

Interpretation of Tones and Modes in Theoretical Handbooks of the 15th century

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Introduction

Undoubtedly, the ecclesiastical modes, as is also the case for the musical modal system in general, constitute one of the most interesting, yet at the same time one of the most difficult chapters in the history of music¹. This has to do with the fact that the aforementioned subjects are shaped by various factors, such as, mathematics, the physical sciences, philosophy, by theology, etc.² Christianity adopted some of the theoretical and technical principles of the ancient Greek modal system, but it related the eight *echoi* (modes) and the *octaechia* as a liturgical phenomenon to its own practice within the bounds of the theological symbolisms and the doctrine of the Church³. On the other hand, the musical system of the Christian East remains basically polymodal and the whole structure of Byzantine and post-Byzantine liturgical melody is founded on that perspective⁴.

Concerning the Byzantine polymodal system, certain theoretical handbooks of the late Middle Ages are particularly enlightening. Among these is an anonymous text having the following characteristic inscription:

Ἐτέρα παραλλαγή καὶ μέθοδος καὶ μητροφωνία τῆς ψαλτικῆς τέχνης, περιέχουσα ἅπασαν τῶν ἡ' ἤχων τὴν ἐρμηνείαν, ποῦ καταντᾶ εἰς ἕκαστος καὶ ποῦ κεῖται καὶ πῶς εἰς ἕκαστος ἤχος ἔχει. ἤγουν οἱ κύριοι, μέσους καὶ παραμέσους, καὶ οἱ πλάγιοι, διφώνους, καὶ τριφώνους, καὶ τετραφώνους. καὶ διερμηνεύει ταῦ-

τα ὁ μακαρίτης ἐκεῖνος κύρ Ἰωάννης μαῖστωρ ὁ Κουκουζέλης, ἐν τῇ σοφωτάτῃ αὐτοῦ μεθόδῳ: Αὕτη ἐστὶν ἡ ἐρμηνεία τῶν φωνῶν καὶ ἤχων⁵.

The text above is the first, amongst two other related interpretations which were formulated by the well-known music theoreticians: Ioannes Plousiadenos⁶ and Ioannes Laskares⁷. All three texts refer to the great Maestor Ioannes Koukouzeles, who appears to introduce and systematically form the Byzantine polymodal system. A fact that, from the beginning, takes for granted the significance of the musical theory of that kind⁸.

This paper is an attempt at an analytical presentation of the content of the aforementioned anonymous text, which bears the specific title: "Interpretation of tones and modes". This presentation will be in two parts: First we shall examine the manuscript tradition of the text and its content and secondly we shall analyze its relation to the other two similar interpretations of the polymodal system and its significance in the development and formulation of Byzantine and post-Byzantine musical theory as a whole.

1. Manuscript tradition and content

Our text is partially of a theoretical nature which was common in theoretical treatises and methods concerning Byzantine music. We find it in two important manuscripts: MS Athonite Dionysiou 570 (15th century) and MS Athens 968 (17th

century). We are mainly interested in the Athonite MS⁹. It is the most complete selection of theoretical dissertations and methods, which coexists along with the *Mathematarion*. The most important point regarding this MS though appears to be that it was written by the priest Ioannes Plousiadenos, a great representative of Psaltic Art in the late 15th century¹⁰. Here then, our text occupies a significant place. It constitutes the apogee of a major unity, which includes the first elements of theory, as seen by the titles of the chapters: 'Concerning the tones', 'Division of music' and 'Interpretation of *echemata*', along with various methods: the 'octaecho', the 'diplophonia' and finally 'the classification of the great *hypostases*'¹¹. It seems, however, that the 'Interpretation of tones and modes' was not only a learning method of primary importance for the student. At the same time its theoretical material is of particular importance and is related to older levels of theory. It may belong to the group known as the anonymous handbooks A, B, C, D, etc., given that the Athonite MS 570 presents our text after these¹².

It is also characteristic that our text is presented first in MS Dionysiou 570, which goes on to compile Ioannes Laskares' similar interpretation; the well known dissertation of Hieromonachos Gabriel; several pre-theories and methods and also another method similar to the method of *parallage* (παρὰλλαγή) of Ioannes Plousiadenos¹³. Therefore it would seem that the very important Athonite MS Dionysiou 570 forms a complete coverage of almost the entire theoretical material of Byzantine music, where the methods of interpretation and *parallage* of the modal system hold a significant place. Furthermore, the depth, the arrangement and the philological formation of the content, as we shall see below, show our text to be superior to the other two similar texts within the same MS, that of Ioannes Laskares and that of Ioannes Plousiadenos. Thus, despite Plousiadenos' flattering title to

Laskares' interpretation: 'Ἐτέρα παραλλαγή τῆς μουσικῆς τέχνης, σοφώτερα καὶ ἀκριβεστέρα εἰς ἄκρον'¹⁴, our text seems to supply information on both interpretations (Laskares - Plousiadenos).

The content of our text is specified in its long title, which refers to the proper technical terminology¹⁵. The terms *parallage* and *metrophonia* are of course two of the most difficult aspects of music theory. It is characteristic, nevertheless, that in every reference to the modes - according to the interpretation of their *parallage* - their signatures are included. Thus, the term *metrophonia* in the title possibly refers to this fact and it prepares us for the relationship of primary importance between *parallage* and *metrophonia*. In the title, as well, are defined the groups of modes: κύριοι, πλάγιοι, μέσοι, παραμέσοι, δίφωνοι, τρίφωνοι and τετράφωνοι¹⁶. Finally there exists also the significant evidence which presents Maestor Ioannes Koukouzeles as the instigator (architect) of the polymodal system. The master in question, analyses all the types of modes "ἐν τῇ σοφωτάτῃ αὐτοῦ μεθόδῳ"¹⁷.

Our text is divided basically into two parts, in which the *parallage* and *metrophonia* of the two principal categories of modes: the authentic and the plagal modes are described¹⁸. In this way, every part refers separately to the four cases of every category. A smaller part constitutes a kind of short preface, while an even smaller part with general instructions, brings the text to an end¹⁹.

The preface gives the basic theory for the creation of the first categories of the modes which are the plagal and the *mesoi*, then a corresponding descent of voice every four tones and every two tones is described. Furthermore, it is here that, for the first time, the term *parakyrioi* modes is mentioned, which refers to the second *tetrad*es of modes, to the plagal modes upon which the *mesoi* conclude. At this point also, it is made clear that because there is an organic relationship

among the first four categories of modes (authentic, plagal, *mesoi*, *mesoi* of the *mesoi*), their distinction is made by the length of time during which the melody stays at every category of mode and their conclusions which coincide.

In all cases of the four authentic and the four plagal modes, the *parallage* of our text applies the same technique. That is, it ascends successively four tones and then descends in the same way. With this technique, the rest of the modal groups and their cases are created from the different rungs and bases of the authentic modes.

This entire technique above is simplified by Hieromonachos Gabriel's '*Kanonion*', where only the signatures of the eight modes are mentioned²⁰. Thus, while we know exactly the *metrophonia*, we do not know the specific characteristics of the modes' various categories. Because of this, we are obliged to consider in detail the whole text of our interpretation.

In the case of the First mode, ascending to the fourth tone our text refers to the proper *tetraphonos* First mode²¹. Descending three tones we have diphonos of Plagal Fourth²².

In the Second mode by ascending four tones we find *tetraphonos* Second²³. One tone downwards is Plagal First *Nenanos*²⁴. At this point it is verified that *Nenanos* is Third and Fourth modes because, Third mode was created from Second mode and Second from First mode and because: "τὰ γὰρ μέλη πολλάκις εἶωθε νικᾶν τὴν μετροφωνίαν"²⁵. Moreover, the *mesos* of Second *tetraphonos* is Third, because Third mode is *triphonos* of Plagal fourth, thus, "πᾶσα τριφωνία τὸν αὐτὸν ἦχον ποιεῖ"²⁶. In addition, three tones below Second mode is *Barys*, which changes into Plagal Second and *Legetos*²⁷. Finally, four tones below is Plagal Second or *eso* Second mode, because Second mode is the *diphonia* of Plagal Fourth and *triphonia* of *Barys* mode²⁸.

Three tones above Third mode is Second mode, also named 'tied' (*δεμένος*) Third and four tones above is *tetraphonos*

Third or 'double' Third²⁹. Finally, three tones below Third mode is Plagal Fourth, which is again Third mode, because it is *triphonos* of Plagal Fourth³⁰.

Three tones above Plagal First mode is *tetraphonos* First mode, which is also its authentic mode³¹.

Three tones above Plagal Second mode is *Nenano*, which is Third and Fourth modes³². Because three tones above is also First, which (decays) and changes into *Nenano*³³. Further, ascending four tones it turns into *tetraphonos* Second, which is first and second and because of *phthora* it becomes Third³⁴. Three tones below is *Barys* mode, which is Plagal Second and *Legetos*, because *Legetos* changes into *Barys* mode and Plagal Second³⁵.

With regards to *Barys* mode, when we refer to its *tetraphonos* it is again the authentic mode. In the same way that one tone above Third mode is Fourth mode, one tone above *Barys* mode is Fourth mode, which is a Third mode from the *parallage* and not Fourth mode, Finally, four tones above *Barys* mode is Third mode, its authentic mode, which is called *Nanas* (*νανάς*), while a tone below is *tetraphonos Barys* mode³⁶.

The Plagal Fourth mode, which is also *tetraphonos Barys* mode which in turn is Third mode as its authentic, is similar to Third mode, as its *triphonos* mode according to the canon "πᾶσα τριφωνία τὸν αὐτὸν ἦχον ποιεῖ"³⁷. Four tones above Plagal Fourth mode is *tetraphonos* Fourth mode, which is its authentic, the beginning of the plagal tones³⁸.

Our text comes to its conclusion with two precepts that refer to the following categories of modes: to *Legetos*, to *tetraphonos Barys*, and to *eso* First, Second, Third and Fourth modes³⁹.

2. Relation to other interpretations and importance

Our text, as is evident from its place in the selection of the theoretical material

of the MS Athos Dionysiou 570, is an anonymous dissertation, which, obviously, was taken into consideration and completed by our two well known representatives of Psaltic Art, Ioannes Plousiadenos⁴⁰ and Ioannes Laskares Kalomisides⁴¹. The material concerning the interpretation of the tones and modes must have been known by Hieromonachos Gabriel too. However, having a more practical and orderly mind, he worked out the ‘*Kanonion*’, which not only simplifies the *parallage*, but also presents the latter in a more systematic and pedagogical way, easier to memorize⁴². Specifically the rule “πᾶσα τριφωνία τὸν αὐτὸν ἦχον ποιεῖ”, is used by both the music theoreticians Ioannes Plousiadenos⁴³ and Ioannes Laskares⁴⁴. We also encounter the same matter in the references concerning the great Maestor Ioannes Koukouzeles, who is the undisputed instructor of the rules and methods of the polymodal system⁴⁵. We can not ignore, of course, the intimate relation of all interpretations and methods of *parallage* to the *Agiopolites*’ basic theory⁴⁶. But this treatise, in spite of its significance in the technical arrangement of the Byzantine modal system, has only archaic elements of theory, which lack the detailed analyses and applications of Koukouzeles’ practice.

Finally, with regard to the philological structure, our text apparently belongs to the theoretical material and to the group of the known anonymous dissertations A, B, C, D, etc., which are included in the collection bearing the title “Ἐρωταπο-

κρίσεις τῆς παπαδικῆς τέχνης”, ascribed to Saint John of Damascus⁴⁷.

Concluding our reference to the text *Interpretation of tones and modes*, we find that its content includes important elements and thorough analyses on the Byzantine polymodal systems’ complicated mechanism. Moreover, the relation of the modes’ system to Maestor Ioannes Koukouzeles on the one hand, and, its deeper relation to the modal system of Hellenic antiquity on the other hand, makes the text in question, as well as texts related with it, a witness to the vitality of the Byzantine musical civilization. The latter is also confirmed by the fact that the majority of the elements of Byzantine polymodal system were preserved during the post-Byzantine period, providing material even for the three masters’ analytical method of writing⁴⁸. Chrysanthos in his *Theoritikon* refers with clarity to modal systems, such as *triphonia*, *pentachordo*, *trocho*, etc.. Considering those, he admits that “ταῦτα πάντα ἐξηκριβώθησαν ἀπὸ Ἰωάννην τὸν Πλουσιαδηνόν”⁴⁹. Furthermore, contemporary music books include a great number of melodies whose terminology belongs to the old Byzantine polymodal system⁵⁰.

So beyond any formulation of a conclusion, the *Interpretation of tones and modes*, among the theoretical handbooks of the 15th century, constitutes a very useful method for the study and research even of the contemporary traditional Byzantine melody.

ἡ ἀρχὴ ἡ ἀρχὴ τῆς ἐρμηνείας, πρὸς καθάπερ
 εἰς ἑκάστην πρὸς κείτῃ. ἔπειτα εἰς ἕκαστος
 ἡ γὰρ ἔχῃ. οἱ κυριοί, μεσοί καὶ τετραμεσοί.
 Σοὶ πλάγιοι, διφώνοι. καὶ τριφώνοι. καὶ
 τετραφώνοι. καὶ διερμηνεύει τὰ πρῶτα ὁμα
 κὰρ τρεῖς ἀγνοοῦσι ἰωμάει τωρόκουκουζέλης.
 οἱ τὸ σφῶτα τῆ αὐτοῦ μεθόδω.

καὶ αὐτὴ ἐστὶν ἐρμηνεία, τῶν φωνῶν καὶ ἡ γ.
Χ ρὴ δὲ εἰδέναι. ὅτι ἡχοὶ ἔσονται κυρίως τέσσαρες.
 αὐτοῦ τῶν οὐκ ἔσονται κυρίων. ἄλλοι οὐκ ἔσονται.
 ἢ ἀπὸ τοῦ πρώτου, ἢ ὁ πλάγιος αὐτοῦ π.
 εἰς τὸ δεύτερον, ἢ ὁμοῖος πλάγιος αὐτοῦ π.
 εἰς τὸ τρίτον, ἢ ὁμοῖος πλάγιος αὐτοῦ π.
 εἰς τὸ τέταρτον, ἢ ὁμοῖος πλάγιος αὐτοῦ π.
 Σύνον) κυριοί καὶ πλάγιοι, οὕτως. ἐπὶ δὲ εἰς ἕκαστος
 τῶν κυρίων καταβαίνει φωνὰς τέσσαρας καὶ ἄ
 ρισκῆ) ὁ πλάγιος αὐτοῦ, ὅτι καὶ δι' αὐτοῦ τὸ τέσσαρ
 κυριοί ἔσονται καὶ ἄχι πλεόν. λέγομεν δὲ καὶ πρῶτα
 κυριοί, ἀνάγκη ἔχει δεύτερον τούτων. εἰς τὴν
 μεσοῦν ἡχοὺς λείπονται. εἰς τοῦτον καὶ αὐτὸν ἢ πᾶσι
 ἐπιαναπαυομένη ἐπὶ αὐτῶ φύσει. εἰς τὸ διδύ
 ται πρῶτον πρὸς καθάπερ ζευγμένου μελοῖς ἡ χίω
 πρὸς δὲ γίνεται τοῦτο, δι' ἀβερμῶν ἐρούμεν. καὶ
 λάβωμεν τὸν τοῦ πρώτου ἡχοῦ, πλάγιον.

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Ζημι βελόθεν ἐπέτω δ· ἢ ἐπί τῶν ἐπιπέδων
 Τέταρτος ὅντος τῶν ἰσχυρῶν καὶ ἀλίστη· ὅτι περὶ
 ρίος· ἢ λίθιος· ἢ φρυγίος· ἢ ἀμιζολίθιος·
 ἐπὶ οὐρανῶν· ἢ ἀνὰ τῆς ἐπέκεινται ἐπὶ αὐτῶν·
 ἐκείνη δὲ τῆς ἐπιπέδων τοῖς ἐπιπέδοι· αἰετὶ
 κατὰ σφαιρὰς ἐπιπέδων· ὁ μὲν γὰρ σφαιρῶν
 Τῦ πῶτος, διὰ πῦρον ἐπιπέδων· καὶ ὁ μὲν ἀριστερῶν
 ἐπιπέδων· ὁ δὲ δεξιῶν ἐπιπέδων· Ζ
 ὁ δὲ πέμπτος καὶ ἐπιπέδων· ἢ ἐπί τῶν
 αἰετῶν, κατὰ δὲ ἐπιπέδων· ὁ δὲ δεξιῶν ἐπιπέδων
 πρῶτος· ἢ ἐπί τῶν πῶτος ὁ πρῶτος αἰετῶν· διὰ
 τῶν ἀριστερῶν ἐπιπέδων· ἢ ἐπιπέδων ἐπὶ
 αἰετῶν· ὁ δὲ ἐπί τῶν ἀριστερῶν· ἢ ἐπί τῶν
 τοῦ πρῶτος, ἐπιπέδων· διὰ τῶν ἐπιπέδων
 λίθιος· ὁ δὲ αἰετῶν πρῶτος, ἢ ἀμιζολίθιος· ὁ
 τῶν ἐπιπέδων· καὶ ὁ πρῶτος αἰετῶν ἐπιπέδων
 μεγάλου· ἢ ἀριστερῶν ἐπιπέδων φρυγίος· Ζ
 ὁ αἰετῶν πρῶτος ἢ φρυγίος· ὁ δὲ τῶν ἐπιπέδων
 αἰετῶν καὶ τῶν πῶτος· καὶ ὁ πρῶτος αἰετῶν ἐπιπέδων
 σφαιρῶν· ἢ διὰ τῶν ἐπιπέδων ἀμιζολίθιος·
 Ζ ὁ αἰετῶν πρῶτος, ἢ ἀμιζολίθιος· καὶ ὁ
 ὁ δὲ τῶν ἐπιπέδων ἐπιπέδων· ὁ δὲ τῶν ἐπιπέδων
 τῶν πρῶτος ἀμιζολίθιος· ἢ ἀμιζολίθιος·
 Τῶν πρῶτος καὶ τῶν πῶτος· ὁ δὲ τῶν ἐπιπέδων

Παραλλαγή

του

τα

ενταύθα τὰς κατιούσας ευρήσεις τῶν παρῆς

	$a_{\pi\gamma}$	$\omega_{\pi\gamma}$	$\Gamma^{-\pi}$	$\delta_{\pi\gamma}$	h
a	$\delta_{\pi\gamma}$	$a_{\pi\gamma}$	$\omega_{\pi\gamma}$	$\Gamma^{-\pi}$	ρ
b	$\Gamma^{-\pi}$	$\delta_{\pi\gamma}$	$a_{\pi\gamma}$	$\omega_{\pi\gamma}$	ζ
ζ	$\omega_{\pi\gamma}$	$\Gamma^{-\pi}$	$\delta_{\pi\gamma}$	$a_{\pi\gamma}$	ϵ
d	$a_{\pi\gamma}$	$\omega_{\pi\gamma}$	$\Gamma^{-\pi}$	$\delta_{\pi\gamma}$	d
ϵ	$\delta_{\pi\gamma}$	$a_{\pi\gamma}$	$\omega_{\pi\gamma}$	$\Gamma^{-\pi}$	ζ
ζ	$\Gamma^{-\pi}$	$\delta_{\pi\gamma}$	$a_{\pi\gamma}$	$\omega_{\pi\gamma}$	b
ρ	$\omega_{\pi\gamma}$	$\Gamma^{-\pi}$	$\delta_{\pi\gamma}$	$a_{\pi\gamma}$	a
h	$a_{\pi\gamma}$	$\omega_{\pi\gamma}$	$\Gamma^{-\pi}$	$\delta_{\pi\gamma}$	

ενταύθα λάμβανε τὰς ανιούσας ευρήσεις μεγέθους πάντας υψείους

μέθοδος σοφωτάτη ἡ δὲ σεῖς ἔχει σβα τῶν α κ φωνιζῶν Δομῆσια

δρι

να

