

THE SETTINGS OF THE EVENING AND MORNING PSALMS
ACCORDING TO THE MANUSCRIPT SINAI 1255.

Annette Jung

In Byzantine church music the way of reciting verses or half-verses from the Psalter seems to follow a particular pattern, a melodic structure made up of three elements: the recitation proper falling on a monotone, maybe with some elaboration, an introductory formula leading up to the recitation, and a characteristic cadence which ends the recitation and is clearly divided from the rest. Thus we may distinguish between the beginning, middle, and ending of the structure, the ἀρχή, the μέσον, and the τέλος so to speak.

The Byzantine psalm-tone is as a rule designed for the recitation of the half-verse so that the *paralellismus membrorum* of Hebrew hymn writing is reflected in the musical setting. As the connection between word and music is very close, the melodic formula has to adapt itself to the specific requirements of the text, an adaptation brought about mainly by two factors: accent and syllable-count.

Accent influences the opening phrase and the reciting tone so that the opening phrase is expanded or contracted and the formulas of the reciting tone are elaborated to reflect the distribution of the textual accents. Syllable count, on the other hand, is independent of accent and belongs entirely to the cadence. This always comprises the last four syllables of the verse or half-verse, musically stressed irrespective of text-accent. However, without invalidating this rule the music of the cadence formula may consist of tone groups as well as of single tones. The psalm-tone stresses the cadence formula more than the recitation proper and often the cadence may be separated from the recitation formulas by a punctuation mark.

In his 'Essays on Music in the Byzantine World' Strunk gives an example of the simple psalmody of the Protos adapted to the first of the concluding verses of the Ordinary psalms of Vespers, Psalm 141:8, an example taken from the manuscript Sinai 1255, f. 164^v, the manuscript we are going to look at.



In this example the characteristics of the Byzantine psalmody are obvious, 'the reciting tone is moderately inflected to throw the principal accents into relief..., the final cadence is a 'cadenza corsiva'..., the formula is mechanically adapted to the last four syllables of the text, without regard to tonic accent'.¹

The Psalter is treated differently in the various Christian rites. In the Eastern churches psalms are seldom sung or recited in their full lengths, but varied and associated with non-biblical poetry, verses from other parts of the Bible and so on. The importance of the psalmodic cadence, then, lies in its function as transition to the melody of the following text (e. g. a Sticheron or a Troparion). When this is thought to require a special preparation the ending of the cadence will be modified accordingly, not by a fixed ending, but by an ending which is determined in each case by the opening phrase of the following melody. In this respect there is similarity between the cadence and the modal signature which also takes on a special ending to harmonize the transition to the following melody. An important function of the cadence, then, is to accomodate two successive melodies to each other.

Each of the eight Byzantine modes has one or more varieties of simple psalm-tone with characteristic opening phrases and cadential formulas, but often melodic patterns and formulas are more closely connected with specific pitches in the tonal system than with a particular mode or modes.

Towards the end of the thirteenth century or the beginning of the fourteenth the famous Joannes Koukouzeles compiled the Byzantine psalm-tones systematically in an anthology called 'Ἀκολουθία', 'Orders of Service'. The book became very popular and still exists in many copies. One of the oldest is the manuscript Athens 2458, which is precisely dated by its colophon to the year 1336 A.D.

In his compilation Koukouzeles illustrated the rules for the performance of the office and the three liturgies, and where psalmody is concerned he took up the simple psalm-tones, summed up the ways of recitation in

1. Strunk, Oliver, The Chants of the Byzantine-Greek Liturgy, in: Essays On Music In The Byzantine World, pp.307-8.

Basic information for the investigation of the manuscript Sinai 1255 is taken from:

Strunk, Oliver, Essays On Music In the Byzantine World, New York, 1977.
Sadie, Stanley, ed., The New Grove Dictionary of Music and Musicians, London 1980.

Blom, Eric, ed., Grove's Dictionary of Music and Musicians, New York 1975.
In the last two sources under: Byzantine Music and Psalmody.

eight doxologies, one for each of the eight modes, and applied them to standard verses from the psalms and canticles.²



Among the most frequently used Psalms of the Service are a complex consisting of Psalms 140, 141, 129 and 116 ('κύριε ἐκέκραξα'), belonging to the Vespers and Psalms 148-150, the Ἀἶνον or Lauds, belonging to the Orthros or Morning Office. Their performance is less plain than described above because the first verse or verses of each of the two sets are sung to much more complicated melodies.

It is the aim of this article to demonstrate that these elaborate melodies to κύριε ἐκέκραξα and πᾶσα πνοὴ αἰνεσάτω τὸν κύριον actually are nothing but ornamented psalmody.

A particularly good source of material for illustrating this is the manuscript Sinai 1255 which includes also simple psalmody in its κεκραγᾶριον.³ So here we have an opportunity for comparisons within one single tradition.

2. Strunk, op. cit. p. 171.

3. The Kekragarion consists of verses from the Psalms 140, 141, 129 and 116 sung at Vespers. The name refers to the opening words of Ps. 140: κύριε, ἐκέκραξα πρὸς σέ. Nowadays it is usually sung by two choirs alternately, the first of which begins by singing the half-verse κύριε, ἐκέκραξα πρὸς σέ and later sings the refrains of verse 1 and 2: εὐσάκουσόν μου, κύριε. Instead of refrains certain verses are followed by stichera. For short Vespers and Vespers of the week following Easter only the first two verses of Ps. 140 are sung together with the verses followed by stichera. This is also the case at the great Church festivals.

Threskeutikē Encyclopædia, Athenai 1962-68, sub 'Εσπερινός, column 915.

For each of the modes Sinai 1255 has the following content⁴ with the general headline,

ἀρχὴ σὺν θεῷ ἀγίῳ τῶν κατ' ἤχων κεκραγαρίων ἡνωμένα μετὰ τῶν ἀναστασίμων·

Vespers,

- 1) Κύριε ἐκέκραξα (Ps. 140:1) + κατευθυνθήτω (Ps. 140:2)
- 2) ἐξάγαγε (Ps. 141:8) + Stichera Anastasima.
- 3) Δόξα πατρὶ + Theotokion Dogmatikon.

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- 4) ('τοῦ στίχου') Apostichon + Alphabetika.

Orthros,

- 5) Θεὸς Κύριος.
- 6) ('εἰς τοὺς αἰνους') Πᾶσα πνοὴ + Αἰνεῖτε (Ps. 150:6 + 148:1,2).
- 7) ('τῇ ἀγίῳ καὶ μεγάλῃ τεσσαρακοστῇ, εἰς τοὺς αἰνους') Αἰνεῖτε (Ps. 148:1).

The Stichera and the Θεὸς Κύριος have been left out as being irrelevant for our present investigation. The texts that remain are shown below (Ex. 1, p. 27). For practical reasons their lines have been consecutively numbered.

Some of the units need a little comment:

- 1-5, (Ps. 140:1): The first half-verse (1) is followed by a refrain (2. εἰσάκουσόν μου, Κύριε) and then repeated (3). The refrain is found again after the second half-verse.
- 6-8, (Ps. 140:2): Here the refrain is used at the end only.
- 9, First half-verse of Ps. 141:8 to introduce the first of the Stichera Anastasima.
- 10-11, Δόξα, ... καὶ νῦν, bipartite.
- 12-16, The introduction to this unit (12) is the last verse of Ps. 150. Then Ps. 148:1,2 follow with the refrain (σοὶ πρόπει ὕμνος τῷ θεῷ) after each verse.
- 17-20. An alternative to be used in Lent. Notice the parallellism between the arrangements of 17-20 and 1-5:

17 = 1

18 = 2

19 = 3 + 4

20 = 5

As basis for the analysis I shall select a few characteristic motifs - recognizable even with variations in the detail - in order to observe

4. Folios 164^r-204^r.

their occurrences in the material, cf. the survey of cadences in the mode of Protos below. At times such motifs are completely stable in their neumatic shape, e.g. $\tilde{\omega} \tilde{\nu} \tilde{\alpha} \tilde{\tau}$ (Barys, lines 2, 5, 8, 12, 14, 16 and 20).

As shown by Strunk⁵ the simple psalmody is i.a. used for the concluding verses of the ordinary Psalms for Vespers and for the simple Doxologies. These items (lines 9-11 in the text, Ex. 1) will serve as starting point for the following analysis.

Protos.

a) *The psalmodic cadence.*

In the Protos as in the other modes (cf. Strunk p. 170) the last four syllables of the text in Psalm verse and Doxology, as was to be expected, have a fixed melodic shape, and no attention is paid to the text accents:

$$9. \quad \begin{array}{c} \tilde{\omega} \tilde{\nu} \tilde{\alpha} \tilde{\tau} \\ \alpha \quad bc \quad a \quad b \quad G \quad a \quad a \end{array}$$

$$10. \quad \begin{array}{c} \tilde{\omega} \tilde{\nu} \tilde{\alpha} \tilde{\tau} \\ \alpha \quad a \quad bc \quad a \quad b \quad G \quad a \quad a \end{array}$$

$$11. \quad \begin{array}{c} \tilde{\omega} \tilde{\nu} \tilde{\alpha} \tilde{\tau} \\ \alpha \quad a \quad bc \quad a \quad b \quad G \quad a \quad a \end{array}$$

In our material this cadence occurs, besides, in lines 4, 7, 12, 13, 15, 17 and 19:

$$4. \quad \begin{array}{c} \tilde{\omega} \tilde{\nu} \tilde{\alpha} \tilde{\tau} \\ \alpha \quad bc \quad a \quad b \quad G \quad a \quad a \end{array}$$

$$7. \quad \begin{array}{c} \tilde{\omega} \tilde{\nu} \tilde{\alpha} \tilde{\tau} \\ \alpha \quad a \quad bc \quad a \quad b \quad G \quad a \quad a \end{array}$$

$$12. \quad \begin{array}{c} \tilde{\omega} \tilde{\nu} \tilde{\alpha} \tilde{\tau} \\ \alpha \quad a \quad a \quad bc \quad a \quad G \quad a \quad b \quad G \quad a \end{array}$$

$$13. \quad \begin{array}{c} \tilde{\omega} \tilde{\nu} \tilde{\alpha} \tilde{\tau} \\ \alpha \quad bc \quad a \quad b \quad a \quad G \quad a \quad b \quad G \quad a \end{array}$$

$$15. \quad \begin{array}{c} \tilde{\omega} \tilde{\nu} \tilde{\alpha} \tilde{\tau} \\ \alpha \quad bc \quad a \quad b \quad G \quad a \quad a \end{array}$$

5. Strunk, op. cit. p. 170 ff. and pp. 307-8.

17. $\begin{array}{c} \text{εκ} \\ \text{α} \end{array} \left| \begin{array}{c} \text{τωυ} \\ \text{c} \end{array} \right. \begin{array}{c} \text{ou} \\ \text{a} \end{array} \begin{array}{c} \text{ou} \\ \text{b} \end{array} \begin{array}{c} \text{παα} \\ \text{Ga} \end{array} \begin{array}{c} \text{ωωω} \\ \text{abaGa} \end{array} \begin{array}{c} \text{ωω} \\ \text{aGa} \end{array}$

19. $\begin{array}{c} \text{ευ} \\ \text{α} \end{array} \left| \begin{array}{c} \text{τοic} \\ \text{bc} \end{array} \right. \begin{array}{c} \text{u} \\ \text{a} \end{array} \begin{array}{c} \text{ψι} \\ \text{Ga} \end{array} \begin{array}{c} \text{στoic} \\ \text{a} \end{array}$

In the first of the succession of diagrammes which follow the text (p. 36) this cadence is marked by a 'C'. It is evident that the Protos melodies for the ordinary Psalms for Vespers and Lauds use the same cadence as the simple psalmody.

b) *Opening patterns.*

in 9-11 we find either an opening pattern or a repetition of the note a:

9). $\begin{array}{c} \text{g} \\ \text{a} \end{array} \left| \begin{array}{c} \text{ε} \\ \text{a} \end{array} \right. \begin{array}{c} \text{α} \\ \text{a} \end{array} \begin{array}{c} \text{α} \\ \text{a} \end{array} \begin{array}{c} \text{α} \\ \text{a} \end{array} \begin{array}{c} \text{α} \\ \text{a} \end{array}$

10). $\begin{array}{c} \text{g} \\ \text{a} \end{array} \left| \begin{array}{c} \text{δ} \\ \text{E} \end{array} \right. \begin{array}{c} \text{α} \\ \text{F} \end{array} \begin{array}{c} \text{α} \\ \text{Ga} \end{array}$

11). $\begin{array}{c} \text{g} \\ \text{a} \end{array} \left| \begin{array}{c} \text{κα} \\ \text{E} \end{array} \right. \begin{array}{c} \text{α} \\ \text{F} \end{array} \begin{array}{c} \text{α} \\ \text{Ga} \end{array}$

The opening of 10 and 11, as we shall see, reappears as line-openers in the ordinary Psalms and must thus be taken for a standard psalmodic line-opener in this mode (marked 'I' in diagram 1). It is to be noted that the 'refrains' in 5, 8, 14, 16 and 20 have opening phrases of their own - the standard phrase being found only in 2 and 18. The openings in Protos vary considerably in details, cf. Ex. 2, p.28.

Note the following cases:

2 ≠ 18

3

4a

13b

Finally, it is to be noted also that the opening phrase, usually combined with punctuation dots, subdivides lines 4, 6, 13 and 19.

Deuterios.

a) *The psalmodic cadence.*

A comparison between lines 9, 10 and 11 reveals the following final formulas:

- 9) $\begin{array}{cc|cc} \tau & \tau & \omega & \gamma \\ \tau\omega & o & \gamma\omega & \gamma \\ b & b & c & a \end{array} \begin{array}{c} \gamma \\ \gamma \\ \gamma \\ \gamma \end{array} \begin{array}{c} \gamma \\ \gamma \\ \gamma \\ \gamma \end{array} \begin{array}{c} \gamma \\ \gamma \\ \gamma \\ \gamma \end{array}$
- 10) $\begin{array}{cc|cc} \tau & \tau & \omega & \gamma \\ \tau & \gamma & \omega & \gamma \\ b & b & b & a \end{array} \begin{array}{c} \gamma \\ \gamma \\ \gamma \\ \gamma \end{array} \begin{array}{c} \gamma \\ \gamma \\ \gamma \\ \gamma \end{array} \begin{array}{c} \gamma \\ \gamma \\ \gamma \\ \gamma \end{array}$
- 11) $\begin{array}{cc|cc} \tau & \tau & \omega & \gamma \\ \tau\omega & \alpha & \omega & \gamma \\ b & b & b & a \end{array} \begin{array}{c} \gamma \\ \gamma \\ \gamma \\ \gamma \end{array} \begin{array}{c} \gamma \\ \gamma \\ \gamma \\ \gamma \end{array} \begin{array}{c} \gamma \\ \gamma \\ \gamma \\ \gamma \end{array}$

The three quotations can all be divided into two parts, a recitation on b and a musical formula with the ambitus a - c on the last four syllables. The three occurrences are all different. For line 9, however, a close parallel is given by Strunk.⁶ It is, therefore, perhaps legitimate to let line 9 represent the cadence of the simple psalmody of Deuteroc. However that may be, it is evident that a rather more ornamented shape of the cadence is used in the ordinary context.

- 4) $\gamma \varepsilon$ | $\begin{matrix} \rightarrow \alpha & \rightarrow \beta & \rightarrow \gamma & \rightarrow \delta & \rightarrow \epsilon & \rightarrow \zeta & \rightarrow \eta & \rightarrow \theta \end{matrix}$
G a | b c a G a b c b b G
- 7) α | $\begin{matrix} \rightarrow \beta & \rightarrow \gamma & \rightarrow \delta & \rightarrow \epsilon & \rightarrow \zeta & \rightarrow \eta & \rightarrow \theta & \rightarrow \iota \end{matrix}$
b | c a G a b d c b a G
- 13) $\varepsilon \psi$ | $\begin{matrix} \rightarrow \alpha & \rightarrow \beta & \rightarrow \gamma & \rightarrow \delta & \rightarrow \epsilon & \rightarrow \zeta & \rightarrow \eta & \rightarrow \theta \end{matrix}$
G a | b c a G a b c b b G
- 15) $\delta \psi$ | $\begin{matrix} \rightarrow \alpha & \rightarrow \beta & \rightarrow \gamma & \rightarrow \delta & \rightarrow \epsilon & \rightarrow \zeta & \rightarrow \eta & \rightarrow \theta \end{matrix}$
b | c b c a G a b c b b G
- 17) $\varepsilon \chi$ | $\begin{matrix} \rightarrow \alpha & \rightarrow \beta & \rightarrow \gamma & \rightarrow \delta & \rightarrow \epsilon & \rightarrow \zeta & \rightarrow \eta & \rightarrow \theta \end{matrix}$
b | c b c a G a b c b b G
- 19) $\varepsilon \psi$ | $\begin{matrix} \rightarrow \alpha & \rightarrow \beta & \rightarrow \gamma & \rightarrow \delta & \rightarrow \epsilon & \rightarrow \zeta & \rightarrow \eta & \rightarrow \theta \end{matrix}$
G a | b c a G a b c b b G

6. Strunk, *op. cit.* p. 171, from Doxology in Laura I 185.

Three features are here to be observed,

- a) the combination Petasthé + leap of a third at the beginning of the cadence.
- b) the cadences never end on b, but on G (in 17 even on D preparing the following movement).
- c) the formulas in lines 4, 13 and 19 follow immediately after the sequence Ga whereas the formulas in lines 7, 15 and 17 follow after the recitation b as in lines 9 and 11.

The position of the cadence can be seen in diagram 2.

b) *Opening patterns.*

The opening phrases of line 9, 10 and 11 are as follows,

9) $\overset{\sim}{\gamma} \quad \overset{\sim}{\varepsilon} \overset{\sim}{\xi} \overset{\sim}{\alpha} \quad \overset{\sim}{\gamma} \overset{\sim}{\alpha} \quad \overset{\sim}{\gamma} \overset{\sim}{\varepsilon}.$
 G a b b b

10) $\overset{\sim}{\gamma} \quad \overset{\sim}{\delta} \overset{\sim}{\alpha} \quad \overset{\sim}{\xi} \overset{\sim}{\alpha}$
 b b

11) $\overset{\sim}{\kappa} \overset{\sim}{\alpha} \overset{\sim}{\iota} \quad \overset{\sim}{\gamma} \overset{\sim}{\varepsilon} \overset{\sim}{\xi} \overset{\sim}{\alpha} \quad \overset{\sim}{\kappa} \overset{\sim}{\alpha} \overset{\sim}{\iota}$
 G a b b

The variation is evidently of the same kind as in Protos: either a repetitive tone (now on b) or a motif with musical stressing following the text accentuation. The similarity between the opening motif $\overset{\sim}{\varepsilon} \overset{\sim}{\xi} \overset{\sim}{\alpha} \overset{\sim}{\gamma}$ and the standard intonation of Deuterios $\overset{\sim}{\gamma} \overset{\sim}{\varepsilon} \overset{\sim}{\xi} \overset{\sim}{\alpha} \overset{\sim}{\gamma}$ is striking, cf. below p.23.

In the two ordinary Psalms the motif is used no less than twentyfive times, cf. Ex.3, p.29. It opens all lines except 5, 8, 14, 16, 20 (refrain lines;) and, besides, subdivides the lines 3, 4, 6, 9, 13, 15 and 19. There seems to be a tendency of reshaping the motif into Gabc etc. in occurrences inside the line. In a way line 10 has two opening phrases the first of which is the recitation of $\delta\acute{o}\xi\alpha \kappa\alpha\tau\acute{o}\iota$ on the tone b elaborated on $\kappa\alpha\tau\acute{o}\iota$, the next following immediately after in the form $\overset{\sim}{\gamma} \overset{\sim}{\varepsilon} \overset{\sim}{\xi} \overset{\sim}{\alpha} \overset{\sim}{\gamma}$ merging into the first medial formula. $\overset{\sim}{\gamma} \overset{\sim}{\varepsilon} \overset{\sim}{\xi} \overset{\sim}{\alpha} \overset{\sim}{\gamma}$
G a ba

For the position of the opening patterns see diagram 2, p.36.

Tritos

a) The psalmodic cadence.

- 9) $\begin{array}{c|c} \text{Tw} & \text{σ} \\ \text{c} & \text{c} \end{array} \left| \begin{array}{c} \text{σ} > \times \pi \\ \text{d} & \text{G} \quad \text{a} \quad \text{a} \end{array} \right.$
- 10) $\begin{array}{c|c} \text{Tw} & \text{α} \\ \text{c} & \text{c} \end{array} \left| \begin{array}{c} \text{ω} > \text{π} > \text{ε} > \text{α} \\ \text{d} & \text{c} \quad \text{b} \quad \text{a} \quad \text{b} \end{array} \right.$
- 11) $\begin{array}{c|c} \text{Tw} & \text{α} \\ \text{c} & \text{c} \end{array} \left| \begin{array}{c} \text{ω} > \text{π} > \text{ε} > \text{α} \\ \text{d} & \text{c} \quad \text{b} \quad \text{a} \quad \text{bc} \end{array} \right.$

All three formulas follow upon the recitation tone c of the mode and begin with the note d. In line 9 follows a leap of a fifth down to G. In 10 and 11 the formulas consist of a series of downward steps from d to the note a followed in 10 by b leading on to the c at the opening of the next line and in 11 by b and c forming the transition to the following Sticheron. The formula $\text{σ} > \text{π} > \text{ε} > \text{α}$ will be taken to represent the cadence of the simple psalmody.

The cadence is found again in lines 4, 7, 13, 15 and 19, but only as variations of the simple cadence.

- 4) $\begin{array}{c|c} \text{Tw} & \text{ε} \\ \text{c} & \text{c} \end{array} \left| \begin{array}{c} \text{σ} > \text{π} > \text{ε} > \text{α} \\ \text{cd} & \text{c} \quad \text{ba} \quad \text{bc} \quad \text{dc} \quad \text{c} \quad \text{a} \end{array} \right.$
- 7) $\begin{array}{c|c} \text{Tw} & \text{α} \\ \text{c} & \text{c} \end{array} \left| \begin{array}{c} \text{σ} > \text{π} > \text{ε} > \text{α} \\ \text{cd} & \text{c} \quad \text{ba} \quad \text{bc} \quad \text{ed} \quad \text{c} \quad \text{a} \end{array} \right.$
- 13) $\begin{array}{c|c} \text{Tw} & \text{ε} \\ \text{c} & \text{c} \end{array} \left| \begin{array}{c} \text{σ} > \text{π} > \text{ε} > \text{α} \\ \text{d} & \text{ba} \quad \text{bc} \quad \text{dc} \quad \text{c} \quad \text{a} \end{array} \right.$
- 15) $\begin{array}{c|c} \text{Tw} & \text{α} \\ \text{c} & \text{c} \end{array} \left| \begin{array}{c} \text{σ} > \text{π} > \text{ε} > \text{α} \\ \text{d} & \text{ba} \quad \text{bc} \quad \text{dc} \quad \text{c} \quad \text{a} \end{array} \right.$
- 19) $\begin{array}{c|c} \text{Tw} & \text{α} \\ \text{c} & \text{c} \end{array} \left| \begin{array}{c} \text{σ} > \text{π} > \text{ε} > \text{α} \\ \text{cd} & \text{c} \quad \text{ba} \quad \text{bc} \quad \text{dc} \quad \text{c} \quad \text{a} \end{array} \right.$

The characteristic pattern of the model may, however, still be found in the variations. The Petasthē on d is still seen followed by the Apōstrophoi and the formula ends on the note a. In 4 and 7 the Petasthē is replaced by the figure $\text{σ} > \text{π} > \text{ε} > \text{α}$. Line 13 and 15 are identical and have the Petasthē on d, while 19 has a combination of the Petasthē and the neumes of 4 and 7. In 4, 7, and 19 the steps dcba are indicated by

opening of 9 the conclusion may be that the mode uses a recitation on c as opening phrase.

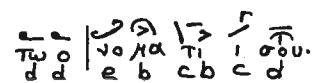
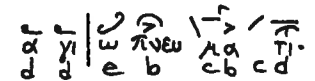
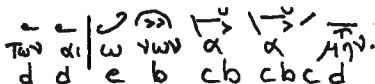
This opening is found in the following positions often in conjunction with the following medial formula. See Ex. 4, p.30.

Evidently, the opening phrase for the ordinary Psalms in the mode of Tritos must be a recitation on c. For occurrences cf. diagram 3.

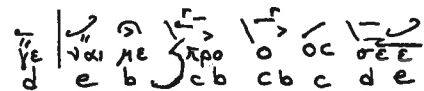
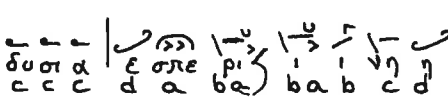
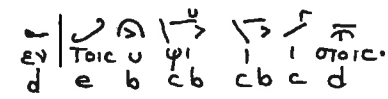
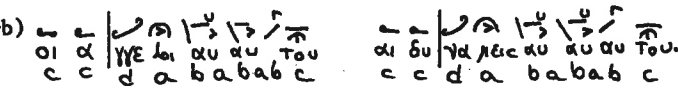
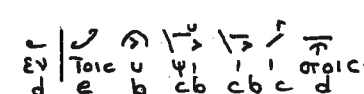
Tetartos.

a) *The psalmodic cadence.*

As the cadences of lines 9, 10 and 11 in the mode of Tetartos are identical, they may all be taken to represent the cadence of the simple psalmody.

- 9) 
- 10) 
- 11) 

The same formula is used as cadences in lines 4, 7, 13, 15 and 19:

- 4) 
- 7) 
- 13) 
- 15a+b) 
- 19) 

Line 15 is divided into two half-lines, a and b, with identical melody. Thus, the cadence appears twice. Its neumes are identical with the

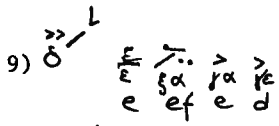
neumes of the rest of the cadences in the text, but the melody lies a second lower than the melody of the model cadence, and this is also the case of the cadence in line 7.

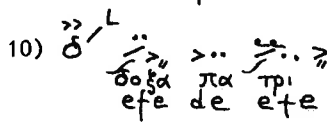
The ordinary Psalms, then, use the cadence of the simple psalmody also in Tetartos.

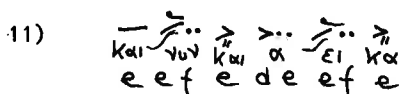
The occurrences are shown in diagram 4, p.36.

b) *Opening patterns.*


A comparison between the opening patterns of lines 9, 10 and 11 in the mode of Tetartos results in determining the opening phrase of 9 as the model opening phrase of the simple psalmody.

9) 

10) 

11) 

Similar openings are found in 1, 3, 4, 6, 13, 15, 17 and 19. Cf. Ex.5, R31,

In 1 the opening phrase is preceded by a succession of notes on the word *κύριε* leading up to it while in the rest of the occurrences the line begins immediately with the phrase which in all cases is conjunct with the following medial formula. The group of neumes  is replaced in line 4 and 6 by a Petasthē.

The opening phrase of 6 lies a second lower than usual as a parallel to the lower cadence in 7. This is also the case of the two occurrences in 15 and in 17.

Thus, in Tetartos also the opening phrase follows the simple psalmody, The positions of the phrases are indicated in diagram 4.

o o o

First Plagal Mode.

a) *The psalmodic cadence.*

For lines 9, 10 and 11 the first plagal mode has one cadence only.

- 9) $\begin{array}{c} \tau\omega \quad \alpha | \quad \omega \quad \alpha \quad \tau \quad \sigma\omega \\ G \quad \alpha \quad F \quad E \quad D \quad E \end{array}$
- 10) $\begin{array}{c} \alpha \quad \tau | \quad \omega \quad \alpha \quad \tau \quad \sigma\omega \\ G \quad G \quad \alpha \quad F \quad E \quad D \end{array}$
- 11) $\begin{array}{c} \tau\omega \quad \alpha | \quad \omega \quad \alpha \quad \tau \quad \sigma\omega \\ G \quad G \quad \alpha \quad F \quad E \quad D \end{array}$

In line 9 an E is added at the end probably to prepare the Sticheron which follows, and the usual 'last-four-syllable-pattern' could not be realized. Therefore, the form found in lines 10 and 11 is taken to be the cadence of the simple psalmody.

The cadences of the verse lines are more ornamented than that of the simple psalmody, but follow its melodic outlines.

- 4) $\begin{array}{c} \tau\omega \quad \alpha | \quad \omega \quad \alpha \quad \tau \quad \sigma\omega \\ G \quad \alpha \quad G \quad \alpha \quad G \quad F \quad G \quad F \quad E \quad G \quad F \quad E \quad D \end{array}$
- 7) $\begin{array}{c} \tau\omega \quad \alpha | \quad \omega \quad \alpha \quad \tau \quad \sigma\omega \\ G \quad \alpha \quad G \quad \alpha \quad G \quad F \quad G \quad F \quad E \quad G \quad F \quad E \quad D \end{array}$
- 13) $\begin{array}{c} \tau\omega \quad \alpha | \quad \omega \quad \alpha \quad \tau \quad \sigma\omega \\ G \quad \alpha \quad G \quad \alpha \quad G \quad F \quad G \quad F \quad E \quad G \quad F \quad E \quad D \end{array}$
- 15) $\begin{array}{c} \tau\omega \quad \alpha | \quad \omega \quad \alpha \quad \tau \quad \sigma\omega \\ G \quad \alpha \quad G \quad \alpha \quad G \quad F \quad G \quad F \quad E \quad G \quad F \quad E \quad D \end{array}$
- 19) $\begin{array}{c} \tau\omega \quad \alpha | \quad \omega \quad \alpha \quad \tau \quad \sigma\omega \\ G \quad \alpha \quad G \quad \alpha \quad G \quad F \quad G \quad F \quad E \quad G \quad F \quad E \quad D \end{array}$

These cadences are found in lines 4, 7, 13, 15 and 19, Cf. diagram 5, p. 37.

b) *Opening patterns.*

$$9) \begin{array}{c} \text{A} \text{g} \\ \text{E} \quad \text{F} \quad \text{E} \quad \text{D} \end{array}$$

$$10) \begin{array}{c} \text{A} \text{g} \\ \text{G} \quad \text{E} \quad \text{F} \quad \text{a} \quad \text{G} \end{array}$$

$$11) \begin{array}{c} \text{A} \text{g} \\ \text{G} \quad \text{G} \quad \text{E} \quad \text{FG} \quad \text{a} \quad \text{G} \end{array}$$

In this mode line 9 has an opening of its own, the opening pattern of the simple psalmody, then, is taken to be that of lines 10 or 11.

This opening is found again slightly varied in lines 6, 13, 15 and 19, and in more elaborated forms also in lines 3, 4 and 7. See Ex. 6, p. 32.

For occurrences cf. diagram 5, p. 37.

*Second Plagal Mode.*a) *The psalmodic cadence.*

In this mode the cadence of line 10 differs from the cadence of lines 9 and 11,

$$9) \begin{array}{c} \text{Tw} \quad \text{a} \\ \text{a} \quad \text{a} \end{array} \left| \begin{array}{c} \text{bc} \quad \text{G} \quad \text{a-b-a-b-a-b} \quad \text{G} \quad \text{E} \end{array} \right.$$

$$10) \begin{array}{c} \text{a} \quad \text{f} \\ \text{a} \quad \text{f} \end{array} \left| \begin{array}{c} \text{D} \quad \text{D} \quad \text{E} \quad \text{F} \quad \text{a} \quad \text{G} \quad \text{a} \quad \text{G} \end{array} \right.$$

$$11) \begin{array}{c} \text{Tw} \quad \text{a} \\ \text{a} \quad \text{a} \end{array} \left| \begin{array}{c} \text{b} \quad \text{G} \quad \text{b} \quad \text{a} \quad \text{G} \quad \text{F} \quad \text{G} \end{array} \right.$$

The formula in line 10 ends on the note G and leads on to the opening of the following line. It is found again in line 1 where it is also leading on to the next line,

$$1) \begin{array}{c} \text{E} \cdot \text{a} \quad \text{a} \quad \text{a} \quad \text{a} \quad \text{a} \quad \text{a} \quad \text{a} \\ \text{D} \quad \text{D} \quad \text{D} \quad \text{E} \quad \text{F} \quad \text{G} \quad \text{a} \quad \text{G} \end{array}$$

It will, therefore, be considered as a medial formula.

The cadence is differently elaborated in its two occurrences. It is the longer form (line 9) which we find in lines 4, 7, 13, 15 and 19 in nearly identical variations. For occurrences cf. diagram 6, p. 37.

- 6)
- | | | | | | | | |
|----|-----|-----|-----|-----|-----|-----|-----|
| κα | τευ | του | του | του | του | του | του |
| E | E | E | G | F | E | a | G |
- 12)
- | | | | | | | | |
|----|---|---|---|---|---|---|----|
| κα | α | α | α | α | α | α | α |
| E | G | F | E | G | F | E | FG |
- 15)
- | | | | | | | | |
|---|---|---|---|---|---|---|---|
| α | α | α | α | α | α | α | α |
| E | G | F | E | G | F | E | |
- 17)
- | | | | | | | | |
|---|---|---|---|---|---|---|---|
| α | α | α | α | α | α | α | α |
| E | G | F | E | G | F | E | |

Also the refrains employ a variation of this opening, often conjunct with the following medial formula as in lines 5, 8, 14, 16, 18 and 20.

- 5)
- | | | |
|---|----|---|
| α | α | α |
| E | FG | E |
- 8)
- | | | | | | | | |
|---|----|---|---|---|---|---|---|
| α | α | α | α | α | α | α | α |
| E | FG | E | F | D | D | a | G |
- 14)
- | | | | | | | | |
|---|----|---|---|---|---|---|---|
| α | α | α | α | α | α | α | α |
| E | FG | E | F | D | | | |
- 16)
- | | | | | | | | |
|---|----|---|---|---|---|---|---|
| α | α | α | α | α | α | α | α |
| E | FG | E | F | D | | | |
- 18)
- | | | | | | | | |
|---|---|---|---|---|---|---|---|
| α | α | α | α | α | α | α | α |
| E | F | G | a | G | | | |
- 20)
- | | | | | | | | |
|---|---|---|---|---|---|---|---|
| α | α | α | α | α | α | α | α |
| E | F | G | E | F | D | | |

For total occurrences of the opening pattern cf. diagram 6.

Barys.

a) *The psalmodic cadence.*

From a comparison between the endings of lines 9, 10 and 11 we may conclude that the formula in its shortest form consists of a leap of a

third from the note b down to the note G; the b is always indicated by a Petasthé. Only in line 10 is the note a from the previous formula or recitation included in the cadence itself.

- 9) $\begin{array}{c} \text{a} \text{ b} \text{ a} \\ \text{a} \text{ a} \end{array} \left| \begin{array}{c} \text{b} \\ \text{b} \end{array} \right| \begin{array}{c} \text{G} \\ \text{G} \end{array} \begin{array}{c} \text{a} \\ \text{a} \end{array} \begin{array}{c} \text{F} \\ \text{F} \end{array} \begin{array}{c} \text{G} \\ \text{G} \end{array}$
- 10) $\begin{array}{c} \text{a} \text{ b} \text{ a} \\ \text{G} \text{ a} \end{array} \left| \begin{array}{c} \text{a} \\ \text{a} \end{array} \right| \begin{array}{c} \text{b} \\ \text{a} \end{array} \begin{array}{c} \text{G} \\ \text{a} \end{array} \begin{array}{c} \text{F} \\ \text{b} \end{array} \begin{array}{c} \text{G} \\ \text{G} \end{array}$
- 11) $\begin{array}{c} \text{a} \text{ b} \text{ a} \\ \text{a} \end{array} \left| \begin{array}{c} \text{b} \\ \text{b} \end{array} \right| \begin{array}{c} \text{G} \\ \text{G} \end{array} \begin{array}{c} \text{a} \\ \text{a} \end{array} \begin{array}{c} \text{F} \\ \text{F} \end{array} \begin{array}{c} \text{G} \\ \text{G} \end{array}$

Thus, this will be considered as the simple psalmodic cadence of the mode, and it is found again at the ends of most of the verses of our ordinary Psalms.

However, the end of line 12 as well as all refrain endings employ a different cadence. As this is the one that appears as psalmodic cadence in Strunk's example⁸ - see above p.5 - we have to operate with two cadences for the moment:

$$c^a: \begin{array}{c} \text{a} \\ \text{a} \end{array} \left| \begin{array}{c} \text{b} \\ \text{b} \end{array} \right| \begin{array}{c} \text{G} \\ \text{G} \end{array} \begin{array}{c} \text{a} \\ \text{a} \end{array} \begin{array}{c} \text{F} \\ \text{F} \end{array}$$

$$c^b: \begin{array}{c} \text{a} \\ \text{a} \end{array} \left| \begin{array}{c} \text{b} \\ \text{b} \end{array} \right| \begin{array}{c} \text{G} \\ \text{G} \end{array} \begin{array}{c} \text{a} \\ \text{a} \end{array} \begin{array}{c} \text{F} \\ \text{F} \end{array} \begin{array}{c} \text{G} \\ \text{G} \end{array}$$

The formula c^a is found in 2, 4, 13, 15, 18 and 19. Line 19 has a formula of its own reminding of the cadence formula of Protos. Cf. Ex. 7, p.33.

The formula c^b is found in 2, 5, 8, 12, 14, 16 and 20. Notice that at the end of line 2 the manuscript adds c^b as an alternative. Cf. Ex. 7, p.33.

The occurrences of c^a and c^b can be seen in diagram 7, p.37.

b) Opening patterns.

The opening pattern of Barys is characteristic in being very simple consisting only of a leap of a fifth from D to a and vice versa. The pattern contains a long or short recitation either on the deep tone or on the high.

8. Strunk, op. cit. p. 171.

$$11) \begin{array}{c} \text{αι} \\ \text{Ga} \end{array} \left| \begin{array}{c} \text{ω} \\ \text{bc} \end{array} \right| \begin{array}{c} \text{ω} \\ \text{a} \end{array} \begin{array}{c} \text{ω} \\ \text{c} \end{array} \begin{array}{c} \text{α} \\ \text{ba} \end{array} \begin{array}{c} \text{ω} \\ \text{G} \end{array}$$

It is found again, though more elaborated, in lines 4, 7, 13 and 19 all ending on the note a instead of the note G.

$$4) \begin{array}{c} \text{γ ε} \\ \text{Ga} \end{array} \left| \begin{array}{c} \text{ω} \\ \text{bc} \end{array} \right| \begin{array}{c} \text{ω} \\ \text{aG} \end{array} \begin{array}{c} \text{ε ε} \\ \text{ab} \end{array} \begin{array}{c} \text{ε ε} \\ \text{cb} \end{array} \begin{array}{c} \text{π ρ ο c} \\ \text{ba} \end{array} \begin{array}{c} \text{σ ε} \\ \text{a} \end{array}$$

$$7) \begin{array}{c} \text{ω} \\ \text{Ga} \end{array} \begin{array}{c} \text{ω} \\ \text{ab} \end{array} \left| \begin{array}{c} \text{ω} \\ \text{bc} \end{array} \right| \begin{array}{c} \text{ε σ π ε} \\ \text{aG} \end{array} \begin{array}{c} \text{ε ε} \\ \text{ab} \end{array} \begin{array}{c} \text{ε ε} \\ \text{cb} \end{array} \begin{array}{c} \text{ρ ι} \\ \text{ba} \end{array} \begin{array}{c} \text{ω η} \\ \text{a} \end{array}$$

$$13) \begin{array}{c} \text{ε} \\ \text{Ga} \end{array} \left| \begin{array}{c} \text{ω} \\ \text{bc} \end{array} \right| \begin{array}{c} \text{ω} \\ \text{aG} \end{array} \begin{array}{c} \text{ω} \\ \text{ab} \end{array} \begin{array}{c} \text{ω} \\ \text{cb} \end{array} \begin{array}{c} \text{ω} \\ \text{ba} \end{array} \begin{array}{c} \text{σ τ ο ι c} \\ \text{a} \end{array}$$

$$19) \begin{array}{c} \text{ε} \\ \text{Ga} \end{array} \left| \begin{array}{c} \text{ω} \\ \text{cb} \end{array} \right| \begin{array}{c} \text{ω} \\ \text{c} \end{array} \begin{array}{c} \text{ω} \\ \text{aG} \end{array} \begin{array}{c} \text{ω} \\ \text{ab} \end{array} \begin{array}{c} \text{ω} \\ \text{cb} \end{array} \begin{array}{c} \text{ω} \\ \text{ba} \end{array} \begin{array}{c} \text{π} \\ \text{a} \end{array} \begin{array}{c} \text{ε} \\ \text{a} \end{array}$$

For total occurrences cf. diagram 8.

b) *Opening patterns.*

$$9) \begin{array}{c} \text{ε} \\ \text{a} \end{array} \begin{array}{c} \text{ω} \\ \text{aG} \end{array} \begin{array}{c} \text{ω} \\ \text{G} \end{array} \begin{array}{c} \text{ω} \\ \text{G} \end{array}$$

$$10) \begin{array}{c} \text{α δ} \\ \text{a} \end{array} \begin{array}{c} \text{ω} \\ \text{G} \end{array} \begin{array}{c} \text{ω} \\ \text{G} \end{array}$$

$$11) \begin{array}{c} \text{ω} \\ \text{E} \end{array} \begin{array}{c} \text{ω} \\ \text{F} \end{array} \begin{array}{c} \text{ω} \\ \text{F} \end{array} \begin{array}{c} \text{ω} \\ \text{G} \end{array} \begin{array}{c} \text{ω} \\ \text{G} \end{array}$$

There is no modal signature in front of line 9. Maybe the initial Oligon is reckoned from the finalis of the preceding Psalm-verse.

The openings of line 9 and 10 are the same, the opening of line 11 differs and seems to be a linking formula beginning on the extra, final note F of the cadence of line 10, and thus the openings of lines 9 and 10 will be taken to represent the opening phrase of the simple psalmody.

This opening pattern is found in all the verse lines of the melody and never in the refrains i.e. lines 1, 3, 4, 6, 7, 12, 13, 15, 17 and 19, cf. Ex. 8, and diagram 8.

The modal signature of Deuterios is written in front of line 19 instead of the signature of the Fourth Plagal.

Cadences: Conclusion.

The cadences chosen above as representative of the simple psalmody all start from recitation tones which in the authentic modes are identical with the first note of the intonation melody of the mode in question. Each cadence formula begins with a Petasthé in the neumes. Cf. Ex. 9, p.35.

Elsewhere the cadences mostly conform to the patterns of the simple psalmody: they start from the recitation tone - apart from Deuterios 4, 13 and 19, Tetartos 7 and 15, and Fourth Plagal 7 (cf. pp. 9, 13, and 21).

They are nearly always variations of their model cadences - sometimes, though, identical with them as in Protos 4, 7 and 15, Second Plagal 4, 13 and 19 and Barys 2, 5, 8, 12, 14, 16, 18 and 20, i.e. cadence c^b (cf. pp. 7, 17, 19 and Ex. 7, p.33).

In the melodies to ΚΥΡΕ ΕΚΕΚΡΑΞΑ and ΠΑΘΑ ΠΝΟΗ the occurrences of the psalmic cadence mark the endings of the Psalm verses (cf. diagrammes 1-8, text in Ex. 1 with comments p. 7).

lines 4 & 7 = Ps. 140:1,2

9 = Ps. 141:8

(10 & 11 = Δόξα...καὶ νῦν...)

13 & 15 = Ps. 148:1,2

19 = Ps. 148:1

NB. There is no psalmic cadence in Barys 7, Tritos 9, Deuterios 10, Second Plagal 10 and Fourth Plagal 15.


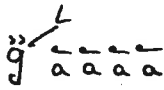
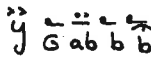
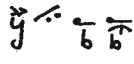
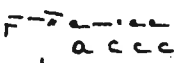
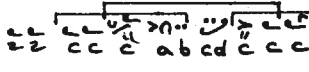
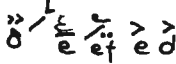

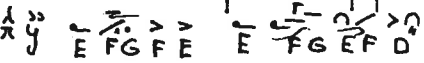
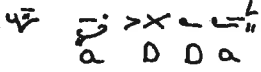
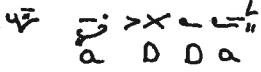

Additional occurrences are found in Barys 2, the refrain after the first half-verse of Ps. 140:1, Protos 12 and Barys c^b 12, ending of the last verse of Ps. 150, Tetartos 15, after first half-verse of Ps. 148:2 and Deuterios 17, ending of the first half-verse of Ps. 148:1.

The cadence c^b of Barys occurs as cadence in all refrains of the melody in this mode.

Openings: Conclusion.

Just as the function of the cadences was to mark the endings of the Psalm-verse or half-verses, the function of the opening pattern is to mark

the beginnings. For this purpose the eight modes display a variety of devices: they may have a fixed formula of their own which recurs in variations in the melodies as in Tetartos and First Plagal, or a fixed formula now and then alternating with a recitation tone alone as in Protos and Deuterios. Tritos and Barys begin on a recitation tone, in Barys elaborated so that the recitation takes place either on D or on a. The opening of the Second Plagal mode is similar to the intonation melody of the mode, as is also the case in First Plagal lines 1, 9, 12 and 17. The opening of Deuterios reminds of the second half of the intonation melody, and the Fourth Plagal could be a variation of the intonation melody also. Both recitation and formula may occur in conjunction with the following medial formula as in Tritos and Second Plagal.

Protos		alternative	
Deuterios		alternative	
Tritos			
Tetartos			
First Plagal			
Second Plagal			
Barys			
Fourth Plagal			

In some cases, however, exceptions to this rule may be found (Ex.10-11 and 12-19, pp.38-57).

Line 1. Ps. 140:1 - first half-verse: the opening formula of Tetartos is introduced by a sequence of ascending notes.

Line 4. Ps. 140:1 - second half-verse: Tritos employs a medial formula, Second Plagal a recitation on a, and Barys what could be a variation of the alternative cadence c^b from line 2.

Line 6. Ps. 140:2 - first half-verse: Barys has an alternative medial formula.

Line 9. Ps. 141:8 - first half-verse: Here Protos has the recitation on a as given by Strunk (cf. p. 5).

Lines 10-11. Δόξα - In the case of Tritos, Second Plagal and Fourth Plagal the opening pattern is omitted in line 11 and replaced by a medial formula forming the transition between line 10 and 11.

Line 12. Ps. 150:6. - Tetartos has the same ascending sequence as in line 1, here, however, followed by a medial formula.

Line 13. P. 148:1 - Second Plagal has a medial formula.

Line 17. Ps. 148:1 - Tetartos has a medial formula.

Line 19. Ps. 148:2 - Both Second Plagal and Barys employ a medial formula.

In addition to these occurrences Protos, Deuterios, Tritos, Tetartos First Plagal and Fourth Plagal mark the repetition of Ps. 140:1, first half-verse, in line 3, where Second Plagal and Barys have a medial formula. Normally, Ps. 140:2, line 7, is not treated as a half-verse and line openers are found in Deuterios, First Plagal and Fourth Plagal only.

Protos, Deuterios and Tetartos divide the following verse lines in smaller parts by inserted opening patterns.

Protos: Lines 4, 6, 13 and 19.

Deuterios: Lines 3, 4, 6, 9, 13, 15 and 19.

Tetartos: Line 15.

The Refrains.

Finally, opening patterns are occasionally used in the refrains in the following places: Protos and Deuterios lines 2 and 18, Second Plagal in all refrains except line 2. Normally, however, the refrains do not employ the same melodic formulas as the psalmtxts and these lines, i. e. lines 2, 5, 8, 14, 16, 18 and 20 will therefore be omitted from the remaining investigation.

Medial Formulas.

As was the case with the opening patterns and the cadences the medial formulas will be determined through a comparison between lines 9, 10 and 11 (Ex. 10-11).

As a rule these medial formulas are in good harmony with the examples from the psalmody given by Strunk.⁹ Frequently, however, Sinai 1255 uses a greater number of medial formulas than Laura I 185 (Strunk's source):

Tritos: M_2 (Protos M_2 and Barys M_1 , but starting from c, not from a) and M_3 . Notice that both these formulas reach the pitch of e

9. Strunk, op. cit. p. 171.

and so pass the pitch shown in Strunk's example.

Plagios Deuterios: M_2 and M_3 , the latter being used in a somewhat different form in the Ordinary psalms (Ex. 17).

Barys: M_1 (=Protos M_2) and M_2 (=Protos M_1), both in the same pitch as in Protos.

Plagios Tetartos: M_2 and M_3 ; the latter does not occur in the Ordinary psalms (Ex. 19).

In the Ordinary settings (Exx. 12-19)¹⁰ all modes except *Plagios Protos* and *Plagios Tetartos* use still more medial formulas than in their simple psalmody (Exx. 10-11):

Protos: M_3

Deuterios: M_4 (=Protos M_3 , but starting from b, not from a).

Tritos: M_4 , M_5 and M_6 .

Tetartos: M_3 .

Plagios Deuterios: M_4 .

Barys: M_4 (=Plagios Deuterios M_4 , same pitch) and M_5 .

In *Plagios Protos*, lines 1 and 17, the intonation melody is used instead of a medial formula; in line 15 the elaboration of M_2 makes it look like the elaborated opening patterns of lines 6 and 15. This together with the placing of the formula seems to indicate that the line may have been felt as bipartite.

The medial formulas of Tetartos seem to occur in two pitches depending on whether the line begins on e or d.

The order of the medial formulas in the Ordinary settings is not bound to follow the order in lines 9, 10 and 11, but when a mode has more than one formula extra as in Tritos and Barys, these formulas always repeat the order in which they first occurred.

The extra formulas seem to divide the text into smaller units than provided by the opening patterns and the cadences, often as the division of a line into two halves, and they seem to be employed and placed with the intention of stressing particular aspects of the meaning of the text and therefore set off individual words.

There is a tendency for the extra formulas of the authentic modes to function as endings either of the lines or of the half-lines as e.g. in

10. Ad Ex. 15: In Tetartos the scribe has overlooked the beginning of line 13, cf. f. 183^v of the MS, but for the analysis compensation has been found in the corresponding formula from a copy of Chrysaphes's *Anastasimatarion*, f. 68^r, belonging to the library of the Institute of Greek and Latin Medieval Philology.

Protos lines 1, 3 and 6 (Ex. 20) and for the formulas of the plagal modes to function as beginnings as e.g. in Plagios Deuterios lines 1 and 6 (Ex. 24).

These extra medial formulas are often followed by a punctuation mark as in Deuterios line 3 (Ex. 13) or the last syllable or word of the formula is stressed by an Apōderma or Diplē as e.g. Plagios Deuterios line 6 (Ex. 17) and Barys line 6 (Ex. 18).

The extra formulas are not found in line 15 in any of the modes.

The distribution of these formulas can be seen in Exx. 20-25, pp.58-63.

o 0 o

The conclusion of the investigation of the melodies to κύριε ἐκέκραξα and Πᾶσα πνοὴ in the manuscript Sinai 1255 must be that these melodies are ornamentation of the musical material used in the simple doxology and psalmody (lines 9-11). Their elaborate recitation is framed in an opening pattern and a cadence both of which mainly employ the simple formulas. Mostly the simple formulas of Sinai 1255 are the 'Koukouzelian' ones mentioned by Strunk (Cf. above p.5). Barys, however, introduces a different cadence and transfers the 'Koukouzelian' cadence to the refrains.

Sometimes a cadence is missing and the line must be connected with the following line or refrain, sometimes an opening pattern is replaced by the intonation melody or recitation tones. The opening pattern is more widely used than the cadence because it can be used in the refrains also and in connection with medial formulas to divide longer lines into smaller units.

In six of the modes ornamented medial formulas occur which go beyond the simple psalmody of Sinai 1255 and the 'Koukouzelian' doxologies as published by Strunk.

Though these extra formulas from a structural point of view must be termed medial formulas, they apparently had a function of their own dividing the lines into smaller units. Thus if the half-verse is neither marked by the structure of the melody nor by an opening phrase or a cadence, it may be marked by such a medial formula. Curiously enough authentic and plagal modes seem to behave differently in this respect: in the authentic modes the extra medial formulas have a tendency to be placed at the end of the line, in the plagal modes they are mainly placed at the beginning.

The above analyses have been inspired by an idea of Jørgen Raasted's put forward in the discussion at The Sixteenth International Congress Of

Byzantine Studies in 1981.¹¹ They have extended the material of 1981 to comprise all modes including also the Orthros material (Πασα πνοή). But still, the data from one isolated manuscript may be considered too narrow a basis for any definitive conclusions, and the inevitable 'subjectivity' of the investigation - especially as to the division into musical formulas - will no doubt make details open to criticism; but nevertheless it is a step towards understanding one of the central parts of Byzantine chant.


ο ο ο

Ex. 1

1. Κύριε, ἐκέκραξα πρὸς σέ, εἰσάκουσόν μου,
2. εἰσάκουσόν μου, Κύριε.
3. Κύριε, ἐκέκραξα πρὸς σέ, εἰσάκουσόν μου;
4. πρῶσχες τῇ φωνῇ τῆς δεήσεώς μου, ἐν τῷ κεκραγέναι με πρὸς σέ;
5. εἰσάκουσόν μου, κύριε.
6. Κατευθυνθήτω ἡ προσευχή μου, ὡς θυμίαμα ἐνώπιόν σου;
7. ἔπαρσις τῶν χειρῶν μου θυσία ἐσπερινή;
8. εἰσάκουσόν μου, κύριε.
9. ἐξάγαγε ἐκ φυλακῆς τὴν ψυχὴν μου, τοῦ ἐξομολογήσασθαι τῷ ὀνόματί σου.
10. δόξα πατρί καὶ υἱῷ καὶ ἁγίῳ πνεύματι
11. καὶ νῦν καὶ ἀεὶ καὶ εἰς τοὺς αἰῶνας τῶν αἰώνων ἀμήν.
12. πᾶσα πνοὴ αἰνεσάτω τὸν κύριον.
13. αἰνεῖτε τὸν κύριον ἐκ τῶν οὐρανῶν, αἰνεῖτε αὐτὸν ἐν τοῖς ὑψίστοις.
14. σοὶ πρέπει ὕμνος τῷ θεῷ.
15. αἰνεῖτε αὐτόν, πάντες οἱ ἄγγελοι αὐτοῦ; αἰνεῖτε αὐτόν, πᾶσαι αἱ δυνάμεις αὐτοῦ.
16. σοὶ πρέπει ὕμνος τῷ θεῷ.
17. αἰνεῖτε τὸν κύριον ἐκ τῶν οὐρανῶν.
18. σοὶ πρέπει ὕμνος τῷ θεῷ.
19. αἰνεῖτε τὸν κύριον ἐκ τῶν οὐρανῶν, αἰνεῖτε αὐτόν ἐν τοῖς ὑψίστοις.
20. σοὶ πρέπει ὕμνος τῷ θεῷ.

11. Jahrbuch der Österreichischen Byzantinistik 32/7, Wien 1982, p. 133.

Opening patterns Protos:

1. $\overset{L}{g}$ $\overset{\cdot}{\alpha} \overset{\cdot}{\pi} \overset{\cdot}{\rho} \overset{\cdot}{\epsilon}$
EF G a
2. $\gamma - - \gamma - \gamma \gamma$
Ei σa kou σa o ov Hou
E F G a G a b G
3. $\overset{\cdot}{\alpha} \overset{\cdot}{\pi} \overset{\cdot}{\rho} \overset{\cdot}{\epsilon}$
EF Ga FG a
- 4a. $\gamma \gamma \gamma \gamma \gamma \gamma \gamma \gamma$
E F E F a G a F G a
- 4b. $\overset{\cdot}{\alpha} \overset{\cdot}{\pi}$
Eγ TW
EF Ga
- 6a. $\overset{\cdot}{\alpha} \overset{\cdot}{\pi}$
kα TEU ---
EF Ga
- 6b. $\gamma \gamma \gamma \gamma$
ωc ρu ---
EF Ga
10. $\overset{L}{g}$ $\overset{\cdot}{\alpha} \overset{\cdot}{\pi}$
δo ρa
EF Ga
11. $\overset{L}{g}$ $\overset{\cdot}{\alpha} \overset{\cdot}{\pi}$
koi vuv
EF Ga
12. $\overset{L}{g}$ $\overset{\cdot}{\alpha} \overset{\cdot}{\pi} \overset{\cdot}{\rho} \overset{\cdot}{\epsilon}$
EF G a
- 13a. $\overset{\cdot}{\alpha} \overset{\cdot}{\pi} \overset{\cdot}{\rho} \overset{\cdot}{\epsilon}$
αi vεi εi TE
E F Ga FG a
- 13b. $\overset{\cdot}{\alpha} \overset{\cdot}{\pi} \overset{\cdot}{\rho} \overset{\cdot}{\epsilon}$
E F G c b
15. $\overset{\cdot}{\alpha} \overset{\cdot}{\pi}$
αi vεi TE
E F Ga a
17. $\overset{L}{g}$ $\overset{\cdot}{\alpha} \overset{\cdot}{\pi}$
αi vεi TE
E F Ga a
18. $\overset{\cdot}{\alpha} \overset{\cdot}{\pi} \overset{\cdot}{\rho} \overset{\cdot}{\epsilon}$
σoi πpe ε πei
E F G a G G
- 19a. $\overset{\cdot}{\alpha} \overset{\cdot}{\pi}$
αi vεi TE
E F Ga a
- 19b. $\overset{\cdot}{\alpha} \overset{\cdot}{\pi} \overset{\cdot}{\rho} \overset{\cdot}{\epsilon}$
αi vεi εi TE du Ton
E F G a a a a
- 

Opening Patterns Tritos:

1. $\begin{array}{c} \text{e e} \quad \text{e e} \quad \text{e} \\ \text{z z} \quad \text{ku pi} \quad \text{E} \\ \text{c} \quad \text{c} \quad \text{c} \end{array}$
3. $\begin{array}{c} \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \\ \text{z z} \quad \text{ku pi} \quad \text{e''} \quad \text{e} \quad \text{e} \quad \text{ke} \quad \text{kpa} \quad \text{fa} \\ \text{c} \quad \text{c} \quad \text{c} \quad \text{a} \quad \text{b} \quad \text{cd} \quad \text{c} \quad \text{c} \end{array}$
6. $\begin{array}{c} \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \\ \text{z z} \quad \text{ka TEU} \quad \text{su} \quad \text{v} \quad \text{ny} \quad \text{tw} \\ \text{c} \quad \text{c} \quad \text{a} \quad \text{b} \quad \text{cd} \quad \text{c} \end{array}$
12. $\begin{array}{c} \text{e e} \quad \text{e e} \\ \text{z z} \quad \text{pa sa} \\ \text{c} \quad \text{c} \end{array}$
13. $\begin{array}{c} \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \\ \text{xi} \quad \text{vei TE} \quad \text{ToV} \quad \text{ku pi} \quad \text{ov} \\ \text{c} \quad \text{c} \quad \text{c} \quad \text{a} \quad \text{b} \quad \text{cd} \quad \text{c} \quad \text{c} \end{array}$
15. $\begin{array}{c} \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \\ \text{xi} \quad \text{vei TE} \quad \text{au} \quad \text{ToV} \\ \text{c} \quad \text{c} \quad \text{c} \quad \text{a} \quad \text{b} \quad \text{c} \end{array}$
17. $\begin{array}{c} \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \\ \text{z z} \quad \text{xi} \quad \text{vei TE} \\ \text{c} \quad \text{c} \quad \text{c} \end{array}$
19. $\begin{array}{c} \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \quad \text{e e} \\ \text{z z} \quad \text{ou} \quad \text{vei TE} \quad \text{ToV} \quad \text{ku pi} \quad \text{ov} \\ \text{c} \quad \text{c} \quad \text{c} \quad \text{a} \quad \text{b} \quad \text{cd} \quad \text{c} \quad \text{c} \end{array}$

Opening Patterns First Plagal:

3. $\begin{array}{c} \text{ku} \text{ pi } \text{E} \text{ E } \text{KE} \text{ kpa} \dots \\ \text{G a F G E F G a G} \end{array}$
4. $\begin{array}{c} \text{pro} \text{ sox} \text{E} \text{ th} \text{ pu} \text{ th} \text{ thc} \\ \text{G a F G E F G a G G} \end{array}$
6. $\begin{array}{c} \text{ka} \text{ TEU} \text{ pu} \text{ th} \text{ TW} \text{ th} \\ \text{G E F a b a G} \end{array}$
7. $\begin{array}{c} \text{E} \text{ pa} \text{p} \text{ ac} \text{ TW} \text{ xei} \text{ pu} \text{ pu} \text{ pu} \\ \text{G a G a G a F G F G E F G a G G} \end{array}$
13. $\begin{array}{c} \text{ai} \text{ vei} \text{ TE} \text{ Ton} \text{ ku} \text{ pi} \text{ pu} \\ \text{G G E F a G G} \end{array}$
15. $\begin{array}{c} \text{ai} \text{ vei} \text{ TE} \text{ au} \text{ Ton} \text{ pa} \text{u} \text{ TE} \text{ L} \\ \text{G G E F a b a G} \end{array}$
19. $\begin{array}{c} \text{ai} \text{ vei} \text{ TE} \text{ TW} \text{ ku} \text{ pi} \text{ pu} \\ \text{G G E F a G G} \end{array}$

Cadences Barys:

Cadence c^a:

2. $\frac{u}{\sigma\sigma\upsilon} \left| \frac{\pi}{\lambda\sigma\upsilon} \right. \frac{\gamma}{\kappa\upsilon} \frac{\pi}{\rho\iota} \frac{\epsilon}{\epsilon}$
4. $\frac{\pi}{\gamma\epsilon} \left| \frac{\gamma}{\gamma\omega} \right. \frac{\pi}{\mu\epsilon} \frac{\pi}{\pi\rho\sigma} \frac{\sigma}{\sigma\epsilon}$
 $\frac{a}{a} \frac{b}{b} \frac{G}{G} \frac{G}{G} \frac{F}{F} \frac{F}{F} \frac{C}{C}$
13. $\frac{\epsilon}{\sigma\iota} \left| \frac{\gamma}{\tau\sigma\iota\epsilon} \right. \frac{\gamma}{\upsilon} \frac{\pi}{\psi\iota} \frac{\pi}{\iota\iota} \frac{\sigma}{\sigma\iota\sigma\iota\epsilon}$
 $\frac{a}{a} \frac{b}{b} \frac{G}{G} \frac{G}{G} \frac{F}{F} \frac{G}{G} \frac{a}{a}$
15. $\frac{\iota}{\sigma\upsilon} \left| \frac{\gamma}{\gamma\alpha} \right. \frac{\pi}{\mu\epsilon\iota\epsilon} \frac{\alpha}{\alpha} \frac{\alpha}{\alpha} \frac{\sigma}{\sigma\upsilon} \frac{\pi}{\tau\sigma\upsilon}$
 $\frac{a}{a} \frac{b}{b} \frac{G}{G} \frac{G}{G} \frac{F}{F} \frac{G}{G} \frac{a}{a}$
18. $\frac{\pi}{\sigma\upsilon} \left| \frac{\pi}{\lambda\upsilon\sigma\epsilon} \right. \frac{\gamma}{\tau\omega} \frac{\pi}{\gamma\epsilon}$
 $\frac{a}{a} \frac{a}{a} \frac{b}{b} \frac{G}{G} \frac{G}{G}$
19. $\frac{\iota}{\sigma\iota} \left| \frac{\gamma}{\tau\sigma\iota\epsilon} \right. \frac{\gamma}{\upsilon} \frac{\pi}{\psi\iota} \frac{\sigma}{\sigma\iota\sigma\iota\epsilon}$
 $\frac{a}{a} \frac{b}{b} \frac{G}{G} \frac{a}{a} \frac{b}{b} \frac{G}{G} \frac{a}{a}$
- ~~—————~~ $\frac{\pi}{\gamma\epsilon}$

Cadence c^b:

2. $\frac{u}{\sigma\sigma\upsilon} \left| \frac{\pi}{\lambda\sigma\upsilon} \right. \frac{\gamma}{\kappa\upsilon} \frac{\pi}{\rho\iota} \frac{\epsilon}{\epsilon}$
 $\frac{a}{a} \frac{a}{a} \frac{a}{a} \frac{F}{F} \frac{G}{G} \frac{F}{F}$
5. $\frac{\pi}{\sigma\sigma\upsilon} \left| \frac{\pi}{\lambda\sigma\upsilon} \right. \frac{\gamma}{\kappa\upsilon} \frac{\pi}{\rho\iota} \frac{\epsilon}{\epsilon}$
 $\frac{a}{a} \frac{a}{a} \frac{a}{a} \frac{F}{F} \frac{G}{G} \frac{F}{F}$
8. $\frac{\pi}{\sigma\sigma\upsilon} \left| \frac{\gamma}{\lambda\sigma\upsilon} \right. \frac{\gamma}{\kappa\upsilon} \frac{\pi}{\rho\iota} \frac{\epsilon}{\epsilon}$
 $\frac{c}{c} \frac{a}{a} \frac{a}{a} \frac{F}{F} \frac{G}{G} \frac{F}{F}$
12. $\frac{\iota}{\sigma\upsilon} \left| \frac{\gamma}{\tau\sigma\iota\epsilon} \right. \frac{\gamma}{\upsilon} \frac{\pi}{\psi\iota} \frac{\pi}{\iota\iota} \frac{\sigma}{\sigma\iota\sigma\iota\epsilon}$
 $\frac{a}{a} \frac{a}{a} \frac{a}{a} \frac{F}{F} \frac{G}{G} \frac{F}{F}$
14. $\frac{\pi}{\sigma\upsilon} \left| \frac{\pi}{\lambda\upsilon\sigma\epsilon} \right. \frac{\gamma}{\tau\omega} \frac{\pi}{\gamma\epsilon}$
 $\frac{a}{a} \frac{a}{a} \frac{a}{a} \frac{F}{F} \frac{G}{G} \frac{F}{F}$
16. $\frac{\iota}{\sigma\upsilon} \left| \frac{\gamma}{\lambda\upsilon\sigma\epsilon} \right. \frac{\gamma}{\tau\omega} \frac{\pi}{\gamma\epsilon}$
 $\frac{a}{a} \frac{a}{a} \frac{a}{a} \frac{F}{F} \frac{G}{G} \frac{F}{F}$
20. $\frac{u}{\sigma\sigma\upsilon} \left| \frac{\pi}{\lambda\sigma\upsilon} \right. \frac{\gamma}{\kappa\upsilon} \frac{\pi}{\rho\iota} \frac{\epsilon}{\epsilon}$
 $\frac{a}{a} \frac{a}{a} \frac{a}{a} \frac{F}{F} \frac{G}{G} \frac{F}{F}$

Psalmodic Cadences:

Protos	9.	$\begin{array}{c} \text{c} \\ \text{a} \end{array} \left \begin{array}{c} \text{c}^{\flat} \text{b}^{\flat} \text{a} \text{b} \text{G} \text{a} \text{a} \end{array} \right.$
Deuterios	9.	$\begin{array}{c} \text{c} \\ \text{b} \end{array} \left \begin{array}{c} \text{c}^{\flat} \text{a} \text{b} \text{b} \end{array} \right.$
Tritos	11.	$\begin{array}{c} \text{c} \\ \text{c} \end{array} \left \begin{array}{c} \text{d}^{\flat} \text{c}^{\flat} \text{b} \text{a} \text{b} \text{c} \end{array} \right.$
Tetartos	9.	$\begin{array}{c} \text{c} \\ \text{d} \end{array} \left \begin{array}{c} \text{e}^{\flat} \text{b}^{\flat} \text{c}^{\flat} \text{b} \text{c} \text{d} \end{array} \right.$
First Plagal	10.	$\begin{array}{c} \text{c} \\ \text{G} \end{array} \left \begin{array}{c} \text{a}^{\flat} \text{F} \text{E} \text{D} \end{array} \right.$
Second Plagal	11.	$\begin{array}{c} \text{c} \\ \text{a} \end{array} \left \begin{array}{c} \text{b}^{\flat} \text{G} \text{b}^{\flat} \text{a} \text{G} \text{F} \text{G} \end{array} \right.$
Barys	11.	$\begin{array}{c} \text{c} \\ \text{a} \end{array} \left \begin{array}{c} \text{b}^{\flat} \text{G} \text{G} \text{G} \end{array} \right.$
Barys	2.	$\begin{array}{c} \text{c}^{\flat} \\ \text{a} \end{array} \left \begin{array}{c} \text{a}^{\flat} \text{a} \text{F} \text{G} \text{E} \text{F} \end{array} \right.$
Fourth Plagal	9.	$\begin{array}{c} \text{c} \\ \text{G} \text{a} \end{array} \left \begin{array}{c} \text{b}^{\flat} \text{c}^{\flat} \text{a} \text{c} \text{b} \text{a} \text{G} \end{array} \right.$

Diagram no. 1: PROTOS

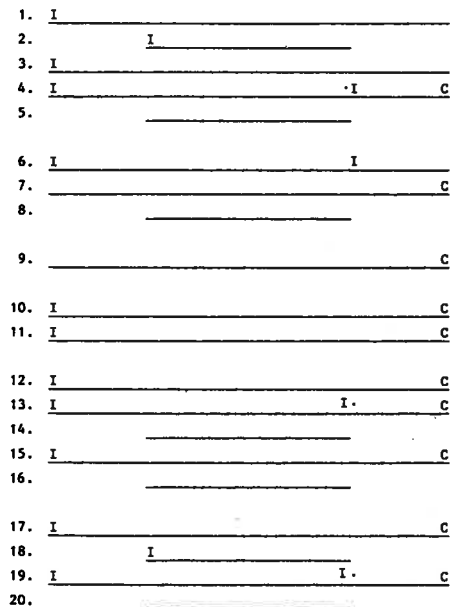


Diagram no. 2: DEUTEROS

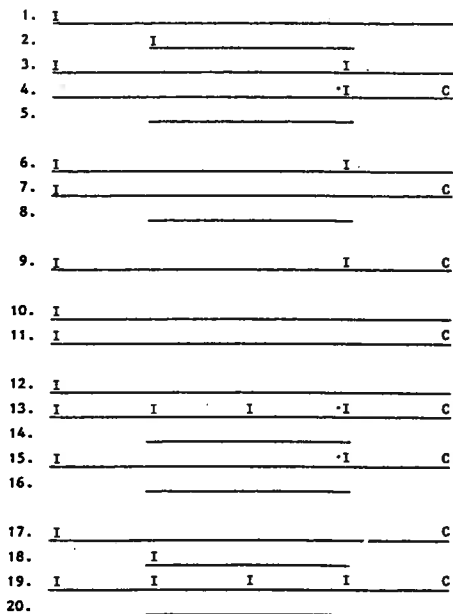


Diagram no. 3: TRITOS

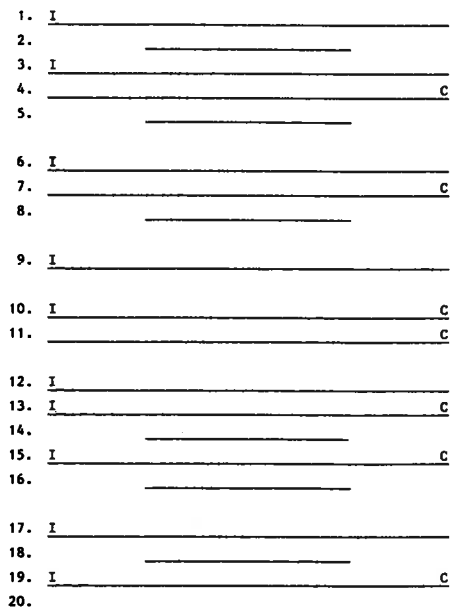


Diagram no. 4: TETARTOS

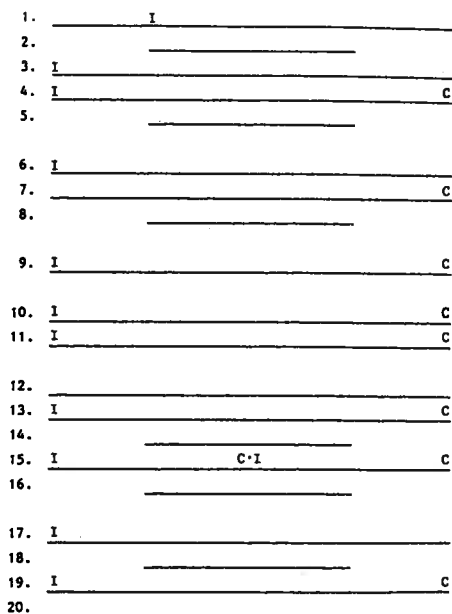


Diagram no. 5: FIRST PLAGAL

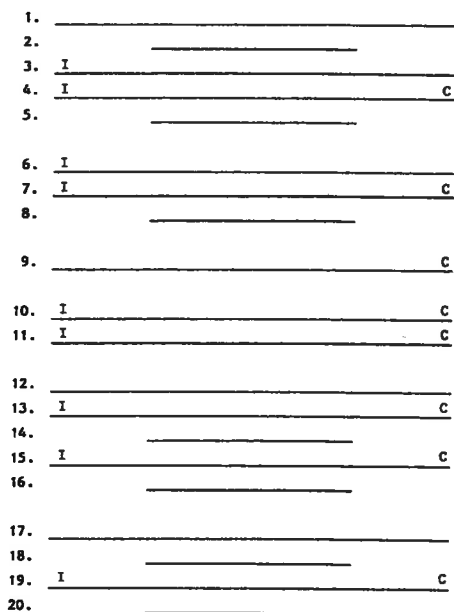


Diagram no. 6: SECOND PLAGAL

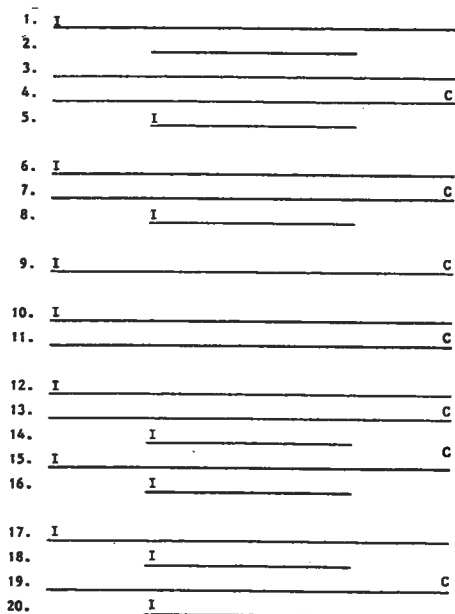


Diagram no. 7: BARYS

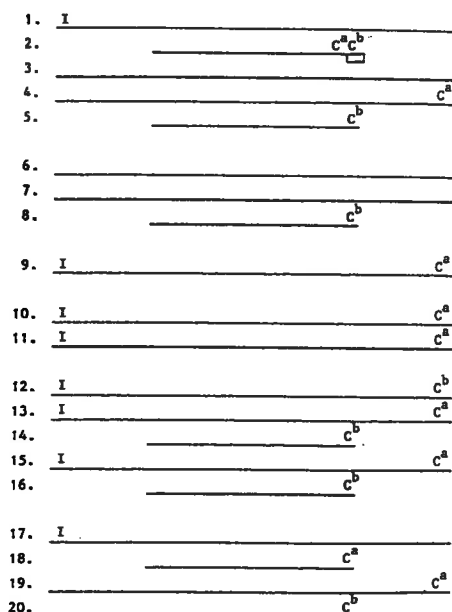
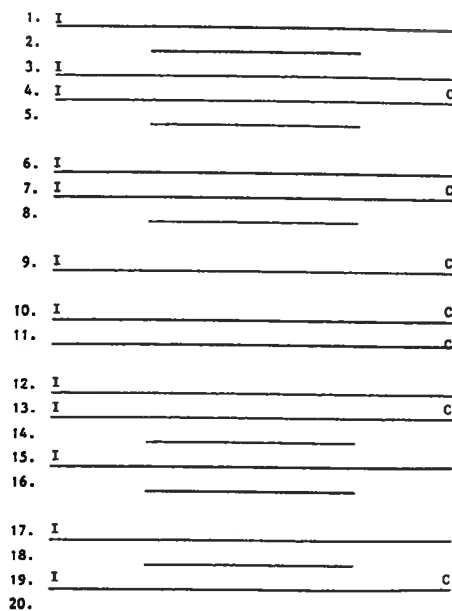
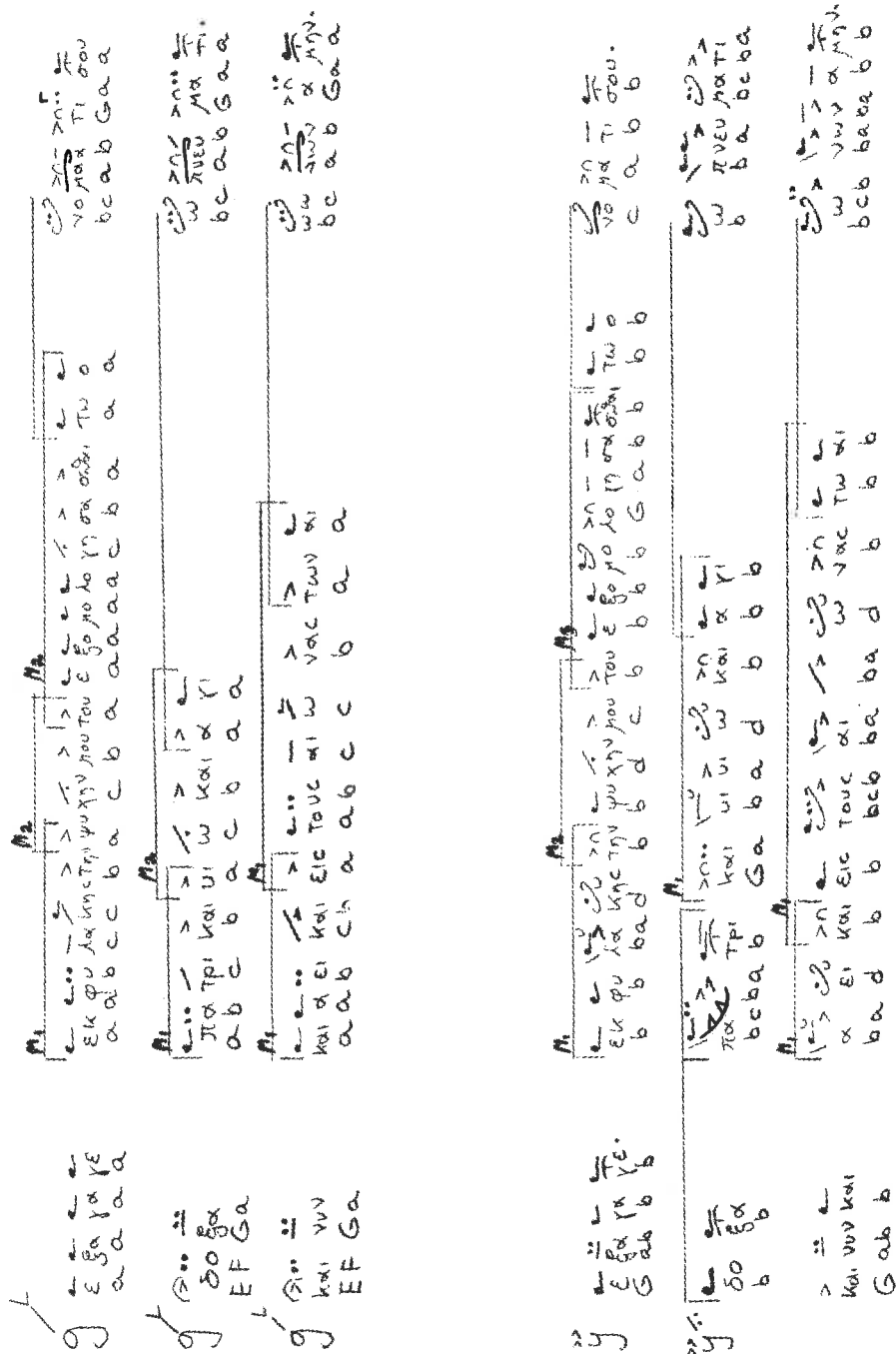
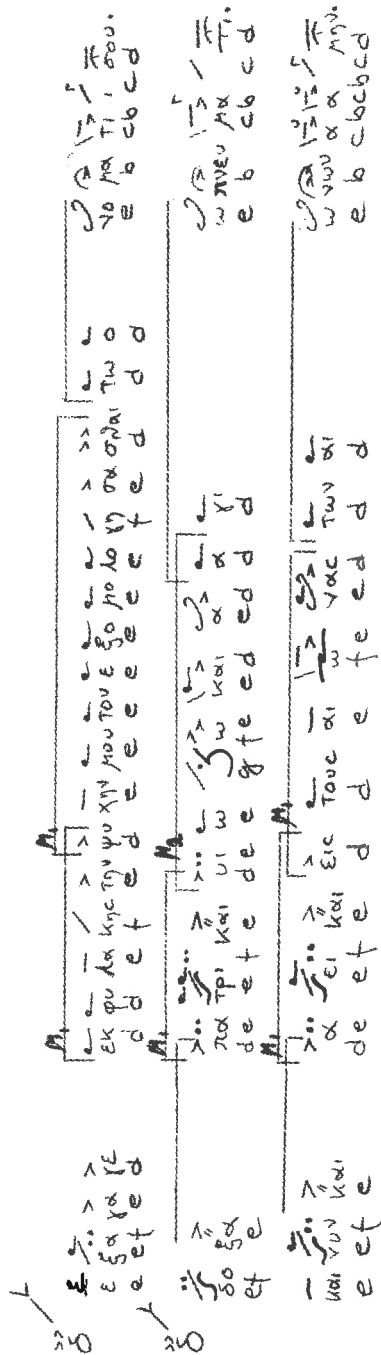
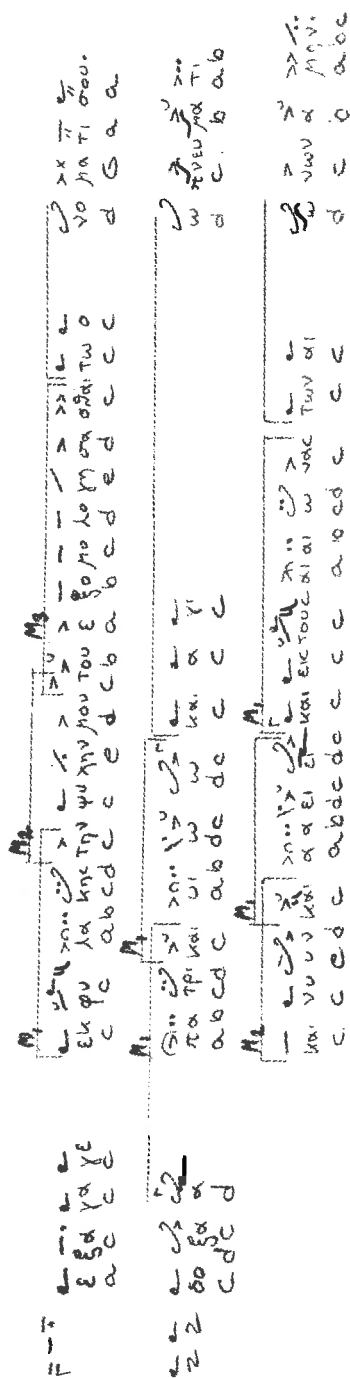


Diagram no. 8: FOURTH PLAGAL



Example 10





Example 11

Handwritten musical score for three voices (M1, M2, M3) and piano accompaniment. The score is written on a single page with a large, stylized 'M' at the top left. The notation includes various musical symbols such as clefs, notes, rests, and dynamic markings. The lyrics are written below the vocal staves. The piano part is indicated by 'P' and 'F' markings. The score is a single system, likely representing a short piece or a section of a larger work.

Handwritten musical notation on a page with a grid background. The notation includes various notes, rests, and bar lines, with some text written above and below the staff. The page is numbered 10 in the top right corner.

[illegible][illegible]

12
 $\alpha \alpha \alpha \alpha$
 $\alpha \alpha \alpha \alpha$

13
 $\alpha \alpha \alpha \alpha$
 $\alpha \alpha \alpha \alpha$

14

15
 $\alpha \alpha \alpha \alpha$
 $\alpha \alpha \alpha \alpha$

16

17
 $\alpha \alpha \alpha \alpha$
 $\alpha \alpha \alpha \alpha$

18

19
 $\alpha \alpha \alpha \alpha$
 $\alpha \alpha \alpha \alpha$

20

$\alpha \alpha \alpha \alpha$
 $\alpha \alpha \alpha \alpha$

$\alpha \alpha \alpha \alpha$
 $\alpha \alpha \alpha \alpha$

$\alpha \alpha \alpha \alpha$
 $\alpha \alpha \alpha \alpha$

$\alpha \alpha \alpha \alpha$
 $\alpha \alpha \alpha \alpha$

$\alpha \alpha \alpha \alpha$
 $\alpha \alpha \alpha \alpha$

$\alpha \alpha \alpha \alpha$
 $\alpha \alpha \alpha \alpha$

$\alpha \alpha \alpha \alpha$
 $\alpha \alpha \alpha \alpha$

$\alpha \alpha \alpha \alpha$
 $\alpha \alpha \alpha \alpha$

$\alpha \alpha \alpha \alpha$
 $\alpha \alpha \alpha \alpha$

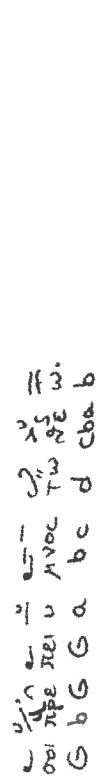
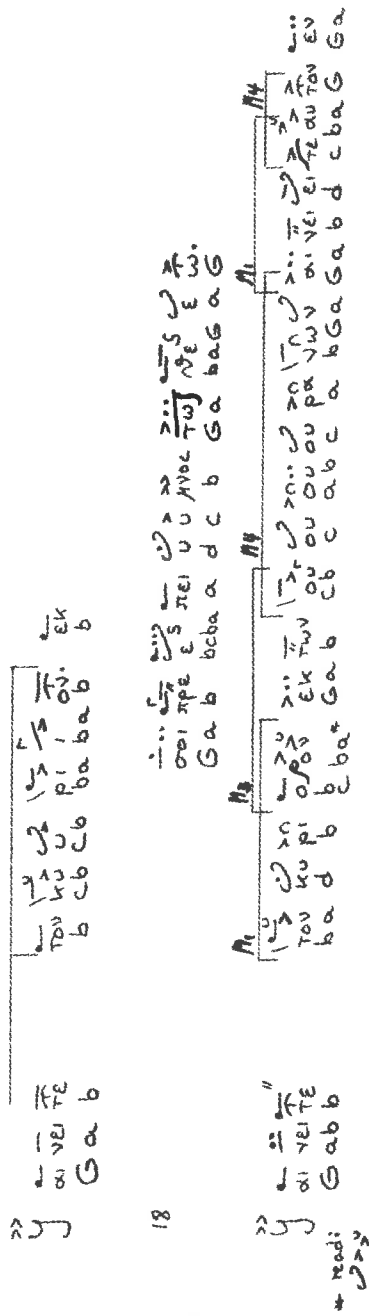
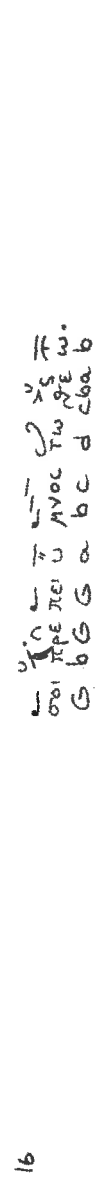
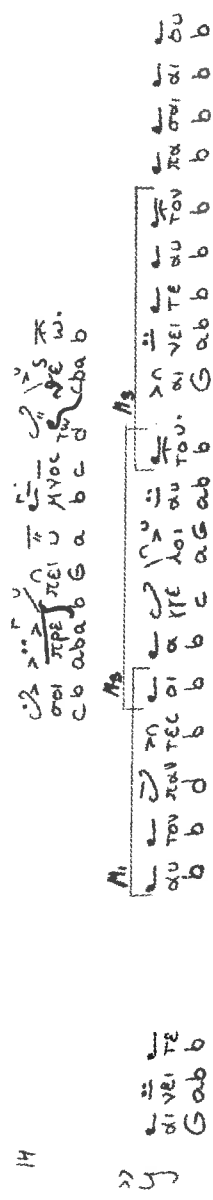
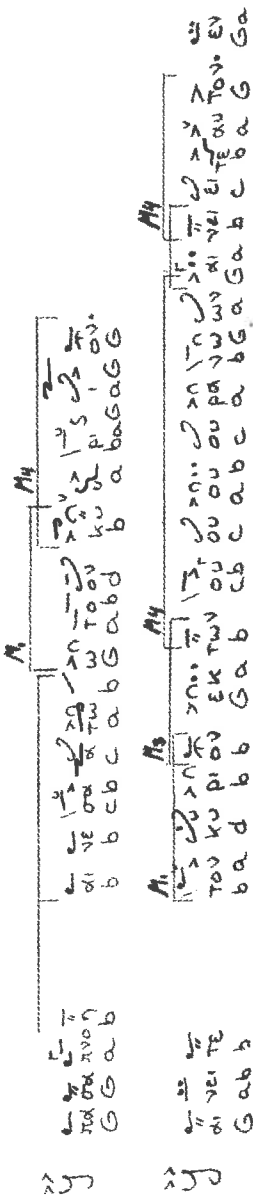
$\alpha \alpha \alpha \alpha$
 $\alpha \alpha \alpha \alpha$

$\alpha \alpha \alpha \alpha$
 $\alpha \alpha \alpha \alpha$

$\alpha \alpha \alpha \alpha$
 $\alpha \alpha \alpha \alpha$

$\alpha \alpha \alpha \alpha$
 $\alpha \alpha \alpha \alpha$

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12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040 1041 1042 1043 1044 1045

12/11/2020

$\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$
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$\frac{1}{\sqrt{2}} \begin{pmatrix} 1 & i \\ 0 & 1 \end{pmatrix}$

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$\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$
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$\begin{array}{c} \text{κ ρ α κ α} \\ \text{e b c b c d e} \end{array}$
 $\begin{array}{c} \text{ε κ ρ α κ α} \\ \text{e b c b c d e} \end{array}$

5a
 $\begin{array}{c} \text{ε κ ρ α κ α} \\ \text{c d e d d d c} \end{array}$
 $\begin{array}{c} \text{ε κ ρ α κ α} \\ \text{e d d c b c d d b c d e} \end{array}$

5b
 $\begin{array}{c} \text{ε κ ρ α κ α} \\ \text{c d e d d} \end{array}$
 $\begin{array}{c} \text{ε κ ρ α κ α} \\ \text{g f a g g f e t e f e} \end{array}$

6
 $\begin{array}{c} \text{κ ρ α κ α} \\ \text{d c d d e d c} \end{array}$
 $\begin{array}{c} \text{ε κ ρ α κ α} \\ \text{d c b a b a b c a b c d} \end{array}$
 $\begin{array}{c} \text{ε κ ρ α κ α} \\ \text{c d e c b a b c d b c} \end{array}$

7
 $\begin{array}{c} \text{ε κ ρ α κ α} \\ \text{d f e d c d c c c d b c d e d c c c c} \end{array}$
 $\begin{array}{c} \text{ε κ ρ α κ α} \\ \text{d c b a b a b c a b c d} \end{array}$
 $\begin{array}{c} \text{ε κ ρ α κ α} \\ \text{c d e d c c c c c c c} \end{array}$

8
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 $\begin{array}{c} \text{ε κ ρ α κ α} \\ \text{c d e c b a b c d b c} \end{array}$
 $\begin{array}{c} \text{ε κ ρ α κ α} \\ \text{c d e c b a b c d b c} \end{array}$

* read: $\begin{array}{c} \text{ε κ ρ α κ α} \\ \text{c d e c b a b c d} \end{array}$

$\pi\alpha\sigma\alpha\tau\omega\sigma\alpha$ $\pi\eta$ $\alpha\iota$ $\nu\epsilon$ $\sigma\alpha$ α $\tau\omega$ $\tau\omega\iota\omega$ $\kappa\omega$ $\pi\iota$ $\alpha\iota$ $\sigma\iota$
 $cbcd edeb cdeed eegte eded$

$\tau\omega\iota\epsilon$ ν $\pi\iota$ $\alpha\iota$ $\sigma\iota\omega\iota\epsilon$
 $e b c b c b c d$

$\alpha\iota$ $\nu\epsilon\iota\tau\epsilon$ $\tau\omega\iota\omega$ $\kappa\omega$ $\pi\iota$ $\alpha\iota$ $\sigma\iota$
 $eete d fed$

$\sigma\alpha\iota$ $\pi\epsilon\iota$ ν $\nu\alpha\sigma\tau\omega$ ω $\pi\epsilon\omega$
 $ced d c ed d b c d b c d e$

$\alpha\iota$ $\nu\epsilon\iota\tau\epsilon$ $\tau\omega\iota\omega$ $\kappa\omega$ $\pi\iota$ $\alpha\iota$ $\sigma\iota$
 $d ded c d d fed d c d c c d \alpha b a b c d d e d c d f e d d c c c c$

$\nu\alpha$ $\pi\epsilon\iota\epsilon$ $\alpha\iota$ $\sigma\iota$ $\tau\omega\iota\omega$
 $d \alpha b a b a b c$

$\sigma\alpha\iota$ $\pi\epsilon\iota$ ν $\nu\alpha\sigma\tau\omega$ ω $\pi\epsilon\omega$
 $b d c c c b d c c b a c b c a b c d$

$\tau\omega\iota\omega\iota\omega$ $\kappa\omega$ $\pi\iota$ $\alpha\iota$ $\sigma\iota$ $\tau\omega\iota\omega$ $\kappa\omega$ $\pi\iota$ $\alpha\iota$ $\sigma\iota$
 $b c d e e g t e e d d d d b e d e f e e d d b a$

$\sigma\alpha\iota$ $\pi\epsilon\iota$ ν $\nu\alpha\sigma\tau\omega$ ω $\pi\epsilon\omega$
 $b c d e c d e t e d e c d e$

$\tau\omega\iota\omega$ $\kappa\omega$ $\pi\iota$ $\alpha\iota$ $\sigma\iota$ $\tau\omega\iota\omega$ $\kappa\omega$ $\pi\iota$ $\alpha\iota$ $\sigma\iota$
 $d e e g t e e d d d d e f d c b c a a b c d e c d e g t e d$

$\tau\omega\iota\epsilon$ ν $\pi\iota$ $\alpha\iota$ $\sigma\iota\omega\iota\epsilon$
 $e b c b c b c d$

$\sigma\alpha\iota$ $\pi\epsilon\iota$ ν $\nu\alpha\sigma\tau\omega$ ω $\pi\epsilon\omega$
 $c e d d d c e d d c b d c d b c d e$

25

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2

$\frac{1}{\sqrt{2}} \begin{pmatrix} 1 & i \\ 0 & 1 \end{pmatrix}$

13

Handwritten notes and symbols, including the word "Hand" at the top, followed by various numbers and symbols (e.g., 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100) and some illegible handwriting.

二

[illegible]

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22

Handwritten notes and symbols, including mathematical expressions like $\frac{1}{2}$, $\frac{1}{3}$, and $\frac{1}{4}$, and various symbols like α , β , γ , δ , ϵ , ζ , η , θ , ι , κ , λ , μ , ν , ξ , \omicron , π , ρ , σ , τ , υ , ϕ , χ , ψ , ω , κ , λ , μ , ν , ξ , \omicron , π , ρ , σ , τ , υ , ϕ , χ , ψ , ω .

7

[illegible]

8

(Handwritten notes at bottom)

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|---|---|---|---|
| | A | E | O |
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| | A | C | S |
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| 2 | A | I | J |

$\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$
 $\frac{1}{2} \times \frac{1}{4} = \frac{1}{8}$
 $\frac{1}{4} \times \frac{1}{4} = \frac{1}{16}$
 $\frac{1}{8} \times \frac{1}{8} = \frac{1}{64}$
 $\frac{1}{16} \times \frac{1}{16} = \frac{1}{256}$
 $\frac{1}{64} \times \frac{1}{64} = \frac{1}{4096}$
 $\frac{1}{256} \times \frac{1}{256} = \frac{1}{65536}$
 $\frac{1}{4096} \times \frac{1}{4096} = \frac{1}{16777216}$
 $\frac{1}{65536} \times \frac{1}{65536} = \frac{1}{4294967296}$
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 $\frac{1}{4294967296} \times \frac{1}{4294967296} = \frac{1}{18446744073709551616}$
 $\frac{1}{65536} \times \frac{1}{65536} = \frac{1}{4294967296}$
 $\frac{1}{16777216} \times \frac{1}{16777216} = \frac{1}{281474976710656}$
 $\frac{1}{4294967296} \times \frac{1}{4294967296} = \frac{1}{18446744073709551616}$

20
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$\frac{1}{\sqrt{2}}$

11 2 0
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 15 2 4
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 18 2 0
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$\frac{1}{\sqrt{2}} \begin{pmatrix} 1 & i \\ -1 & i \end{pmatrix}$
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 $\frac{1}{\sqrt{2}} \begin{pmatrix} 1 & 0 \\ 0 & -i \end{pmatrix}$
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Handwritten notes and symbols, including musical notation and mathematical symbols like Δ and ∇ .

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$\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$
 $\frac{1}{2} \times \frac{1}{4} = \frac{1}{8}$
 $\frac{1}{2} \times \frac{1}{8} = \frac{1}{16}$

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W F FEEDDC EFG α abα aGFG

$$\begin{bmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{bmatrix}$$

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$\frac{1}{2}$

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$\frac{1}{2} = 0.5$
 $\frac{1}{3} = 0.33$
 $\frac{1}{4} = 0.25$
 $\frac{1}{5} = 0.2$
 $\frac{1}{6} = 0.16$
 $\frac{1}{7} = 0.14$
 $\frac{1}{8} = 0.125$
 $\frac{1}{9} = 0.11$
 $\frac{1}{10} = 0.1$
 $\frac{1}{11} = 0.09$
 $\frac{1}{12} = 0.08$
 $\frac{1}{13} = 0.077$
 $\frac{1}{14} = 0.071$
 $\frac{1}{15} = 0.066$
 $\frac{1}{16} = 0.0625$
 $\frac{1}{17} = 0.0588$
 $\frac{1}{18} = 0.0555$
 $\frac{1}{19} = 0.0526$
 $\frac{1}{20} = 0.05$
 $\frac{1}{21} = 0.0476$
 $\frac{1}{22} = 0.0454$
 $\frac{1}{23} = 0.0434$
 $\frac{1}{24} = 0.0416$
 $\frac{1}{25} = 0.04$
 $\frac{1}{26} = 0.0384$
 $\frac{1}{27} = 0.037$
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 $\frac{1}{39} = 0.02564$
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 $\frac{1}{50} = 0.02$
 $\frac{1}{51} = 0.01960$
 $\frac{1}{52} = 0.01923$
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 $\frac{1}{54} = 0.01851$
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 $\frac{1}{57} = 0.01754$
 $\frac{1}{58} = 0.01724$
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 $\frac{1}{61} = 0.01639$
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 $\frac{1}{66} = 0.01515$
 $\frac{1}{67} = 0.01492$
 $\frac{1}{68} = 0.01470$
 $\frac{1}{69} = 0.01449$
 $\frac{1}{70} = 0.01428$
 $\frac{1}{71} = 0.01408$
 $\frac{1}{72} = 0.01388$
 $\frac{1}{73} = 0.01369$
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 $\frac{1}{76} = 0.01315$
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 $\frac{1}{79} = 0.01265$
 $\frac{1}{80} = 0.0125$
 $\frac{1}{81} = 0.01234$
 $\frac{1}{82} = 0.0122$
 $\frac{1}{83} = 0.01207$
 $\frac{1}{84} = 0.0119$
 $\frac{1}{85} = 0.01176$
 $\frac{1}{86} = 0.01162$
 $\frac{1}{87} = 0.01149$
 $\frac{1}{88} = 0.01136$
 $\frac{1}{89} = 0.01123$
 $\frac{1}{90} = 0.01111$
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 $\frac{1}{92} = 0.01086$
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 $\frac{1}{97} = 0.0103$
 $\frac{1}{98} = 0.0102$
 $\frac{1}{99} = 0.0101$
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$\left[\begin{array}{c} \text{Y} \\ \text{L} \\ \text{TE} \\ \text{a} \end{array} \right]$

M_1 M_2 M_3 M_4 M_5 M_6 M_7 M_8 M_9 M_{10} M_{11} M_{12} M_{13} M_{14} M_{15} M_{16} M_{17} M_{18} M_{19} M_{20} M_{21} M_{22} M_{23} M_{24} M_{25} M_{26} M_{27} M_{28} M_{29} M_{30} M_{31} M_{32} M_{33} M_{34} M_{35} M_{36} M_{37} M_{38} M_{39} M_{40} M_{41} M_{42} M_{43} M_{44} M_{45} M_{46} M_{47} M_{48} M_{49} M_{50} M_{51} M_{52} M_{53} M_{54} M_{55} M_{56} M_{57} M_{58} M_{59} M_{60} M_{61} M_{62} M_{63} M_{64} M_{65} M_{66} M_{67} M_{68} M_{69} M_{70} M_{71} M_{72} M_{73} M_{74} M_{75} M_{76} M_{77} M_{78} M_{79} M_{80} M_{81} M_{82} M_{83} M_{84} M_{85} M_{86} M_{87} M_{88} M_{89} M_{90} M_{91} M_{92} M_{93} M_{94} M_{95} M_{96} M_{97} M_{98} M_{99} M_{100}

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$\frac{1}{2} \times \frac{1}{2}$

[illegible]

$\frac{1}{\sqrt{2}} \begin{pmatrix} 0 \\ 1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{pmatrix}$

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$\frac{1}{\sqrt{2}}$

[illegible]

Handwritten notes on the left margin:

Handwritten notes on the right margin:

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[illegible]

11

[illegible]

ॐ नमो भगवते वासुदेवाय
 ॐ नमो भगवते वासुदेवाय
 ॐ नमो भगवते वासुदेवाय
 ॐ नमो भगवते वासुदेवाय

20

[illegible]

Handwritten musical notation on a single staff, featuring various notes, rests, and accidentals.

$$\begin{array}{ccccccc} \frac{\partial^2}{\partial x^2} & \frac{\partial^2}{\partial y^2} & \frac{\partial^2}{\partial z^2} & \frac{\partial^2}{\partial t^2} & \frac{\partial^2}{\partial x \partial y} & \frac{\partial^2}{\partial x \partial z} & \frac{\partial^2}{\partial x \partial t} \\ \frac{\partial^2}{\partial y \partial x} & \frac{\partial^2}{\partial y \partial y} & \frac{\partial^2}{\partial y \partial z} & \frac{\partial^2}{\partial y \partial t} & \frac{\partial^2}{\partial z \partial x} & \frac{\partial^2}{\partial z \partial y} & \frac{\partial^2}{\partial z \partial z} \\ \frac{\partial^2}{\partial z \partial x} & \frac{\partial^2}{\partial z \partial y} & \frac{\partial^2}{\partial z \partial z} & \frac{\partial^2}{\partial z \partial t} & \frac{\partial^2}{\partial t \partial x} & \frac{\partial^2}{\partial t \partial y} & \frac{\partial^2}{\partial t \partial z} \end{array}$$
[illegible][illegible][illegible]


$\frac{1}{\sqrt{2}} \begin{pmatrix} 1 & i \\ 0 & 1 \end{pmatrix}$

(Handwritten notes, mostly illegible due to extreme blur)

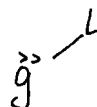
[illegible]

Handwritten musical notation and notes: $\text{be } a \text{ G } a \text{ b } c \text{ b } a$


$\frac{1}{x} = x^{-1}$

Ps-140:1&2, Vespers. 


1. Κύριε, ἐκέκραξα, πρὸς σέ, εἰσάκουσόν μου,
2. εἰσάκουσόν μου, κύριε.
3. κύριε, ἐκέκραξα, πρὸς σέ, εἰσάκουσόν μου;
4. πρόσχες τῇ φωνῇ τῆς δεήσεώς μου,
ἐν τῷ κεκραγέναι με πρὸς σέ,
5. εἰσάκουσόν μου, κύριε.
6. Κατευθυνθήτω ἡ προσευχή μου, ὡς θυμίαμα ἐνώπιόν σου;
7. ἔπαρσις τῶν χειρῶν μου θυσία ἐσπερινή;
8. εἰσάκουσόν μου, κύριε.

Ps.150 & 148:1&2, Orthros. 


12. Πᾶσα πνοὴ αἰνεσάτω τὸν κύριον.
13. αἰνεῖτε τὸν κύριον ἐκ τῶν οὐρανῶν,
αἰνεῖτε αὐτὸν ἐν τοῖς ὑψίστοις.
14. σοὶ πρέπει ὕμνος τῷ θεῷ.
15. αἰνεῖτε αὐτόν, πάντες οἱ ἄγγελοι αὐτοῦ;
αἰνεῖτε αὐτόν, πᾶσαι αἱ δυνάμεις αὐτοῦ.
16. σοὶ πρέπει ὕμνος τῷ θεῷ.
17. Αἰνεῖτε τὸν κύριον ἐκ τῶν οὐρανῶν,
18. σοὶ πρέπει ὕμνος τῷ θεῷ.
19. αἰνεῖτε τὸν κύριον ἐκ τῶν οὐρανῶν,
αἰνεῖτε αὐτόν ἐν τοῖς ὑψίστοις.
20. σοὶ πρέπει ὕμνος τῷ θεῷ.

Ps.140:1&2, Vespers. 


1. Κύριε, ἐκέκραξα, πρὸς σέ, εἰσάκουσόν μου,
2. εἰσάκουσόν μου, κύριε.
3. κύριε, ἐκέκραξα, πρὸς σέ, εἰσάκουσόν μου;
4. πρόσχες τῇ φωνῇ τῆς δεήσεως μου,
ἐν τῷ κεκραγέναι με πρὸς σέ,
5. εἰσάκουσόν μου, κύριε.
6. Κατευθυνθήτω ἡ προσευχή μου, ὡς θυμίαμα ἐνώπιόν σου;
7. ἔπαρσις τῶν χειρῶν μου θυσία ἐσπερινή;
8. εἰσάκουσόν μου, κύριε.

Ps.150 & 148:1&2, Orthros. 

12. Πᾶσα πνοὴ αἰνεσάτω τὸν κύριον.
13. αἰνεῖτε τὸν κύριον ἐκ τῶν οὐρανῶν,
αἰνεῖτε αὐτόν ἐν τοῖς ὑψίστοις.
14. σοὶ πρέπει ὕμνος τῷ θεῷ.
15. αἰνεῖτε αὐτόν, πάντες οἱ ἄγγελοι αὐτοῦ;
αἰνεῖτε αὐτόν πᾶσαι αἱ δυνάμεις αὐτοῦ.
16. σοὶ πρέπει ὕμνος τῷ θεῷ
17. Αἰνεῖτε τὸν κύριον ἐκ τῶν οὐρανῶν,
18. σοὶ πρέπει ὕμνος τῷ θεῷ.
19. αἰνεῖτε τὸν κύριον ἐκ τῶν οὐρανῶν,
αἰνεῖτε αὐτόν ἐν τοῖς ὑψίστοις.
20. σοὶ πρέπει ὕμνος τῷ θεῷ.

Ps.140:1&2, Vespers. 

1. Κύριε, ἐκέκραξα, πρὸς σέ, εἰσάκουσόν μου.
2. εἰσάκουσόν μου, κύριε.
3. κύριε, ἐκέκραξα, πρὸς σέ, εἰσάκουσόν μου;
4. πρόσχες τῇ φωνῇ τῆς δεήσεώς μου,
ἐν τῷ κεκραγέναι με πρὸς σέ,
5. εἰσάκουσόν μου, κύριε.
6. Κατευθυνθήτω ἡ προσευχή μου, ὡς θυμίαμα ἐνώπιόν σου;
7. ἔπαρσις τῶν χειρῶν μου θυσία ἐσπερινή;
8. εἰσάκουσόν μου, κύριε.

Ps.150 & 148:1&2, Orthros. 

12. Πᾶσα πνοὴ αἰνεσάτω τὸν κύριον.
13. αἰνεῖτε τὸν κύριον ἐκ τῶν οὐρανῶν,
αἰνεῖτε αὐτὸν ἐν τοῖς ὑψίστοις.
14. σοὶ πρέπει ὕμνος τῷ θεῷ.
15. αἰνεῖτε αὐτόν, πάντες οἱ ἄγγελοι αὐτοῦ,
αἰνεῖτε αὐτόν, πᾶσαι αἱ δυνάμεις αὐτοῦ.
16. σοὶ πρέπει ὕμνος τῷ θεῷ.
17. Αἰνεῖτε τὸν κύριον ἐκ τῶν οὐρανῶν,
18. σοὶ πρέπει ὕμνος τῷ θεῷ.
19. αἰνεῖτε τὸν κύριον ἐκ τῶν οὐρανῶν,
αἰνεῖτε αὐτόν ἐν τοῖς ὑψίστοις.
20. σοὶ πρέπει ὕμνος τῷ θεῷ.

Ps.140:1&2, Vespers. $\text{π}^{\text{λ}} \text{ψ}^{\text{ν}}$.

1. Κύριε, ἐκέκραξα, πρὸς σέ, εἰσάκουσόν μου.
2. εἰσάκουσόν μου, κύριε.
3. $\overline{\text{κύριε}}, \overline{\text{ἐκέκραξα}}$, πρὸς σέ, εἰσάκουσόν μου;
4. πρόσχες τῇ φωνῇ τῆς δεήσεώς μου,
ἐν τῷ κεκραγέναι με πρὸς σέ,
5. εἰσάκουσόν μου, κύριε.
6. Κατευθυνθήτω ἡ προσευχή μου, $\overline{\text{ὡς θυμίαμα}}$ ἐνώπιόν σου;
7. ἔπαρσις τῶν χειρῶν μου θυσία ἐσπερινή;
8. εἰσάκουσόν μου, κύριε.

Ps.150 & 148:1&2, Orthros. $\text{λ}^{\text{ψ}} \text{ν}^{\text{π}}$.

12. Πᾶσα πνοὴ αἰνεσάτω τὸν κύριον.
13. αἰνεῖτε $\overline{\text{τὸν κύριον}}$ ἐκ τῶν οὐρανῶν,
αἰνεῖτε αὐτὸν ἐν τοῖς ὑψίστοις.
14. σοὶ πρέπει ὕμνος τῷ θεῷ.
15. αἰνεῖτε αὐτόν, πάντες οἱ ἄγγελοι αὐτοῦ;
αἰνεῖτε αὐτόν, πᾶσαι αἱ δυνάμεις αὐτοῦ.
16. σοὶ πρέπει ὕμνος τῷ θεῷ.
17. Αἰνεῖτε τὸν κύριον ἐκ τῶν οὐρανῶν,
18. σοὶ πρέπει ὕμνος τῷ θεῷ.
19. αἰνεῖτε $\overline{\text{τὸν κύριον}}$ ἐκ τῶν οὐρανῶν,
αἰνεῖτε αὐτόν ἐν τοῖς ὑψίστοις.
20. σοὶ πρέπει ὕμνος τῷ θεῷ.

Ps.140:1&2, Vespers.

1. Κύριε, ἐκέκραξα, πρὸς σέ, εἰσάκουσόν μου,
2. ⁴ ⁵ εἰσάκουσόν μου, κύριε.
3. ⁴ κύριε, ἐκέκραξα, πρὸς σέ, εἰσάκουσόν μου;
4. πρόσχες τῇ ⁵ φωνῇ τῆς δεήσεώς μου,
ἐν τῷ κεκραγέναι με πρὸς σέ,
5. εἰσάκουσόν μου, κύριε.
6. ⁵ κατευθυνθήτω ἡ προσευχή μου, ὡς θυμίαμα ἐνώπιόν σου;
7. ἔπαρσις τῶν χειρῶν μου ⁵ θυσία ἐσπερινή;
8. εἰσάκουσόν μου, κύριε.

Ps.150 & 148:1&2, Orthros.

12. Πᾶσα πνοὴ αἰνεσάτω τὸν κύριον.
13. αἰνεῖτε τὸν κύριον ἐκ τῶν οὐρανῶν,
αἰνεῖτε αὐτὸν ἐν τοῖς ὑψίστοις.
14. σοὶ πρέπει ὕμνος τῷ θεῷ.
15. αἰνεῖτε αὐτόν, πάντες οἱ ἄγγελοι αὐτοῦ;
αἰνεῖτε αὐτόν, πᾶσαι αἱ δυνάμεις αὐτοῦ.
16. σοὶ πρέπει ὕμνος τῷ θεῷ.
17. Αἰνεῖτε τὸν κύριον ἐκ τῶν οὐρανῶν,
18. σοὶ πρέπει ὕμνος τῷ θεῷ.
19. αἰνεῖτε τὸν κύριον ἐκ τῶν οὐρανῶν,
αἰνεῖτε αὐτόν ἐν τοῖς ὑψίστοις.
20. σοὶ πρέπει ὕμνος τῷ θεῷ.