the second mode inserted organically. In both cases the chromatic intention aims at the fifth step of the mode, towards the final part of the hemistiches.

From the typology of the *thesis* with *kylisma*, we only retain the cadence context:

- 1. apostrophoi syndesmoi (or any other descendent diastematic sign, sometimes without/with diple, klasma) supported on bareia oxeia dyo-kentemata gorgon petaste apostrophos elaphron with apoderma (Table 1: Formula I 1);
- 2. apostrophos (or ison) with klasma (or without it) supported on bareia aporrhoë petaste apostrophos ison (elaphron) with apoderma (diple) (Table 1: Formula I 2);
- 3. apostrophos with klasma supported on bareia apostrophos petaste apostrophos ison with diple (or apoderma) (Table 1: Formula I 3);
- 4. ison (apostrophos or another diastematic sign) with/without klasma (sometimes with antikenoma) supported on bareia apostrophos ison supported on petaste apostrophos elaphron with apoderma (Table 1: Formula I 4).
- In all the four situations mentioned above, the kylisma is positioned under the neumatic combination.

<sup>&</sup>lt;sup>6</sup> PSACHOS, H παρασημαντική, p. 76; See also M. ALEXANDRU, "The Palaeography of Byzantine Music: a brief introduction with some preliminary remarks on musical palimpsests", in: *El palimsesto grecolatino como fenómeno librario y textual* (Ed. Á. ESCOBAR), Zaragoza (2006), 116.

	FORMULA I THESIS CU KYLISMA
Eh	1.
I	$\pi \begin{pmatrix} x \\ q \end{pmatrix}^{\pi} \overset{\times}{\rightarrow} \overset{\times}$
II	$\tilde{x}_{\underline{x}} \overset{\times}{\overset{\times}{\overset{\times}{_{x}}}} \overset{\times}{\overset{\times}{\overset{\times}{\overset{\times}{_{x}}}} \overset{\times}{\overset{\times}{\overset{\times}{\overset{\times}{\overset{\times}{_{x}}}}} \overset{\times}{\overset{\times}{\overset{\times}{\overset{\times}{\overset{\times}{_{x}}}}} \overset{\times}{\overset{\times}{\overset{\times}{\overset{\times}{\overset{\times}}}} \overset{\times}{\overset{\times}{$
	$\overset{(\overset{(\pi)}{}}{}^{\overset{(\pi)}{}}$
IV	$(\underline{\mathbb{A}})$
I pl.	
II pl.	$\overset{(\underline{\pi})}{\overset{\times}{\overset{\times}{\overset{\times}{\overset{\times}{\overset{\times}{\overset{\times}{\overset{\times}{\overset$
	$\overset{x}{\xrightarrow{\pi}}$
Varys	$\begin{pmatrix} n \\ p \end{pmatrix} \overset{-}{\longrightarrow} \begin{pmatrix} n \end{pmatrix} \overset{-}{\longrightarrow} \begin{pmatrix} n \\ p \end{pmatrix} \overset{-}{\longrightarrow} \begin{pmatrix} n \end{pmatrix} \overset{-}{\longrightarrow} \begin{pmatrix} n \\ p \end{pmatrix} \overset{-}{\longrightarrow} \begin{pmatrix} n $
	$\begin{pmatrix} \pi \\ q \end{pmatrix}  \\ \begin{pmatrix} \sigma \\ q \end{pmatrix} $
	$\frac{1}{2}$
П	ديدنى يەسىرىتى باي بىرى يەددى يەربى بەر بىرى بەر سەر بەر سەر بەر بەر بەر بەر بەر بەر بەر بەر بەر ب
	<b>ニ</b> っつっ <u>、</u>
	ms. gr. 955 BARB, f. 119 (E) ~ こデテアンジューム・マデーン・シッ

# FORMULA II: THESIS WITH PARAKALESMA

The *Parakalesma* appears exclusively in part I of the Sunday koinonikon (mainly in hemistich 1 [ $Aiveite tov Ki\rho_{IOV}$ ]) and only in the modes I, III, I plagal and IV plagal. In most of the situations we encounter it, the formula is placed after a cadence of the following type:



### FORMULA III: THESIS WITH PARAKLETIKE

In the examined chants, the *parakletike* is inserted in different neumatic groupings, equally in papadic and in heirmologic *melos* (part three – *kratema*), that is in the three sections of the piece. Being present in the whole Byzantine modal system, this cheironomic sign determines a melody which varies depending on the step the cadence is performed on and on its importance in the mode hierarchy, but also on the movement (tempo) of each one of the chant parts (papadic or heirmologic). Eventually, the instances in which the *parakletike* is inserted are the following:

- 1. In the combinations with the *thesis* consisting of apostrophos (supported or not on the *mikri bareia*), followed by oligon with diple, the *parakletike* forms the ample melodic construction that starts at the beginning of the koinonikon, a truly jubilatory structure very characteristic of the papadic idiom. In the corpus of the 42 koinonika the "opening" phrase is signalled in the modes II, III and I plagal (Table 3: Formula III 1);
- 2. a) In the ison combination (or any other intervallic sign) the dyo-kentemata, supported on petaste apostrophos, the *parakletike* is inserted under them and it is present in all the modes, except in barys. This neumatic grouping is used as a formula preceding the final cadences of *Alveite* or of the hemistiches. Out of the multitude of examples exclusively belonging to part I, and which are presented in the translation to the New Semiography in a unique version, Mode IV Plagal proposes a sigle situation in which the formula is inserted with the same *melos* and at the beginning of the *kratema* (the second part) (Table 3: Formula III 2a);

b) The combination *parakletike* – oxeia with kentema and tromikon followed by two apostrophoi is inscribed in the pattern of the same formula prefacing the final cadence of the hemistiches (Table 3: Formula III - 2b);

3. In the pelaston combination of two or three apostrophoi and the tromikon placed under the second apostrophos, the great *afonos* sign is positioned over the *thesis*. We can encounter the formula in all the eight modes, both in part II (*kratema*) – where the section's beginning is preferred, mainly in sequential successions, but also inside it or at its end – as well as in the other two parts. It worth mentioning that its melody varies depending on its belonging to the papadic or heirmologic movement (Table 3: Formula III – 3).

	FORMULA III THESIS CU PARAKLITIKI
Eh	
п	$\frac{1}{2} \frac{1}{2} \frac{1}$
ш	۲ می ب ب د د کر ب د س اس ب اس
	$\frac{1}{\sqrt{2}}$
	ms. gr. 17476 BCS (F)
I pl.	$\left(\begin{array}{c} 1\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\$
	<sup>۵</sup> د لیک شرح می شرح به سرد، در از می سرد می در می در می در به و از
	2. a <u> </u>
I	
п	لاً با الله الله الله الله الله الله الله ا
ш	
IV	
	2.b
I	$\binom{\binom{n}{2}}{\binom{n}{2}}$
Ш	$(\underline{\mathfrak{g}}) \overset{\mathcal{H}}{\rightarrow} \underbrace{\mathcal{L}}_{\mathcal{L}} \underbrace{\mathcal{L}} \mathcal{$
	( <sup>ی)</sup> ، است شهر است می می است از در این می
ш	
I pl.	( <sup><sup>1</sup>/<sub>b</sub></sup> ) <u>د</u> , <u><u></u>, <u></u>, <u></u>, <u></u>, <u></u>, <u></u>, <u></u>, <u></u>, <u></u>, </u>
II pl.	$(\overset{\pi}{\cdot})^{(\mathbf{v})} \overset{\mathbf{v}}{\rightarrow} \overset$
	( <sup>2</sup> ) <u>دا می </u>
Varys	( <sup>4</sup> ) <u>* - m ( </u>
IV pl.	(*) # #> (
	$\binom{x}{\chi}$ , $\widetilde{\zeta}$ , $\widetilde$
	3.
Eh	Partea I is a III-a Eh Partea a II-a (Kratema)
	$\begin{pmatrix} \chi \\ \chi \end{pmatrix}  \chi \\ \chi $
	$\begin{pmatrix} \chi \\ q \end{pmatrix} \xrightarrow{r} 5 \overset{r}{5} \overset{r}{6} \overset{r}{q} \end{pmatrix} \xrightarrow{\text{II pL}} \begin{pmatrix} \pi \\ (\pi \\ q \end{pmatrix} \xrightarrow{r} \chi \overset{r}{5} \overset{r}{5}$
	$\begin{array}{c} \text{ms. gr. 955 BARB, f. 118v} \\ (a) ( \overrightarrow{\textbf{x}} ) ) ( \overrightarrow{\textbf{x}} ) ( \overrightarrow{\textbf{x}} ) ( \overrightarrow{\textbf{x}} ) ) ( \overrightarrow{\textbf{x}} ) ( \overrightarrow{\textbf{x}} ) ( \overrightarrow{\textbf{x}} ) ) ( \overrightarrow{\textbf{x}} ) ( \overrightarrow{\textbf{x}} ) ) ( \overrightarrow{\textbf{x}} ) ( \overrightarrow{\textbf{x}} ) ) ) ( \overrightarrow{\textbf{x}} ) ) ( \overrightarrow{\textbf{x}} ) ) ( \overrightarrow{\textbf{x}} ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) $

#### FORMULA IV: THESIS WITH EPEGERMA

The formula is specific both to the text melody and to the *kratema*. The reduced number of instances where the *epegerma* is present as well as its equivocal translation to the New Method offered by the Three Teachers, do not allow us to formulate a definitive conclusion on the stenographic function of this *thesis*. Either the formula is inserted in the final cadence point of hemistich 2, or in part II, its *melos* is still ample, despite the idiom differences.<sup>7</sup> This is probably due to the conclusive intention given by the two haplai present under the oligon or due to the insertion of the *thesis* in the beginning of second part. When it is inserted in the *kratema*, the formula provides the beginning of the section; when it is together with the *thesis* of the *lygisma*, it can build up the whole second section.

The *Thesis* with *epegerma* has the following neumatic profile: *epegerma* positioned under the *thesis* consisting of apostrophos (or any other diatematic sign) supported on bareia, with/without klasma, dyo-kentemata with/without gorgon, elaphron, homalon, oligon with apoderma (diple) (Table 4: Formula IV).



#### FORMULA V

The formula V belongs exclusively to section  $I^8$  and is given in three combinations:

- oligon with/without klasma aporrhoë supported on small bareia ([*mikri bareia*] written in red) oligon apostrophos with/without apoderma (or diple). The *thesis* can be accompanied by heteron [parakalesma] written in red (Table 5: Formula V − 1);
- 2. oligon (or any other diastematic sign) with kratema aporrhoë oligon (oxeia) apostrophos with/without apoderma (or diple). The *thesis* can be accompanied by heteron [parakalesma] written in red (Table 5: Formula V 2);
- 3. the last combination is basically the "formula 1" presented in sequential succession. In the New Notation, the *thesis* forms a melodic unit, independent from the principle model-sequence of the Old Notation, but in which we find elements that are common to both formulas ("1" and "2")(Table 5: Formula V 3).

 $<sup>^{7}</sup>$  The few examples, in which the melodic line is obviously diminished, belong to the third mode (inside the *kratema* – third mode, Daniel Protopsaltes) and first mode (Daniel Protopsaltes).

<sup>&</sup>lt;sup>8</sup> There is also one case in which the formula is inserted at the beginning of the *kratema* (Daniel Protopsaltes, Mode I Plagal).



#### FORMULA VI: THESIS WITH ARGOSYNTHETON/GORGOSYNTHETON

The analysis of the Sunday koinonikon repertoire in the 18<sup>th</sup> century proves that the two formulas are exclusively part of the text melody. The most surprising conclusion is that, despite belonging to the papadic idiom and having all the arguments to develop ample melodic lines, the two formulas are totally ignored by the Three Teachers.

The these is in which the signs argosyntheton/gorgosyntheton are involved, are the following:

- oligon apostrophos oligon apostrophos with *argosyntheton/gorgosyntheton* (Table 6: Formula VI). Exceptionally, this formula can also be encountered in sequential context, and its melody can be recognised in both semiographies;
- 2. descendent fourth oxeia with/without gorgon elaphron with klasma *argosyntheton* (Table 6: Formula VI).



#### FORMULA VII: THESIS WITH XERON - KLASMA

All the examples in which *xeron-klasma* is involved belong to part  $I^9$ , more precisely to the second segment of the first hemistich. Composers from Constantinople prefer to insert this melodic figure either accompanied by the direct complement " $\tau ov$ " and the first syllable from " $K \delta \rho \iota ov$ " ("K v"), or on the vowel "v", which is marked at the end with the intercalated letter " $\chi$ ".

The *thesis* under which *xeron-klasma* is inserted is as follows: petaste with piasma – aporrhoë – oligon – apostrophos with tromikon – two consecutive apostrophoi, usually the last syndesmoi (or apostrophos with/without diple) (Table 7: Formula VII).



<sup>&</sup>lt;sup>9</sup> We mention that the only example in which the *xeron-klasma* is inserted in the second part, too (*kratema*), is offered to us by Daniel Protopsaltes (barys). The sequential context, the idiom and probably the red colour the *xeron-klasma* is written in, determines the loss of the stenographic dimension of the neuma.

### FORMULA VIII

As it is characteristic of sections I and III, this formula is the articulating element, connecting the great melodic figures of the Sunday koinonikon. Preceded by oxeia (oligon) with tromikon (strepton) with/without gorgon, this *thesis* is mostly followed by oxeia (oligon) with klasma supported on bareia – piasma – apostrophos.

The formula can be found in all eight modes in the following typology that offers two possibilities:

- 1. ison with klasma apostrophos heteron (Table 8: Formula VIII 1);
- 2. ison with klasma aporrhoë heteron (Table VIII: Formula 8 2).

FORMULA VIII		
Eh	1.	
I	$\overset{\gamma}{\mathfrak{A}} \left( \overset{\pi}{\mathfrak{q}}, \overset{r}{\mathfrak{n}} \right)  \overset{\tau}{\mathfrak{s}} \overset{\tau}{\mathfrak{s}} \overset{\tau}{\mathfrak{s}} \left( \overset{\gamma}{\mathfrak{a}}, \overset{\mathfrak{s}}{\mathfrak{k}} \right)$	
	$\overset{\gamma}{\mathfrak{A}}(\overset{\pi}{\mathfrak{q}},\overset{\tau}{\mathfrak{n}})$	
	$\lambda(\frac{\pi}{q}, \frac{\pi}{n})$	
п		
ш	(Å) <u> </u>	
	$\begin{pmatrix} \lambda \\ \lambda \end{pmatrix}$	
	ان <u>د د ان </u>	
IV	$\hat{\hat{a}} \begin{pmatrix} \gamma' \\ n \end{pmatrix} \stackrel{\checkmark}{\longrightarrow} \stackrel{\checkmark}{\longrightarrow} \stackrel{\checkmark}{\longrightarrow} \stackrel{\checkmark}{\longrightarrow} \stackrel{\checkmark}{\longrightarrow} \stackrel{\gamma'}{\longrightarrow} \hat{\hat{a}}$	
I pl.	$\begin{pmatrix} \pi \\ \P \end{pmatrix} \xrightarrow{\mu} \overset{\nu}{\sim} \overset{\nu}{\sim} \overset{\nu}{\sim} \overset{\nu}{\sim} \overset{\tau}{\sim} \overset{\tau}{$	
	$\binom{\pi}{q}$	
	$\begin{pmatrix} \chi \\ q \end{pmatrix} \begin{pmatrix} \kappa \\ \lambda \end{pmatrix} \xrightarrow{r} \overset{r}{\sim} \overset{r}{\sim} \overset{r}{\sim} \overset{r}{\sim} \overset{r}{\sim} \overset{r}{\sim} \begin{pmatrix} \Lambda \\ \Lambda \end{pmatrix} \begin{pmatrix} \pi \\ q \end{pmatrix}$	
	$\begin{pmatrix} z \\ \lambda \end{pmatrix}$ $\overleftarrow{\mu}$ $\overleftarrow{c}$ $\overleftarrow{c}$ $\overleftarrow{c}$ $\overleftarrow{c}$ $\begin{pmatrix} x \\ q \end{pmatrix}$	
II pl.		
	( <sup>z</sup> )	
	( <sup>z</sup> ) <u> </u>	
	$(\overset{\pi}{\neg})(\overset{\wedge}{\neg})(\overset{\wedge}{\sigma})\overset{-}{\sim}\overset{-}{\sim}\overset{-}{\sim}\overset{-}{\sim}\overset{-}{\sim}\overset{\circ}{\sim}(\overset{\vee}{\sigma})(\overset{\wedge}{\neg})(\overset{\wedge}{\sigma})$	
Varys	$\binom{\pi}{9}\binom{\pi}{\lambda}\binom{z}{\lambda}\binom{z}{\lambda}\binom{y}{\lambda}\binom{y}{n}$	
	$\begin{pmatrix} \pi \\ \pi \end{pmatrix} \xrightarrow{\pi} \overset{\pi}{\longrightarrow} \overset{\pi}{\longrightarrow} \overset{\pi}{\longrightarrow} \overset{\pi}{\longrightarrow} \overset{\pi}{\longleftarrow} \begin{pmatrix} \pi \\ \pi \end{pmatrix}$	
IV pl.	$\begin{pmatrix} \overset{\vee}{\Lambda} \end{pmatrix} \begin{pmatrix} \overset{z}{\sim} \end{pmatrix} \begin{pmatrix} \overset{\pi}{\gamma} \end{pmatrix} \begin{pmatrix} \overset{\pi}{\gamma} \end{pmatrix} \begin{pmatrix} \overset{z}{\sim} \end{pmatrix} \begin{pmatrix} \overset{z}{\sim} \end{pmatrix} \begin{pmatrix} \overset{z}{\sim} \end{pmatrix} \begin{pmatrix} \overset{\pi}{\gamma} \end{pmatrix} \begin{pmatrix} \overset{\vee}{\Lambda} \end{pmatrix} \end{pmatrix} \begin{pmatrix} \overset{\vee}{\Lambda} \end{pmatrix} \end{pmatrix} \begin{pmatrix} \overset{\vee}{\Lambda} \end{pmatrix} \end{pmatrix} \begin{pmatrix} \overset{\vee}{\Lambda} \end{pmatrix} \begin{pmatrix} \overset{\vee}{\Lambda} \end{pmatrix} \end{pmatrix} \begin{pmatrix} \overset{\vee}{\Lambda} \end{pmatrix} \end{pmatrix} \end{pmatrix} \end{pmatrix} \begin{pmatrix} \overset{\vee}{\Lambda} \end{pmatrix} \end{pmatrix} \begin{pmatrix} \overset{\vee}{\Lambda} \end{pmatrix} \end{pmatrix} \end{pmatrix} \end{pmatrix} \end{pmatrix} \end{pmatrix} \begin{pmatrix} \overset{\vee}{\Lambda} \end{pmatrix} \end{pmatrix}$	



#### FORMULA IX: THESIS WITH PIASMA

The cheironomic sign of the *piasma* is present in all eight modes according to the following typology:

- 1. oligon (oxeia/ison or any other interval sign) with klasma apostrophos heteron [red] *piasma* (Table 9: Formula IX 1);
- 2. oligon (oxeia/ison or any other interval sign) with klasma two apostrophoi heteron [red] *piasma* (Table 9: Formula IX 2);
- 3. apostrophos with klasma apostrophos elaphron and *piasma* placed under the *thesis* (Table 9: Formula IX 3).

The first example precedes the cadence formula at the endings of the hemistiches; in combination with these, it builds up the most ample and complex melodic structure of the entire piece.

The second formula appears in the non-cadence context and has the role of connecting the two structures, like a "ligament".

If the two *theseis* are especially characteristic of the text melody, the third formula is exclusively encountered in *kratema*, without stenographic value.

	FORMULA IX THESIS CU PLASMA
Eh	
	$1. \qquad \qquad$
I	"
	[ديرجد]
п	(چ) بې چېنې د کو د جه مسان د ماد د بر (چ)
	$ \overset{()}{=} \overset{}{=} }{=} \overset{}{=} \overset{}{=} \overset{}{=} \overset{}{=} \overset{}{=} \overset{}{=} }{=} \overset{}{=} }{=} }{=} }{=} }{=} \overset{}{=} $
	-(-)
IV	( <sup>۲</sup> ) 
I pl.	(*) داری به می شد سالا سی او سی به می او مراسب می
	۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲
II pl.	$[\underline{\cdot}]_{\underline{\tau}} = \underline{\cdot} $
Eh	2.
I	
п	( <i>( الله ) ع</i> م م <i>ا</i> م ا م ا م ا م ا م ا م ا م ا م ا م ا م



### FORMULA X: THESIS WITH SYNAGMA

The fundamental characteristic of this formula is the fact that it belongs to part I, and more rarely, to part III of the Sunday koinonikon. It can be found mainly in the middle of the piece, either as cadence *thesis* of hemistich 1 (see third mode), or as incipit of hemistich 2 (see Mode I Plagal), or inserted towards the end of hemistich 1 (modes II, IV, IV plagal).

The *thesis* with *synagma* consists of oligon (or any other interval sign) – apostrophos with/without klasma – aporrhoë – apostrophos – oligon with apoderma/diple and *synagma* placed under the mentioned neumatic combination. The instances encountered are presented in Table 10: Formula X.



# FORMULA XI: THESIS WITH PSEPHISTON - PARAKALESMA

The last melodic figure studied in the Sunday koinonikon repertoire in the  $18^{th}$  century stays devoted to part I, being encountered only in modes III, I plagal, barys and IV plagal. The most important conclusion after studying the few examples in which *psephiston – parakalesma* is involved, especially in barys and IV plagal, shows that it is not a cheironomic sign which is determining in developing an ample *melos*, but – in our case – rather the cadence context. This last formula can be seen in Table 11: Formula XI.



#### 3.2. CONCLUSIONS 2

Following the investigation of the construction mechanism of the Sunday koinonika repertoire in the 18<sup>th</sup> century, the conclusions regarding the constitutive elements of the monodic language are absolutely remarkable. The formula or the combination between the *thesis* and the cheironomic sign that dominates the *thesis* becomes the fundamental unit of constructing the Byzantine *melos*, and is able to concentrate whole phrases as well as to change the physiognomy depending on four parameters which are as follows:

# 1. The step of the infraoctaviant (diphony, triphony, tetraphony, pentaphony) or octaviant mode structure:

This instance proves that the *thesis* is free to move, in most cases, inside a tetrachord or pentachord of the octoechal system. The transposition of the melodic fragment or formula is made either through *lex trochos* or by what the Byzantine call  $\mu\epsilon\tau\dot{\alpha}\theta\epsilon\sigma\iota\varsigma$  or mutation/modulation. This is the reason why certain *theseis* are common to more than one mode. Also some of these *theseis* are characteristic to certain modes and others to other modes. Some of them have cadence character (see for example *thesis* with *kylisma*), others are characteristic for beginnings (*thesis* with *parakletike*), whereas others have the function of a ligament. Nevertheless, all of them depend on the step the cadence is reached on and on its function in the modal hierarchy of that particular mode. The above statement is strengthened by the fact that each stage of the tetrachord structure can potentially be the *finalis* for one of the eight basic modes.<sup>10</sup>

#### 2. Belonging to one of the three genera: diatonic, chromatic or enharmonic:

This situation can be easily followed in the well-known cadence formula of *kylisma*, in which its melody is modified depending on the cheironomic sign in the diatonic or chromatic genre. The conclusions we get from the comparative study are also consolidated by the testimony of Chrysantos of Madytos: "Όταν τινὰς θέλη νὰ καταλάβη τὰ μέλη, τὰ όποῖα, ἐγράφοντο διὰ τῶν εἰρημένων δεκαπέντε χαρακτήρων, καὶ διὰ τῶν κατηριθμημένων ὑποστάσεων, δύναται νὰ ἐπιτύχη τοῦτο διὰ τῶν αραλληλισμοῦ. Ἐἀν φέρ' εἰπεῖν θέλει νὰ γνωρίση, ποῖον μέλος ἔγραφε τὸ Κρατημοϋπόξόδουν, ἀς πάρη τὸ Κοινωνικὸν τοῦ Δανιὴλ, τὸ εἰς ἦχον πλάγιος τοῦ πρώτου, γεγραμμένον μὲ τὴν παλαιὰν μέθοδον, καὶ γεγραμμένον μὲ τὴν νέαν, καὶ διὰ τοῦ παραλληλισμοῦ εὐκόλως τὸ εὐρίσκει".<sup>11</sup> Even if his example refers to the cheironomic sign which is characteristic of the Old Sticherarion, the paradigm is extremely relevant for the understanding of the stenographic mechanism of the Byzantine music semiography: "Πάλιν ἐὰν θέλη νὰ γνωρίση, πῶς ἐἶναι γεγραμμέναι κατ' αὐτὸν, καὶ πῶς εἶναι καθ' ἡμᾶς. Χρωματικῶς δὲ, ἰδη εἰς τὸ 'Παρῆλθεν ἡ σκιὰ', τὴν λέξιν 'ἕμεινας'. Τὸ ἰδιον δύναται νὰ κάμη καὶ διὰ τὸ ψηφιστὸν παρακάλεσμα, καὶ διὰ τὰ λοιπά."<sup>12</sup>

# **3.** The idiom (or the *melodic type* – $\gamma \epsilon v o \varsigma \mu \epsilon \lambda o \pi o i a \varsigma$ ) in which the *thesis* appears: heirmologic, ticheraric or papadic:

As can be noticed in our study, there are certain *theseis* for which the "interpretation" disappears when the formula is taken over from papadic to heirmologic repertory (e.g. the formula *parakletike*). As this phenomenon is constant, it indicates that each idiom has a set of characteristic formulas, which can be found only rarely in the other "melodic types". This "vocabulary" can metamorphose not only from one melodic type to another (heirmologic – sticheraric – papadic), but also from a stylistic period to another, inside the same type (see the huge difference between "The Old Sticherarion" and "The New Sticherarion" [in the 18<sup>th</sup> century]).

<sup>&</sup>lt;sup>10</sup> CHR. of MADYTOS, Θεωρητικόν Μέγα τῆς Μουσικῆς, Triest (1832), §408: "Διότι, οἱ εἰρημένοι χαρακτῆρες, καὶ αἱ ὑποστάσεις, ὅταν ἀλλάζωσι τόνους, ἤλλαζον καὶ τὴν δύναμιν' οἶον, τὸ Παρακάλεσμα ἄλλο μὲν μέλος ἔγραφεν ἐν τῷ τόνῳ τοῦ πα' ἄλλο δὲ ἐν τῷ τόνῳ τοῦ βου' καὶ τὰ λοιπά." For more examples, see K. PHILOXENOS, Λεζικὸν τῆς ἑλληνικῆς ἐκκλησιαστικῆς μουσικῆς Α-Μ, Constantinople (1868), p. 44; and S. KARAS, Η Βυζαντινή Μουσική Σημειογραφία, Athens (1933).

<sup>&</sup>lt;sup>11</sup> ΜΑΔΥΤΟS, Θεωρητικόν Μέγα, §408.

<sup>&</sup>lt;sup>12</sup> MADYTOS, Θεωρητικόν Μέγα, §408.

## 4. The colour of the cheironomic sign can be red or black:

One of the most important composers and theorists at the beginning of the 19<sup>th</sup> century, Apostolos Konstas Chios, states in his famous treaty that the great cheironomic signs "rule" and dominate the interval signs.<sup>13</sup> They influence if some *theseis* are simple or complex, longer or shorter from the *melos* point of view. Starting from the cheironomic sign of lygisma, Konstas Chios mentions that this sign has two interpretations: *argon* and *gorgon/syntomon*, depending on the colour red or black of the cheironomic sign.<sup>14</sup>

In the papadic repertoire, the disappearance of an aphonos sign is indissolubly related to the colour, the tempo (papadic or heirmologic) but also to the presence of the formula in the cadence points.

<sup>&</sup>lt;sup>13</sup> About this musician and his treaty see TH. APOSTOLOPOULOS, Ό Απόστολος Κώνστας ὁ Χίος καὶ ἡ Συμβολή του στὴν Θεωρία τῆς Μουσικῆς Τέχνης. Μουσικολογική θεώρηση ἀπό ἔποψη ἱστορική, κωδικογραφική, μελοποιητοκή καὶ θεωρητική, Athens (2002).

<sup>&</sup>lt;sup>14</sup> MS 389 Docheiariou, dated 1807, f. 39v: "Λύγισμα ποὺ δουλεύονται μὲ δυό τρόπους, ἀργοῦ τε καί γοργοῦ". See STATHES, Η ἐξήγησις τῆς παλαιᾶς βυζαντινῆς σημειογραφίας, Ἱδρυμα Βυζαντινῆς Μουσικολογίας, Μελέται 2, Athens (<sup>4</sup>1998), p. 97.