

UNION ACADÉMIQUE INTERNATIONALE
MONUMENTA
MUSICAE BYZANTINAE
SUBSIDIA

EDIDERUNT

CARSTEN HÖEG · H. J. W. TILLYARD
EGON WELLESZ

Volumen I
Fasc. 1

COPENHAGUE

MUNKSGAARD
1970

HANDBOOK
OF
THE MIDDLE BYZANTINE
MUSICAL NOTATION

BY

H. J. W. TILLYARD
D. LITT.
PROFESSOR OF GREEK AT UNIVERSITY COLLEGE CARDIFF

COPENHAGUE

MUNKSGAARD
1970

First published 1935
Second impression 1970
Composition: Fr. Bagges Kgl. Hofbogtrykkeri
Second impression printed in Denmark by
Villadsen & Christensen

ISBN 87 16 00277 6

PREFACE

This handbook is meant to serve as a companion to the *Monumenta Musicae Byzantinae*, in so far as the latter provide specimens of the Middle Byzantine musical notation, popularly called the Round System, which is the earliest form of Byzantine Neumes that can be definitely deciphered. Our aim therefore will be to give the rules of this system as clearly as possible: to explain the symbols usually found in musical manuscripts; and to illustrate by practical examples the method of transcription recommended by the editors of the *Monumenta Musicae Byzantinae*. It is to be hoped that the reader, after following our exposition, will be able to transcribe and perform any ordinary Byzantine hymn of which a manuscript copy or facsimile may be available. Now we are trying to provide for the needs of musical palaeographers and students of the history of music. Critics and the general musical public cannot be expected to appreciate a subject which has only just emerged from the experimental stage: but, when a greater body of hymns has been published in staff-notation, with the most needful explanations, then the artistic side of Byzantine music and its connexion with the Gregorian and other kindred systems can be more profitably discussed. The generosity and enlightened policy of the Danish Academy and the support of the Union of Academies allow us to hope that such a publication may be found possible before very long.

Our list of authorities is confined to modern books and articles that are of immediate use to the musical palaeographer. Several of these contain lists of older works. We have also included one or two collections of Greek folksongs.

My thanks are due firstly to Professor Höeg and Professor Wellesz, joint editors with me of the *Monumenta Musicae Byzantinae*, for their valuable cooperation; secondly to the Danish Academy and its

ex-president, Professor Drachmann; thirdly, to the Editor of the *BYZANTINISCHE ZEITSCHRIFT* for leave to reproduce a diagram — the latest, but, I hope, not the last, of many kindnesses from that quarter; and fourthly to the Governors of the Hort Fund at Cambridge, the British School at Athens and all scholars or academic bodies in Great Britain that have, at various times and in many different ways, helped me during my twenty-nine years' study of Byzantine Music.

University College, Cardiff.

H. J. W. TILLYARD.

CONTENTS

	Page
PREFACE	5
LIST OF AUTHORITIES	9
CHAPTER I. A GENERAL SURVEY	13
CHAPTER II. THE INTERVAL-SIGNS IN THE MIDDLE BYZANTINE NOTATION.	19
CHAPTER III. THE SUBSIDIARY SIGNS	25
CHAPTER IV. THE BYZANTINE MODES	30
CHAPTER V. MUSICAL EXAMPLES	37
INDEX	49

AUTHORITIES

- Benešević, V.: *Monumenta Sinaitica Archaeologica et Palaeographica*, Fasc. 2, Petropoli, 1912.
- Cereteli, F. G. and Sobolevski, S.: *Exempla codicum Graecorum*: vol. I *codices Mosquenses*: vol. II *Codices Petropolitani*, Mosquae, 1911, 1913.
(Both series contain facsimiles of Byzantine Musical MSS).
- Bourgault-Ducoudray, L.: *Études sur la musique ecclésiastique grecque*, Paris, 1877.
(On the modern system).
— *Trente Mélodies Populaires de Grèce et d'Orient*, Paris, 1876.
- Chrysanthos: *Θεωρητικὸν μέγα τῆς ἐκκλησιαστικῆς μουσικῆς*, Trieste, 1832: reprint, Athens 1911.
(The standard work on the Modern System, by its inventor.)
- Fleischer, O.: *Neumenstudien*, T. 3, Berlin, 1904.
(Chief authority for the Late Byzantine Notation; but also the earliest scientific work on the whole subject.)
- Gaïsser, Dom H.: *Les Heirmoi de Pâques dans l'office grec*, Rome, 1905.
— *I Canti ecclesiastici italo-greci* (*Rassegna Gregoriana*, 1905, 5).
- ¹³ Gastoué, Am.: *Introduction à la Paléographie musicale byzantine*, Paris, 1907.
(A list of articles by Gastoué is given in Petresco's bibliography. V. inf.)
- Höeg, C.: *La Théorie de la Musique Byzantine* (*Revue des Études Grecques* 35 (1922), 321-334).
- Merlier, M.: *Τραγούδια τῆς Ῥομηλῆς*, Athens, 1931.
(Greek Folksongs; introduction also in French).
- Möller, H.: *Das Lied der Völker*, vol. II.
(Some Greek folksongs.)
- Pachtikos, G.: *Δημώδη Ἑλληνικά ἄσματα*, Athens, 1905.
- Papadopoulos, G.: *Συμβολαὶ εἰς τὴν ἱστορίαν τῆς παρ' ἡμῶν ἐκκλησιαστικῆς μουσικῆς*, Athens, 1890.

- Petresco, J. D.: *Les Idiomèles et le Canon de l'Office de Noël*, Paris, 1932.
- Psachos, K. A.: *Δημώδη ᾠσματα Σκόρου*, Athens, 1910.
- 50 δημώδη ᾠσματα Πελοποννήσου καὶ Κρήτης, Athens, 1930.
(In collaboration.)
- Ἡ παρασημαντικὴ τῆς Βυζαντινῆς Μουσικῆς, Athens, 1917.
(On the stenographic theory of Byzantine Music. Replies by H. J. W. Tillyard, *Laudate*, Dec. 1924, March 1925; *Byz. Zeitschr.*, 25 (1925), 333-338; and E. Wellesz *Byzantion*, 5, 557.)
- Rebours, J. B.: *Traité de Psaltique*, Paris, 1906.
(Best work on the Modern System.)
- Riemann, H.: *Die Byzantinische Notenschrift im 10-15 Jahrhundert*, Leipzig, 1909.
- Schwarz, D. G.: See note on page 16.
- Tardo, Dom L.: See note on page 18.
- Thibaut, J.: *Monuments de la Notation Ekphonétique et Hagiopolite de l'Église Grecque*, St. Pétersbourg, 1913.
- *Origine Byzantine de la Notation Neumatique de l'Église latine*, Paris 1903.
- Tillyard, H. J. W.: *Byzantine Music and Hymnography*, London, 1923.
- A Canon by St. Cosmas (*Byz. Zeitschr.* 28, 25). — *The Stichera Anastasima in Byz. Hymnody* (*Ibid.* 31, 13). — *Some New Specimens of Byzantine Music* (*Annual of the British School at Athens*, 27, 151). — *The Morning Hymns of the Emperor Leo* (*Ibid.* 30, 86; 31, 12). — *The Hymn "Stars of the Morning" and its Byzantine Melody* (*Laudate*, 1927, 143). — *Early Byzantine Neumes* (*Ibid.* 1930, 204) — *Byzantine Music at the End of the Middle Ages* (*Ibid.* 1933, 141). — *A Byzantine Musical Handbook at Milan* (*J. H. S.*, 46, 219). — Article "Byzantine Music" in *Grove's Dictionary of Music and Musicians*. (Third Edition.)
- Wellesz, E.: *Aufgaben u. Probleme auf dem Gebiete der Byzantinischen u. orientalischen Kirchenmusik*, Münster, 1923.
- *Byzantinische Musik*, Breslau, 1927.
(Bibliography including W's own articles and H. J. W. Tillyard's up to 1924).
- *Trésor de Musique Byzantine*, Paris 1934.
(Contains three Canons and sixteen Stichera in Mode I given in staff-notation).

- Wellesz, E.: *Rhythmus u. Vortrag der Byzantinischen Melodien* (*Byz. Zeitschr.*, 33, 34-66).
(With summary of recent literature.)
- *Studien zur byz. Musik* (*Zeitschr. f. Musikwissenschaft*, 1934, 213-228, 414-422).
- Wolf, J.: *Die Tonschriften*, Breslau, 1925.
- *Handbuch d. Notationskunde*, Leipzig, 1913, 1919.
- We mention some modern Greek choir-books in Greek notation on p. 16 below.

CHAPTER I

A GENERAL SURVEY

Byzantine Music in its main features resembles Gregorian. It has eight Modes: it uses a free rhythm, without any regular division into bars: it is sung by a single voice or by voices in unison. The metrical unit of Greek hymnody is a colon or versicle of no fixed length, like the half-verses in the psalms. Most hymns are written in rhythmical prose; but even if the poem was in a strict metre, like the iambic Canons of St John of Damascus, the composer paid no heed to the scansion, but followed the stress-accent, as in ordinary speech. The ancient Greek quantities were obsolete in the Byzantine age; and the music ignores them, but respects the accents, which no longer denoted pitch as in Ancient Greek, but stress, as in Modern Greek. Because of this freedom of rhythm we may say that Byzantine Hymnody is more like recitative than melody. Florid passages are admitted; and a great many conventional phrases, cadential or otherwise, are used, some being typical of one or two Modes, or found mostly in some special part of the scale, while others could occur in any position and in all Modes alike. Such devices made the music more lucid and easier to remember. If the student is to appreciate and enjoy a Byzantine hymn, it must not merely be played over on the piano, but thoroughly mastered and sung with the words and with due regard to rhythm and expression.

THE BYZANTINE MUSICAL NOTATIONS.

The Byzantine musical signs were derived from the Ecphonetic Notation, or recitation-marks, used as a guide to the reading of certain portions of Scripture in the Church. These are an extension of the accentual signs invented by Aristophanes of Byzantium. While denoting certain inflections of the voice, they do not imply

either definite intervals or a coherent melody. But they are of great historical value, both as affording a clue to the nature of the accent in later classical Greek and as the parent of the Byzantine neumes.

The earliest musical system appears towards the end of the tenth century; and it rapidly developed through more or less tentative phases, until, about 1100, a clear and adequate notation was invented, which, by the end of the century, had virtually ousted the more primitive forms. We may therefore tabulate the chief stages of the neumes as follows:

EARLY BYZANTINE. c. 950-1200

The neumes represent approximate intervals and only give an inexact view of the melody. The most primitive stage has no sign for a repeated note but leaves a blank space over the syllable. In the intermediate stages the repeated note is marked by a horizontal stroke. Some of the intermediate notations, for instance the Chartres fragment, use very elaborate compound signs for conventional groups of notes. The third stage, sometimes called the Coislin notation (1), from a famous MS at Paris, used a hooked sign \curvearrowright for a repeated note. A more detailed sub-division of the Early Byzantine notations would be of little use until more specimens have been studied and published. By comparison with later versions we can usually gain a rough notion of the original tunes—exactly as is done with the Gregorian neumes.

MIDDLE BYZANTINE OR ROUND NOTATION. c. 1100-1450

In this system, which is the subject of the present handbook, the melody is shown by interval-signs having exact and fixed values (2). As a rule the change from the early to the Middle notation did not mean a new tune, but only the fixing of an old one; so that we may

(1) Paris, Coislin 220. Some reproductions are given by Petresco, J-B., *LES IDIOMÈLES ET LE CANON DE L'OFFICE DE NOËL*, Plates XXVI—XXVIII; Riemann, H., *D. BYZ. NOTENSCHRIFT*, Pl. IV, V. Specimen of Chartres frag., Gastoué op. cit. Pl. III.

(2) The popular term "Round" is used with a certain reservation, because some of the more archaic Middle Byzantine specimens use angular forms (e. g. \curvearrowright for \curvearrowleft), as also do some of the Coislin type. This however is only a graphical oddity and does not affect the musical value of the signs.

claim to have melodies whose origin goes back to the tenth or eleventh centuries if not further. Throughout the period given above, we see that the older tunes were copied again and again, with slight local variations or alternative readings, but substantially unaltered.

LATE BYZANTINE. 1400-1821.

While the copying of ancient melodies went on, there was no lack of new composition in the fifteenth century and perhaps in the fourteenth (1); and the new works, being often settings of words not hitherto supplied with music, showed, in their florid character and chromatic ornamentation, the growing influence of the East. The interval-signs remain unchanged; but, in order to cope with a more elaborate rhythm, the composers employ a great number of symbols intended to give a summary view of various conventional figures, or to indicate the primary and secondary accents with greater precision, or to divide the unit of time. Most of these symbols had already been invented and were illustrated in a study by the precentor Cucuzeles (1300 A. D.). But as their general use belongs to a later age, we shall no longer recommend the name "Cucuzelian" for the late Byzantine notation. The Fall of Constantinople brought to a rude cessation the activities of Greek musicians; and it was not until the seventeenth century that any noticeable revival can be seen. But from 1660 onwards there was a vast output of Church music. Some scribes copied the older hymns, with little change, from the manuscripts of the fifteenth century. Many composers made ornamental or embellished versions, often with almost incredible elaboration; while others, again, simplified the more difficult tunes to suit beginners or village singers. The influence of the East was overwhelming: Greek musicians composed Turkish songs, while they naturally borrowed from Oriental sources much of the new melodic material used in the setting of Byzantine hymns. At the end of the eighteenth century the movement seems to have spent its force, as travellers have then declared that few, if any, Greek precentors even pretended to understand the notation.

(1) See the list of Byzantine musicians and their works in Sophronius Eustratiades, *CATALOGUE OF GREEK MSS. AT LAURA (Athos)* p. 444 (*HARVARD THEOL. STUDIES* XII).

MODERN OR CHRYSANTHINE. 1821 to 1933.

Chrysanthus was a Greek Archimandrite with some knowledge both of Ancient Greek and of European music. His reform had two main objects—the simplification of the notation so that it could be printed; and the adaptation of a sol-fa system for the use of learners. He did not attempt to restore the mediaeval melodies or to purge Byzantine music of Oriental elements. It is therefore unsafe to assume that the modern music of the Greek Church contains any body of tradition earlier than the eighteenth century (1), although many melodies may have accidentally preserved their more ancient forms. After 1832, when the Chrysanthine notation was published in its final shape, the older system was soon forgotten; and composers began to work in the new medium, still following the style of the East. In the last quarter of the nineteenth century the influence of Western Europe and of Russia makes itself felt. The extreme chromaticism and nasal voice-production begin to be regarded as barbaric, while harmonised vocal music comes into use in many of the city churches (2). This practice has been deplored by European critics and strongly opposed by patriotic Greeks, who since 1912, have attempted to restore the methods of 1821. Both schools at present flourish side by side.

In our account of the development of the musical notation we have made no mention of the less important or transitional varieties. More thorough research will be needed before these can be tabulated in detail. It will also be noticed that there is some overlapping between the different stages; but this is natural, as a new system

(1) Thus Hatherly, S. G., *TREATISE ON BYZ. MUSIC* deals almost entirely with the modern system, which he regularly calls "Byzantine". Among Greek choir-books in the Chrysanthine system we may mention: Sakellariades, A. *Τριψόδιον καὶ Πεντηκοσταῖον Δοξαστάριον* (Athens 1895); Georgiou, N., *Ἀναστασιματάριον* (Smyrna 1900); Keltzanides, P. G., *Δοξαστάριον* (C'ple 1882); Sakellarides, I. Th. *Ἱερὰ Ὑμνοῦδια* (Athens 1902) and other selections. (cf. *BYZ. ZEITSCHR.* XX, p. 470). One or two Modern Greek tunes in Neale-Hatherly *HYMNS OF THE EASTERN CHURCH WITH MUSIC*. and in Christ-Paranikas *ANTHOL. GRAECA CARMINUM CHRISTIANORUM* (Introd. Lib. IV). For a recent study of the modern system see D. G. Schwarz, *LE CHANT ECCLÉS. BYZ. DE NOS JOURS*. (*IRÉNIKON*, vol. X, parts 3 and 4, 1933, part 3, 1934).

(2) cf. *MUSICAL ANTIQUARY*, Vol. II. (1911) p. 97. *MUSIC AND LETTERS*, Vol. IV, July 1923, 271.

always needed some time to win general acceptance and to oust its older rivals.

The earlier writers on Byzantine Music, who worked independently in different countries, naturally pleased themselves in naming the various stages of the notation. But the resulting disagreement and confusion of nomenclature are most perplexing to a beginner. We add therefore a survey of the chief varieties of terminology used by modern theorists and the equivalent names in our own scheme. No attempt will be made to discuss the validity of the terms applied by other writers, as this would involve a longer treatment than space allows. (1)

In the following summary of the different nomenclatures we leave out, for brevity's sake, all mention of the Recitation-Marks or Ecphonetic Notation, as the danger of confusion lies elsewhere.

Thibaut (2) has the stages—NOTATION CONSTANTINOPOLITAINE, which answers to our Early Byzantine; NOTATION HAGIOPOLITAINE, which is our Middle Byzantine or Round System; NOTATION DE KOUKOUZÉLÈS (3) which answers to our Late Byzantine (though Thibaut has dated it much too early) and lastly NOTATION GRECQUE MODERNE (4), which we call Modern or Chrysanthine.

Gastoué (5), who had studied the intermediate stage of the Early Byzantine Neumes, calls this NOTATION PALÉOBYZANTINE, while the next stage (which we call the Coislin Notation) he calls NOTATION BYZ. MIXTE OU CONSTANTINOPOLITAINE. Otherwise he agrees with Thibaut.

Riemann (6), who was aware of a still older notation, distinguishes two archaic stages (that of the Athos MS, Laura B. 32 and that of the Chartres fragment.) In the third place he puts DIE FEINE STRICHPUNKTNOTIERUNG (our Coislin System), while his later stages agree with those marked by the earlier authors.

(1) See Wellesz, E. *DIE EPOCHEN DER BYZ. NOTENSCHRIFT* (*ORIENS CHRIST.* S. III, 7, 1932 p. 279).

(2) *ORIGINE BYZ.* p. 33, 101 (for full title see bibliography on page 10).

(3) *Ibid.* Plate XIII.

(4) *Ibid.* Plate XIV.

(5) *OP. CIT.* pp. 12—23.

(6) *OP. CIT.* pp. 54, 73.

Psachos (1) appears to regard all the notations before 1660, as "ancient stenography", making no attempt to distinguish between the various stages.

Tardo (2) calls the Early Byzantine Notation SCRITTURA PALEOBIZANTINA; the Middle Byzantine or Round NEOBIZANTINA; and the Late Byzantine SCRITTURA DI CUCUZELI.

Petresco (3) calls one stage NOTATION PALÉOBYZANTINE, which includes the archaic and intermediate stages of the Early Byzantine Notation. The next stage he calls NOTATION HAGIOPOLITE (4), but apparently means the third stage of the Early Neumes, or Coislin System. The Middle Byzantine or Round Notation receives no separate mention; and he passes to the next stage, which he calls LA NOTATION DE KOUKOUZÉLÈS ET DES MELURGES (5).

It is greatly to be desired that the nomenclature used in this handbook and recommended by the editors of the MONUMENTA MUSICAE BYZANTINAE should be followed by all writers on Byzantine hymnody. Subdivisions of the main classes can easily be made, as need arises.

(1) *Ἡ παρασημαντικὴ τῆς Βυζαντινῆς Μουσικῆς*, Athens 1917, p. 25 ff.

(2) D. Lorenzo Tardo, *Ieromonaco, I CODICI MELURGICI DELLA VATICANA ETC.* (ARCHIVIO STORICO PER LA CALABRIA E LA LUCANIA, Anno I, fasc. II, pp. 17, 18;) and *LA MUSICA BIZ. E I CODICI DI MELURGIA DELLA BIBLIOTECA DI GROTTA-FERRATA* (ACCADEMIE E BIBLIOTECHE, Anno IV, N. 4—5, 1931 p. 6) and *Ἡ Βυζαντινὴ Μουσικὴ, ἡ γραφὴ καὶ ἡ ἐκτέλεσις τῆς* (Athens 1933).

(3) *OP. CIT.* p. 40.

(4) *IB.* p. 42.

(5) *IB.* p. 52.


CHAPTER II


THE INTERVAL-SIGNS IN THE MIDDLE BYZANTINE NOTATION

In Byzantine music the melody is given by a chain of interval-signs, every note being reckoned from the one before. The first note of all depends upon the Mode and is shown by the proper signature. The interval-signs are divided into Steps (called Somata or "bodies") and Leaps (called Pneumata or "spirits"). Some of the Steps or Somata have a special dynamic or rhythmic force besides their interval-value. The simple signs have a range of values up to a fifth, both upwards and downwards. For greater leaps we use compound signs. The following are the signs and their values.—


Repeated note: — Ison (*ἴσον*) (a—a)


Ascending Second: — Oligon (*ὀλίγον*): 

— Oxeia (*ὀξεῖα*): 

— Petaste (*πεταστή*): 

— Duo Kentemata (*δύο κεντήματα*): 

— Kuphisma (*κούφισμα*): 

— Pelaston (*πελαστόν*): 

Interval-
value:
a—b

For convenience we reckon the intervals from a; but whatever the starting-note may be, the intervals will be the same. No distinction is made between tones and semitones, or between major and minor intervals. These things depend upon the Mode and will be explained later.

Thus it will be seen that the Oligon makes a plain quaver without any special force; but the Oxeia indicates an accent. The Petaste implies a strong staccato and is usually followed by a descent of the melody. The Duo Kentemata cannot be the first sign over a syllable, but add an ascending second, with a weak staccato, to some other progression, e. g.—



The Kuphisma and Pelaston are seldom used.

Descending Second = Apostrophus ἀπόστροφος  (a—g)

⇒ Double Apostrophus ἀπόστροφοι σύνδεσμοι  .. (a—g)

Two descending seconds over one syllable

⊞ Hyporrhoe ὑπορροή (a—gf)

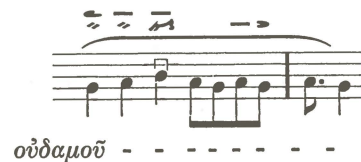
This cannot be the first sign over a syllable, but is used thus:—







or, to take a longer example:



and ⚡ Kratemo-hyporrhoe κρατημονπόρροον which has the same value, but lengthens and accents the preceding note, thus:




















LEAPS OR PNEUMATA.



- Ascending third = Kentema κέντημα  (a—c')
- Ascending fifth = Hypsele ὑψηλή  (a—e')
- Descending third = Elaphron ἐλαφρόν  (a—f)
- Descending fifth = (later ⚡) chamele χαμηλή  (a—d)

COMPOUND SIGNS.





By strict rule no Pneuma (leap) can stand over a syllable without the support of a Soma (step); but the latter loses its interval-value if the Pneuma stands below it or to the right of it; yet in all compounds the dynamic value of the step-sign (Soma) is kept.

Thus for a third upwards (a—c') we might have  or  = 
 =  and so on. For a fifth upwards (a—e')  = 
 but  =  and so with all the signs for an ascending second (except of course the Duo Kentemata, which can never lose interval-value).

If a leap downwards is made, we can have  =  or  = 
 for a fifth (a—d)  =  or  = 

If however the Pneuma (leap) stands ABOVE the Soma (step), the values of both are added together, to form one leap. Thus  makes a fourth upwards (a—d') and  a sixth upwards (a—f').

This may be done with all the Somata (step-signs), which still keep their dynamic force (again excepting the Duo Kentemata, which always make a SEPARATE progression.)

Similarly  makes a fourth downwards and  a sixth downwards. The widest leaps in ordinary use are the sixth downwards and the seventh  and octave  upwards.

SUBORDINATION OR HYPOTAXIS.

It will be seen from the table given above that only the signs for an ascending second have various dynamic values. How could these values be expressed when some other progression was made?

The method used was called Subordination (ὑπόταξις) and the rules were as follows:—

1. The Ison = annuls all ascending step-signs (Somata) if placed above them: in other words, the dynamic value remains,

but the interval-value is lost. Thus, $\overset{\curvearrowright}{\text{a}} = \text{a}-\text{a} = \overset{\curvearrowright}{\text{a}}$, $\overset{\curvearrowleft}{\text{a}} = \text{a}-\text{a} = \overset{\curvearrowleft}{\text{a}}$ and so on. But the Duo Kentemata are not annulled in any position.

2. Descending signs annul the ascending step-signs (Somata) if placed above them. Thus $\overset{\curvearrowleft}{\text{a}} = \text{a}-\text{g} = \overset{\curvearrowleft}{\text{a}}$, $\overset{\curvearrowright}{\text{a}} = \text{a}-\text{g} = \overset{\curvearrowright}{\text{a}}$ and so on: the Duo Kentemata are again unaffected, whether placed above or below the descending sign, nor can the Hyporrhoe annul any other sign.

STEP-SIGNS IN COMBINATION.

For special effects we find two different Somata superposed such as $\overset{\curvearrowright}{\text{a}} \overset{\curvearrowleft}{\text{c}} = \text{a}-\text{c}' = \overset{\curvearrowright}{\text{a}}$ and some others, where the values are added together and an enhanced force is required.

But if the same sign occurs twice over a syllable, it must be given as two distinct progressions: thus $\overset{\curvearrowright}{\text{a}} \overset{\curvearrowright}{\text{a}} = \text{a}-\text{gf}$

Some rarer collocations of interval-signs will be given at the end of the next chapter.

The Kratemo-hyporrhoon may be enlarged by the Oligon or Oxeia, which keep their values, thus:—

EXERCISES ON THE INTERVAL-SIGNS.

Write out the following in staff notation, giving the dynamic and rhythmical values. (Key on next page).

(a) (1) $\overset{\curvearrowright}{\text{f}} \overset{\curvearrowright}{\text{e}} \overset{\curvearrowright}{\text{f}} \overset{\curvearrowright}{\text{g}} \overset{\curvearrowright}{\text{a}} \overset{\curvearrowright}{\text{a}}$ (2) $\overset{\curvearrowright}{\text{b}} \overset{\curvearrowright}{\text{c}'}$ $\overset{\curvearrowright}{\text{a}} \overset{\curvearrowright}{\text{g}} \overset{\curvearrowright}{\text{a}} \overset{\curvearrowright}{\text{g}}$

(3) $\overset{\curvearrowright}{\text{f}} \overset{\curvearrowright}{\text{e}} \overset{\curvearrowright}{\text{f}} \overset{\curvearrowright}{\text{g}} \overset{\curvearrowright}{\text{ab}}$ $\overset{\curvearrowright}{\text{c}'\text{g}}$ $\overset{\curvearrowright}{\text{a}}$ $\overset{\curvearrowright}{\text{gf}}$ $\overset{\curvearrowright}{\text{f}}$.

(b) (1) $\overset{\curvearrowright}{\text{b}} \overset{\curvearrowright}{\text{g}}$ $\overset{\curvearrowright}{\text{ab}}$ $\overset{\curvearrowright}{\text{bc}}$ $\overset{\curvearrowright}{\text{a}}$ $\overset{\curvearrowright}{\text{b}}$ $\overset{\curvearrowright}{\text{a}}$ $\overset{\curvearrowright}{\text{g}}$ (2) $\overset{\curvearrowright}{\text{g}}$ $\overset{\curvearrowright}{\text{g}}$ $\overset{\curvearrowright}{\text{g}}$ $\overset{\curvearrowright}{\text{g}}$

$\overset{\curvearrowright}{\text{b}}$ $\overset{\curvearrowright}{\text{ga}}$ $\overset{\curvearrowright}{\text{a}}$ $\overset{\curvearrowright}{\text{a}}$ $\overset{\curvearrowright}{\text{d}'}$ $\overset{\curvearrowright}{\text{c}'}$ $\overset{\curvearrowright}{\text{b}}$ $\overset{\curvearrowright}{\text{a}}$ $\overset{\curvearrowright}{\text{b}}$ $\overset{\curvearrowright}{\text{c}'}$ $\overset{\curvearrowright}{\text{ba}}$ (3) $\overset{\curvearrowright}{\text{g}}$

$\overset{\curvearrowright}{\text{a}}$ $\overset{\curvearrowright}{\text{bc}'}$ $\overset{\curvearrowright}{\text{b}}$ $\overset{\curvearrowright}{\text{a}}$ $\overset{\curvearrowright}{\text{ga}}$ $\overset{\curvearrowright}{\text{a}}$ (4) $\overset{\curvearrowright}{\text{a}}$ $\overset{\curvearrowright}{\text{a}}$ $\overset{\curvearrowright}{\text{a}}$ $\overset{\curvearrowright}{\text{bc}}$ $\overset{\curvearrowright}{\text{g}}$ $\overset{\curvearrowright}{\text{f}}$

$\overset{\curvearrowright}{\text{e}}$ $\overset{\curvearrowright}{\text{e}}$.

(c) Mode I Plagal from d, Finalis d.

(1) $\overset{\curvearrowright}{\text{Στε}} \overset{\curvearrowright}{\text{-ρε}}$ $\overset{\curvearrowright}{\text{-ω}}$ $\overset{\curvearrowright}{\text{-σον}}$ $\overset{\curvearrowright}{\text{με}}$ $\overset{\curvearrowright}{\text{Κυ}}$ $\overset{\curvearrowright}{\text{-ρι}}$ $\overset{\curvearrowright}{\text{-ε}}$ (2) $\overset{\curvearrowright}{\text{προς}}$ $\overset{\curvearrowright}{\text{την}}$ $\overset{\curvearrowright}{\text{σην}}$ $\overset{\curvearrowright}{\text{υμ}}$ $\overset{\curvearrowright}{\text{-νω}}$

$\overset{\curvearrowright}{\text{δι}}$ $\overset{\curvearrowright}{\text{-αν}}$ (3) $\overset{\curvearrowright}{\text{ο}}$ $\overset{\curvearrowright}{\text{στε}}$ $\overset{\curvearrowright}{\text{-ρε}}$ $\overset{\curvearrowright}{\text{ω}}$ $\overset{\curvearrowright}{\text{-σας}}$ $\overset{\curvearrowright}{\text{ου}}$ $\overset{\curvearrowright}{\text{-ρα}}$ $\overset{\curvearrowright}{\text{-νους}}$ (4) $\overset{\curvearrowright}{\text{τω}}$ $\overset{\curvearrowright}{\text{λο}}$ $\overset{\curvearrowright}{\text{-γω}}$ $\overset{\curvearrowright}{\text{της}}$ $\overset{\curvearrowright}{\text{σο}}$

$\overset{\curvearrowright}{\text{φι}}$ $\overset{\curvearrowright}{\text{-ας}}$ $\overset{\curvearrowright}{\text{σου}}$

KEY TO EXERCISES ON THE INTERVAL-SIGNS.

(a) Mode III Plagal (Barys).

(b) Mode II from b (h), Finalis e.



(c)



(1) Στε - ρέ - ω - σόν με Κύ - - ρι - ε (2) πρὸς τὴν σὴν



ὑμ - νω - - δι - αν (3) ὁ στε - ρε - ῶ - σας οὐ - ρα - νοὺς



(4) τῷ λό - γω τῆς σο - φί - ας σου

CHAPTER III

THE SUBSIDIARY SIGNS

Besides the interval-signs, Byzantine music has a great many subsidiary signs or Hypostases (*ὑποστάσεις*) which modify the rhythm or the expression in various ways. In the classical period of the Round Notation only a small selection of the total was in common use, but late manuscripts, especially in the eighteenth century, are overburdened with these signs. We shall however in this chapter deal only with those usually found in the 12th, 13th and 14th centuries.

1. Rhythmical Signs

(a) The following are used to lengthen a note:

Diple (*διπλή*) ~ =

Kratema (*κράτημα*) ~ (later ~) =

Double Apostrophus ~ = descending second with prolongation, as already explained.

Klasma or Tzakisma (*κλάσμα, τζάκισμα*) ~ =

For anyone unused to free rhythm it may be difficult to sing a dotted quaver between plain quavers; but almost the same effect may easily be gained thus:—(1) If the Klasma affects one member

of a group of notes, e. g. ~ this may be sung as a triplet:

or in reverse order: ~ = (2) If the Klasma stands over a single syllable, we may add a semiquaver rest ~ = The Byzantine theorists say that the Klasma has "half prolongation" or "it detaches a note and lengthens it a little."




Apoderma or Apodoma (*ἀπόδεσμα, ἀπόδομα*) ~ (also ~, ~) =









- (b) Accelerando Gorgon (γοργόν): 
 Ritardando Argon (ἀργόν): 


These two are rare in the earlier MSS, but the Gorgon is often added in red ink by a later hand.

2. The following are mainly for stress or emphasis:


Psephiston (ψηφιστόν)  = sfz.


Piasma (πίασμα)  (older form ) accents the last note of a group. Example:  = (a) b c' g. This must not be confused with the Diple nor with the Duo Kentemata.


Bareia (βαρεία)  (also ) = . This sometimes serves to separate two signs that might otherwise be added together:  (a) f e, whereas  (a) e. Owing to the sprawling shape of the Bareia and the natural wish of the scribe to save space, we often find that a group of signs, joined by the Bareia, may be piled up in a more or less haphazard way, so that the order has to be inferred by comparison with other passages. As a rule, the topmost interval-sign, unless of course it be the Duo Kentemata, is to be read first. Thus we find indifferently such groups as  and  and  = (a) c' g (1), all, as it seems, with the same meaning. Even the same MS may be inconsistent in such cases.


Xeron Klasma (ξηρόν κλάσμα) : mezzo-staccato.
 (This must be carefully distinguished from the Kratema).

3. The following are either slurs or compendious signs for conventional groups of notes:

Kylisma (κύλισμα)  indicates a flourish at a medial cadence and is found with one of these groups: —


 (a) bc' bg a.



 (a) ba bg a.


 (a) bc' bg ab.



(1) We mark a dotted quaver by adding a dot to the letter (a'); a crotchet is indicated by a short stroke (a-).




The Gorgon is often added. Sometimes we find that the second hand in a MS has added the Kylisma to a plain medial cadence without writing the neumes in full.

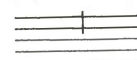
Thematismus Eso (θεματισμός ἔσω) . This accompanies an ornamental group like g- a- c'ba, or g- a- d' c' b. But it must be observed, (a) the neumes are almost always written in full, (b) the Thematismus Eso is usually omitted.

Gorgosyntheton (1) (γοργοσύνθετον)  is used as a slur with a group (2) like 


(It must not be confused with the Kratemo-hyporrhoon .

Parakletike (παρακλητική)  or  is used as a slur with groups like bc' a. The name, from παρακαλεῖν "to exhort", suggests that it may be also a mark of expression.

Antikenoma (ἀντικένωμα) (a)  (b)  is mostly used in late MSS to indicate the highest point of an up-and-down figure. Form (b) is also put between two Apostrophi thus:—  where the effect is probably a glissando: (a) g g f

The End of a Colon or Versicle is marked in the Greek MSS by a heavy dot after the last word. In our transcriptions we replace this by the number of the next line: and in the music, we represent it by a short stroke, thus:— , as will have been seen in the examples at the end of the last chapter. X

The following Subsidiaries, though really belonging to the Late Byzantine notation, are sometimes added by the second hand to manuscripts of the Round System.

Thes-kai-Apothes (θές και ἀπόθες) . Literally "Put and take away". This marks a middle cadence with a phrase like e- fg f g-.

(1) For the shape of this sign and of others in late MSS see Fleischer op. cit. p. 52.

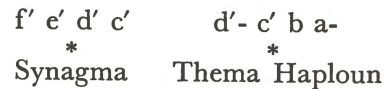
(2) For an example see the hymn given below in c. V, page 44 (ἴλιος βαρύς.).

In the famous Study by John Cucuzeles (1) it is given as follows, the star showing where the Subsidiary is placed.



Enarxis (ἐναρξίς) $\underline{\text{L}}$. This marks the beginning of a phrase. In the archaic notations it seems to have been used as an interval-sign, often at the beginning of a hymn; but what special purpose it served, either then or later, is uncertain.

Synagma (σύναγμα) $\text{—}\underline{\text{L}}$. Evidently a slur. We find it associated with the next Subsidiary in a phrase like:



Thema Haploun (θέμα ἀπλοῦν) $\text{—}\underline{\text{L}}$ or Simple Theme, seems to mark a middle cadence with two or three descending notes. The formulae (2) in Cucuzeles' Study for these two signs are as follows:



(1) Fleischer, NEUMENSTUDIEN T. 3, Facs. p. 27. As no sound text of this Study has so far been found, neither Fleischer nor anyone else has been able to give a satisfactory version of the whole. Yet, although the pitch of the separate phrases is therefore uncertain, the melodic formulae are clear enough.

(2) *Ibid.* Facs. 32 and 28.—The Thematismus Eso, the Thema Haploun and Thes-kai-Apothes were probably adopted by the Russian Church under the common name of Fita (i. e. Theta) and used to indicate some extremely elaborate flourishes, often varied at the discretion of the singer and sung differently in different modes. This practice may be a reflexion of the usage of the Greek Church in the seventeenth and eighteenth centuries, when some musicians no longer sang the neumes from the MS, but ornamented them or improvised freely, according to the custom of the East. (Cf. O. von Riesenmann, DIE NOTATIONEN DES ALT-RUSSISCHEN KIRCHENGESANGES, p. 94). The Kylisma was also used in this extended sense in the Russian Church at the same date (*IBID.* 92).

RARER GROUPS OF INTERVAL-SIGNS.

Seisma (σεισµα). In this group the Hyporrhoe loses its interval-value, under the influence of the Piasma, thus:

The effect may be that of a tremolo



Pneuma without Soma.

(1) The Bareia may be a support to a Leap-sign, as in the following groups:



(2) The Piasma is also, though seldom, used in this way. Example (1)



(3) The Diple may stand under the Elaphron with no other sign: z (a—)f-

(4) The Kratema may be a support for the Kentema z a—c' or for the Hypsele. z a—e'

Reason: in the older or Coislin notation (the last stage of the Early Byzantine neumes) all these signs, Bareia, Piasma, Diple and Kratema, were interval-signs and hence formed conventional groups, like those given above, which survived in the Round System, when the Bareia, Diple and Kratema had become mere Subsidiaries.

(1) cf. also LAUDATE, June 1923, page 10 (Ode IX of Easter Canon.).

CHAPTER IV

THE BYZANTINE MODES

The elementary studies and exercises written for beginners in the Middle Ages have come down to us in many manuscripts (1). From these we see that the fundamental notes of the eight modes were held to form a scale in the following order:

I	II	III	IV	I	II	III	IV
d	e	f	g	a	b	c'	d'

All theorists agree that Mode I comprises the octave d-d', from which the other notes are naturally inferred. As a rule the notes from d to a are marked as Authentic, when approached from below, and Plagal, when approached from above. We shall see later that this is not an invariable distinction. Notes below d are only marked Plagal and those above a only Authentic, though here again the practice varied. As the starting-note of a Byzantine hymn was indicated by the number (or sometimes by the Intonation) of the Mode, and the melody ran on from that by a chain of interval-signs, it was essential for the interpreter to understand the signature of the Mode; and all the more so, because the interval-signs make no distinction between tones and semitones.

Students have found Mode I plain sailing, as it always reads from one of the fundamental notes, usually a, and ends on a or d. But the later Modes very often do not start from their proper Finalis but from some other note, fixed by a special formula, partly conventional and partly implying some variety in the Intonation.

These INTONATIONS OR INITIAL FORMULAE must now be explained.

Every Byzantine Mode had, besides its number, a certain syllabic formula, originally perhaps of a religious meaning, but soon of

(1) Fleischer, O., NEUMENSTUDIEN, T. 3, p. 45, and Transcriptions, p. 2. Cf. Tillyard, H. J. W., BYZANTINE MUSIC AND HYMNOGRAPHY, p. 41.

obscure or forgotten significance. These formulae were borrowed and corrupted by the Gregorian theorists. It was usual to sing the formula as an Intonation at the beginning of a hymn. But while the syllables were (apart from repetition) constant for every Mode, the musical notes were variable. Most manuscripts only give a brief indication of the starting-note, but others, though the hymn itself may be almost note-for-note the same, prefix at times an elaborate vocal passage, and (what is more vexatious) may omit the number of the Mode. The use of the Intonation was to help the singer to find his note; and probably he intoned softly, unheard by the congregation, but admired, if he took a florid formula, by the rest of the choir. The Intonation was therefore independent of the hymn, which it introduced; and no allusion to the Intonation was required in the course of the hymn, though some familiar turn of the music might happen to occur in both. On the other hand, in studies and practice-examples the Intonations are often interwoven with fragments of hymns or other verses (1). The following Intonations are typical of the many varieties found in the MSS.

Mode I.....	Ananes.....	agfedefga
	(called annaneane by Hucbald, whose intonations most resemble the Byzantine).	
Mode II.....	Neanes.....	bagab
Mode III.....	Nana (2).....	c'c'
	or Aneanes.....	c'c'bc'gagfefgabc'
Mode IV.....	Hagia.....	ggagfg
I Plagal.....	Aneanes (3)....	dfed
II Plagal.....	Neeanes (4)....	gabaga (Finalis e.)
III Plagal or Barys.....	Aanes.....	fgef
IV Plagal.....	Nehagie.....	gagg.

We now come to the main question. How can the singer tell from what note to begin the hymn? The answer is in the table of signatures(5)

(1) For the Intonations v. Fleischer, OP. CIT. p. 42, and Transcriptions p. 1 ff. Our articles B. S. A., XXII, 137; XXVI p. 85; J. H. S., XLVI, 221. Rebours, P., TRAITÉ DE PSALTIQUE, p. 278 ff. Petresco, OP. CIT., p. 27 ff. The Greek words for Intonation, ἤχημα, ἀπήχημα, ἐπήχημα seem to be interchangeable.

(2) The formula Nana is sometimes given to IV Plagal.

(3) Some MSS interchange this with III Plagal.

(4) For the chromatic form of this mode see below.

(5) Reprinted from BYZ. ZEITSCHR., 1931.

and in the following explanations, which are based on the decipherment of more than five hundred Byzantine melodies.

The signature, called in Greek MARTYRIA (*μαρτυρία*), is used at the beginning of a Byzantine hymn and also medially, as a check on the correctness of the singing. If a pause be made on the Finalis of some other mode, the signature of that mode may be added. These medial signatures were usually put in by a later hand in extant MSS of the Middle Byzantine era.

The compass of the music is unrestricted in all the modes, although the authentic seldom go below *c* and the Plagal not often above *d'*. The usual limits are from *A* to *f'*. If an Authentic Mode makes a medial cadence on the Finalis of a Plagal Mode, we should, when approaching such a cadence, change *b*-natural to *b*-flat in order to avoid the suggestion of an augmented fourth.

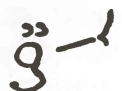


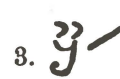
Mode I. The signature is a stylised alpha, surmounted by two hooks and an ascending fifth. (Oxeia-Hypsele.) The hooks are a relic of the small semicircle used in older MSS and imply that the letter alpha has a numerical value. They are not the Double Apostrophus. Other meaningless marks, of like origin, appear over several of the other signatures in our table. Mode I in the Middle Byzantine system regularly begins from *a* (very rarely from *d*) and ends on *a* or *d*.

Cadences. These are frequent: *gaa-a*, *c' aa*, *e- f ed- d*, *e- f d- d*. (We mark a prolonged note by a short stroke.) The last note of all was probably always held, but was not marked with a prolongation-mark in the Middle Byzantine age, although in the Late Byzantine notation it often receives the Apoderma (TENUTO).





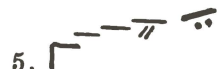

Mode II. Our table shows four different signatures, each indicating a different Intonation. No. 1 and No. 4 indicate *g* as the starting-note. No. 2 means that *b*-natural (or *h*) is used; and No. 3 directs a start from *a*. With all these there is no question of a different scale, for the medial cadences, the structure of the melody and the final cadences do not vary with the initial signature. The most frequent cadences are: *a- g fe e*, *bc' g fe e*, *ac' b b*.


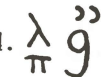

Mode III. Signatures 1, 4 and 5 all denote *c'* as starting-note.

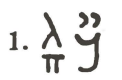
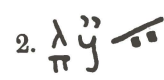
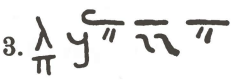

No. 2 and No. 3 denote *a*. No. 6 is used medially and indicates *c'*. (The sign like two question-marks is an abbreviation of *Nana*.)

Mode I.  Mode II. 1.  2.  3. 





4. 

Mode III. 1.  2.  3. 
4.  5.  6. 

Mode IV.  Mode I, Plagal 1.  2. 

Mode II Pl. 1.  2.  3. 
4. 

Mode III Pl. 1.  2.  3. 

Mode IV Pl. 1.  2. 
3.  4. 

5.  6. 

Cadences: $c' ga gf f$, $c' ag f f$ (both common), $ga c' c'$, $d' b c' c'$ (rare). The note b -natural (or h) seems to be avoided near the f -cadence, as it would often suggest an unpleasant augmented fourth, while b -flat would bring in the Plagal mode. At medial cadences this sometimes seems to have happened, and the signature Barys is then used.

Mode IV. This mode often discards its theoretical starting-note d' and begins more conveniently from g . The signature is used for either form. Thus we find a great collection of hymns beginning and ending on g , which a start from d' would take out of the compass of an ordinary Greek voice. These hymns frequently descend to c and thus, being in the region of the Fourth Plagal mode, require b -flat to avoid an augmented fourth. There is also a smaller collection beginning on d' and ending on g . A few, which appear in some MSS as reckoned from c , are probably incorrectly copied and should read from g .

Cadences: agg , $fggg$, bgg , $bag g$.

Mode I Plagal. The usual starting-note is d (signature No. 1.). We also find a , with the same signature; and g with No. 2, and lastly e (signature No. 2 without the Kentema). We mark all Plagal modes with b -flat; but if the tune reaches the upper part of the scale and takes on the aspect of an Authentic mode, we change to b -natural (h) until the Plagal region is regained.

Cadences: $f d d$, $fe d d$. A cadence on a is very rare.

Mode II Plagal. No. 1 from e ; No. 2 from g ; No. 3 from a ; No. 4 from f .

Cadences: $a- g fe e$ (frequent); also $gfe e$ and $h c' gfe e$.

Mode III Plagal. This Mode is called Barys or Grave, either because it did not normally admit an accidental b -natural, or because it occasionally started from low b -flat and was thus the lowest of the Modes. In the Middle Byzantine period, however, it begins regularly from f and answers to our F -major scale. The signatures 1 and 3 imply a start from f , while No. 2 indicates a as the origin. The note d is very rarely used for this.

Cadences: $c' g af$; $c' g a gf f$; $g e f f$.

Mode IV Plagal. The following starting-notes are used: No. 1, g ; No. 2, a ; No. 3, a ; No. 4, c' ; No. 5, c' ; No. 6, e . The use of c' probably represents the by-form called Nana, which is intermediate between this mode and the Third Authentic.

Cadences: $c' b ag g$; $a f g g$; $b a g g$.

In no case is the list of cadences exhaustive: many more are known and others probably await discovery. But the main fact is that every hymn must end on the Finalis of the mode used, whatever the starting-note may have been. Very rarely and only in a long hymn do we find the third Plagal mode ending on b -flat; and the fourth Plagal on c' .

CHROMATIC PASSAGES.

Anyone who has listened to Modern Greek Church music must have been struck by the frequency of its chromatic passages; but in Middle Byzantine music we never find a whole hymn in the chromatic species, but only a short passage here and there. Further, the introduction of the chromatic sign seems usually, if not always, to be due to a later hand than the thirteenth century and may be regarded, in the main (1), as a fifteenth century development. Until the reform of Chrysanthus in 1821, Greek Church Music had only one properly chromatic sign, called Nenanó (*νενανώ*) σ , which might be used (so far as can be seen) in any mode and on any part of the scale, where the augmented tone was desired. This sign has survived in the modern system. The following are mediaeval examples:—

Mode I. 6th Nov.



Mode I Plagal, 21st Nov.



(1) Cf. Wellesz, E., *Byz. Music*, 92 and our comment, *B. S. A.*, XXVII, 168.

The effect of the sign only lasted to the end of the versicle.

In the Late Byzantine system we often find, not only Mode I Plagal, but also II Plagal using the Chromatic species. The latter then has the scale $e f g a\flat b\flat (h) c' d' e'$.

Furthermore it is possible that the Late Byzantine notation where it uses the Chromatic modulation-sign, may have recorded an older, though unwritten, practice of some singers, who had come under Oriental influence. If the modern interpreter has reason to infer such a thing, he is advised to indicate the chromatic change by accidentals placed above the staff.

MODULATION.

In Ancient Greek theory it was possible to begin any Mode on any note; and in Byzantine theory every Mode has a Phthora or modulation-sign, which nominally makes the same thing possible. But in unaccompanied singing the difficulty of a sudden alteration of the mode would have been very great; and even in the Chrysanthine system, we rarely find it (1). For example, if we put the Modulation-sign of Mode III on e , the Finalis of Mode II, we should have to go on with $e f\sharp g\sharp$ etc. Or if we put the Phthora of Mode II on f , the scale would be $f g\flat a\flat b\flat c' d'\flat e'\flat$.

Experiments of this sort were made by composers in the later Middle Ages (2); but they had no place in the hymns handed down from the tenth and eleventh centuries, which form the main body of the Middle Byzantine Church music; and a discussion of them would take us beyond the scope of the present book.

Apart from the Chromatic modulation-sign, or Nenano, already mentioned, the other Phthorae, are, especially in the Late Byzantine period, sometimes used to mark a return to the diatonic species from the chromatic, or else as a warning to the singer to remain within the diatonic species. We often find that a later hand has added modulation-signs to an earlier MS.

(1) Chrysanthus, *Θεωρ. Μελ.* §§ 377 seqq.—Rebours, *OP. CIT.* 58—68.

(2) Thibaut, *MONUMENTS*, 89, quotes from Manuel Chrysaphes *Περὶ φθορῶν*, where a modulation is described, as made by Xenus Coronas, the Precentor of St. Sophia, who probably flourished in the fourteenth century. The Modulation-signs of the Modes are all stylised forms of the letter φ and will be found in Fleischer, *OP. CIT.* 20 and Gastoué, *OP. CIT.* 25, and in the author's *BYZ. MUS. AND HYMNOGR.* 50.

CHAPTER V

MUSICAL EXAMPLES

We give a specimen in type of every one of the eight Byzantine Modes, with the equivalent in European notation. Our examples are taken from the following manuscripts.

Athos: Vatopedi 288 (1). Late 12th century.

Cambridge: Trinity College Library 1165 (2). Probably written in the 14th century: then at some later date, perhaps in the 15th century, a scribe retraced the neumes in black, but did not touch up the signatures or other marks in red ink, which are very faint.

Athens: National Library 974 (3), 13th century.

In all these MSS there are occasional variants added by a second hand, but often illegible. No account has been taken of these in the present instance. Such alternative readings seem to represent local traditions, but they never radically alter the tune.

If the student, after working through our transcriptions, will cover up the key and make versions of his own, he will soon become expert in the notation. He can then try the facsimile, made from a photographic negative. The Grottaferrata MS, from which this was taken, has been studied by many palaeographers and several reproductions have been published (4). The date of it is 1281.

(1) Cf. *MUS. ANTIQU.* 1913, p. 205.

(2) *V. B. S. A.*, XXIII, p. 201; *LAUDATE*, June 1923 (with reproduction).

(3) *V. B. S. A.*, XXX, p. 90.

(4) Facsimiles in Riemann *OP. CIT.* Pl. VIII; *B. S. A.*, XXVII, Pl. XXVI (version on p. 157); Tardo, L., *LA MUS. BIZANTINA E I COD. DI MELURGIA D. BIBLIOT. DI GROTTAFERRATA (ACCADEMIE E BIBLIOTECHE, IV, n. 4-5, April 1931, p. 8.*

MODE I. ANTIPHON FROM THE OCTOECHUS (1) (SUNDAY AT LAUDS).
Cod Ath. Vatoped. 288, f. 367B.

From a.

ἦχος ᾠ

(1) ἐν τῷ θλί-βεισ-θαι με (2) εἰσ-ά-κου-σόν μου
τῶν ὀ-δυ-νῶν... (3) Κύ-ρι-ε . σοι κρά-ζω. (1) Τοῖς
ἐ-ρη-μι-κοῖς (2) ἄπ-ανσ-τος ὁ θεῖ-ος πό-θος ἐγ-γι-
νε-ται (3) κόσ-μον οὐ-σι τοῦ μα-ταί-ου ἐκ-τός.

(1) In the Octoechus the Ferial Services are arranged for a series of eight Sundays in rotation (including Saturday evening) so as to cover the eight Modes in order. This original or Lesser Octoechus is now included in the Paracletice or Greater Octoechus, which comprises the Ferial Services for all the days of the week.

MODE II. FOURTH ODE OF CANON ὑψιούχενος ἐν ἄρμασι.
Cod. Cantab. Trin. 1165, f. 30 B.

From b-natural (h).

ᾠ

(1) Τὸ ἄ-φρασ-τον μυσ-τή-ρι-ον (2) τῆς ἐν-
αν-θρώ-πῃ - - σε-ώς σου, Χρισ-τέ, ὁ Θε-ός.
(3) μυσ-τι-κῶς προ-κατ-ι-δὼν Ἀβ-βα-κούμ ἀν-ε-βό-α
(4) εἰσ-α-κή-κο-α τὴν ἀ-κο-ήν σου καὶ ἐ-φο-βή-
θην (5) κατ-ε-νό-η-σα τὰ ἔρ-γα σου

Line 5, fin. although there is no punctuation in the MS, yet the emphatic medial cadence in Mode I clearly marks the end of a line.

(6) και δο - ξά - - ζω τήν δύ - να - μίν σου

MODE III. HYMN FROM THE OCTOECHUS (SATURDAY AT VESPERS).
Cod. Athen. 974, page 174.

From a.

(1) Ὑμ-νοῦ-μεν τὸν σω-τῆ-ρα (2) τὸν ἐκ τῆς

παρ-θέ-νον σαρ-κω-θέν-τα. . . (3) δι' ἡ-μας γὰρ ἐ-

σταν-ρώ - - θη (4) καὶ τῷ τρί-τη ἡ-μέ-ρα ἄν-έσ-τη

(5) δω-ροῦ- - με-νος ἡ - μῖν τὸ μέ - γα ἔ - λε - ος

MODE IV. EIGHTH ODE OF CANON Θείω καλυφθείς BY ST. JOHN OF DAMASCUS.

Cod. Cantab. Trin. 1165 f. 52.

From g.

(1) Λύ - ει τὰ δέσ-μα καὶ δρο-σί - ζει τὴν φλό-γα

(2) ὁ τρις-σο-φει-γῆς τῆς θε-αρ - - χί - ας τύ - - πος.

(3) ὕμ - νοῦ - σι παῖ - δες, εὐ - λο - γεῖ δὲ τὸν μό - νον

(4) σω-τῆ-ρα καὶ παντ-ουργόν, ὡς εὐ-ερ - γέ - - την,

(5) ἡ δη - μι - ουρ-γη-θει - - σα σύμ-πα - σα κτί - σις

MODE I PLAGAL. HYMN FROM THE OCTOECHUS (SATURDAY AT VESPERS).

Cod. Athen. 974, page 185.

From d.

λ''
 $\pi\alpha$

(1) Ὁ δι' ἡ - μᾶς σαρ - κί πά - θος δε - ξά - με - νος . .

(2) καὶ τρι - ἡ - με - ρος ἐκ νεκ - ρῶν ἀ - να - στάς

(3) τῆς σαρ - κός ἡ - μῶν τὰ πά - θη θε - ρά - πευ - σον

(4) καὶ ἀ - νά - στη - σον ἐκ πταισ - μά - των χα - λε - πῶν,

(5) φιλ - ἄν - θρω - πε, καὶ σῶ - σον ἡ - μᾶς

MODE II PLAGAL. HYMN FROM THE OCTOECHUS (SATURDAY AT VESPERS).

Cod. Athen. 974, page 189.

From g.

λ''
 $\pi\beta$

(1) Πύ - λας συν - τρι - ψας χαλ - κούς

(2) καὶ μοχ - λούς τοῦ Ἄι - - δου συν - θλά - σας (3) ὡς

Θε - ὄς παν - το - δύ - να - μος (4) γέ - νος ἀν - θρώ - -

πων πεπ - τω - κός ἀν - έ - στη - σας

(5) δι - ἄ τοῦ - το καὶ ἡ - μείς ὑμ - νοῦν - τες βο - ῶ - μεν

(6) ὁ ἐκ νε-κρῶν ἀ - να-στάς, (7) Κύ-ρι - ε δό - ξα-σοι

MODE III PLAGAL. (BARYS OR GRAVE MODE). FIRST ODE OF CANON.

Cod. Cantab. Trin. 1165, f. 80.

From f.

βαρ.

(1) Ἀσ - ω - μεν τῷ Κυ - ρί - ω (2) τῷ βυ - θύ-

σαν - τι Φα - ρα - ῶ ἐν θα - λάσ - σῃ

(3) καὶ τὸν Ἰσ - ρα - ἦλ ἐκ δου - λεί - - ας λυ - τρω - σα -

μέ - - νω (4) τῆ ἀ - φα - τῷ δό - ξῆ ἀδ - τοῦ

Line 1 fin. The group with the Gorgosyntheton is crowded together in the MS, thus— as often.
-φ . τῷ

MODE IV PLAGAL. PART OF ANTIPHON FROM THE OCTOECHUS (SUNDAY AT LAUDS).

Cod. Athen. 974, page 200.

From g.

(1) Ἀ - γί - φ Πνεύ - μα - τι (2) πᾶς τις θεῖ - ος βλέ - πει

καὶ προ - λέ - - γει (3) τε - ρα - τουρ - γεῖ ὕ -

ψι - τα (4) ἐν τρι - σὶν ἔ - να Θε - ὄν μέλ - πων.

(5) εἰ γὰρ καὶ τρι - λαμ - πεῖ

(6) μον - αρ - χεῖ τὸ Θεῖ - ον.

Line 5 INIT. A medial signature, confirming the progression, is added by Man. II. One or two trifling variants, given by this hand, are here omitted.
FIN. The figure called Thematismus Eso is here used, as often, without its Subsidiary sign (Hypostasis).

TRANSCRIPTION OF FACSIMILE. ODES I AND II OF CANON.
MODE I PLAGAL.
Cod. Crypt. E. γ. II, f. 144 b.

Α σω μὲν το σω τη ρι τω ο λω η τω
 ε κου σι ω κου λη. τω σι του εϋ
 λου προ ση λω θη ρτι. και το ρκο σ
 μα ρ φω τι σα ρτι. *αλι λη*
 Θε ο ο φα ρη ε πι γη ο λυ τρω σα
 με ρο σ το γε ρο σ η μω ρ. *βιι δω*
 λο με ρι α σ αν τω με ρω α σω με ρι.
 ιι δι ρι ε δι τε ο τι ε γε ω θη
 ιι μι ο θε ο ο η μω ρ. ο θη ρω λα σ
 ση σω σα λα ρ. και β ρε ρη με ρ
 θρι ψα σα τω ρ. και α θρω πο σι ε
 γω ρω σ. ι ρα σω σα το γε ρο σ τω ρ
 α θρω πο ρ. *αλι λη*
 Α λη θη ρα τα β ρε γω κυ ρι ου του θε
 ου η μω ρ. και πα σα ι α ο δοι
 ου του κυ ρι σει σι. *αλι λη*
 Γ τι ρε ω σο ρ με ρ με ρε σω τη ρ οικτι ρ

Cod. Cryptoferrat. E. γ. II f. 144 v.

Reprinted from BYZ. ZEITSCHR., 1924.

From d.

ὠδή α'.

(1) Ἄ - - σω - μεν τῶ σω - τῆ - ρι τῶν ὀ - λων

(2) τῶ ε - κου - σί - ω βου - λῆ (3) ε - πι τοῦ ξό - λου

(a) προσ - η - λω - θέν - τι. (4) και τὸν κόσ - μον φω - τί - σαν - τι.

ἄλλο.
(1) Θε - ὄς ε - φά - νη ε - πι γῆς (2) λυ - τρω - σά - με - νος τὸ

(b) γέ -- νος ἡ - μῶν (3) ἐξ εἰ - δω - λο - μα - νί - ας - -

αὐ - τῶ μό - νω ἄ - σω - μεν

(a) The Parakletike (slur) is not very clear in the reproduction: we have - η - λω -. This slur recurs over -δω- at (b).

ὠδή β'.

(1) Ἰ - δε - τε, ἰ - δε - τε (2) ὁ - τι Ἐ - γώ ει - μι . ὁ .

Θε - ὄς ὑ - μων (3) ὁ ἐν θα - λάσ - ση σώ - σας λα - ὄν

(4) καὶ ἐν ἐ - ρή - μω θρέ - ψας αὐ - τόν (5) καὶ ἄν - θρω - πος -

γε - γο - νῶς (6) ἰ - να σώ - σω τὸ γέ - νος τῶν ἄν - θρώ - πων.

ἄλλο.

(1) Ἀ - λη - θι - νὰ τὰ ἔρ - γα Κυ - ρί - ου τοῦ Θε - οῦ ἡ - μῶν

(2) καὶ πᾶ - - - σαι αἱ ὁ - δοὶ αὐ - τοῦ κρι - σεις.

INDEX

- Antikenoma 27.
 Antiphon 38, 45.
 Apoderma or apodoma 25, 32.
 Apostrophus 20.
 Argon 26.
 Athens 37.
 Athos 17, 37.
 Bareia 26, 29.
 Barys or Grave Mode 34.
 Cadences 32—35.
 Cambridge 37.
 Canon 39, 41, 44.
 Chamele 21.
 Chartres 14, 17.
 Chromatic Passages 35—6.
 Chrysanthus 16, 35.
 Coislin Notation 14, 29.
 Colon 27.
 Cucuzeles 15, 17, 18, 28.
 Diple 25.
 Double Apostrophus 20, 25.
 Duo Kentemata 19, 20.
 Elaphron 21, 29.
 Enarxis 28.
 Fita 28.
 Gorgon 26.
 Gorgosyntheton 27, 44.
 Grottaferrata 37.
 Hyporrhoe 20.
 Hypostasis 25.
 Hypotaxis 21.
 Hypsele 21.
 Intonations 30—31.
 Ison 19.
 John of Damascus, Saint 13, 41.
 Kentema 21.
 Klasma 25.
 Kratema 25, 29.
 Kratemo-hyporrhoeon 20.
 Kuphisma 19, 20.
 Kylisma 26.
 Late Byzantine Notation 15.
 Manuel Chrysaphes 36.
 Martyria 32.
 Modes, Byzantine 30—36.
 Modulation 36.
 Nenano 35.
 Octoechus 38, 40, 42-3, 45.
 Oligon 19.
 Oxeia 19.
 Palaeobyzantine Notation 17, 18.
 Paracletice 38.
 Parakletike 27, 47.
 Pelaston 19, 20.
 Petaste 19.
 Phthora 36.
 Piasma 26.
 Pneuma 21.
 Psephiston 26.
 Round Notation 14.
 Seisma 29.
 Signature 32, 45.
 Soma 19, 21.
 Subsidiary Signs 25—29.
 Synagma 28.
 Thema Haploun 28.
 Thematismus 27, 45.
 Thes-kai-apothes 27.
 Tzakisma 25.
 Xenus Coronas 36.
 Xeron Klasma 26.

sometimes as assuming too little. No doubt it will someday be necessary to reconsider it in the light of our rapidly widening experience. Yet before this is done we shall need to know more about the earlier Byzantine notations and about the way the Middle Byzantine notation grew from them. To reconsider it without this knowledge can result only in random patchwork, eventually to be discarded.

Outweighing any of the alleged deficiencies of the method are its positive merits. By now it is solidly established and well understood, even by its critics. And, as Høeg has said, it is "a convertible system of correspondences"; within limits, it enables the reader of a transcription to form an exact mental image of the original notation it represents, and this remains true even if he questions the validity of the several signs used in transcription to indicate dynamic and rhythmic nuance and prefers to regard these as mere conventions.

This second printing being a photographic reproduction, its series-title necessarily lists the members of the Editorial Board as of 1935. An up-to-date list of members heads the catalogue of publications printed on the inside covers.

OLIVER STRUNK.

Vol. 8. HIRMOLOGIUM SABBATICUM

ED. JØRGEN RAASTED

Copenhagen 1968-70

(reproduction intégrale du Cod. Saba 83)

1. Pars Suppletoria. (broché) et

2.1. Pars Prima: Toni Authentici (relié)

Prix: cour. dan. 1725.-

2.2. Pars Secunda: Toni Plagales (relié)

Prix: cour. dan. 1207.50

Vol. 9. TRIODIUM ATHOUM

ED. ENRICA FOLLIERI et OLIVER STRUNK

(reproduction intégrale du Codex Monasterii Vatopediou 1488). - (sous presse)

Série Subsidia. Grand in 8°.

Vol. 1, Fasc. 1. H. J. W. TILLYARD: HANDBOOK OF THE MIDDLE
BYZANTINE MUSICAL NOTATION

Second impression 1970

Vol. 1, Fasc. 2. CARSTEN HØEG: LA NOTATION EKPHONÉTIQUE

Copenhagen 1935 - Prix: br. cour. dan. 14.95

Vol. 2. (= American Series, No. 1). EGON WELLESZ: EASTERN ELEMENTS
IN WESTERN CHANT. Boston 1947

Réimpression Copenhagen 1967 - Prix: relié cour. dan. 126.50

Vol. 3. R. PALIKAROVA VERDEIL. LA MUSIQUE BYZANTINE CHEZ
LES BULGARES ET LES RUSSES (en collaboration avec l'Institut Byzantin de

Boston). Copenhagen 1953 - Prix: br. cour. dan. 44.-

Vol. 4. STUDIES ON THE FRAGMENTA CHILIANDARICA PALAEOSLAVICA. I
Miloš M. VELIMIROVIĆ: BYZANTINE ELEMENTS IN EARLY SLAVIC CHANT:
THE HIRMOLOGIUM

Pars Principalis et Pars Suppletoria

(in collaboration with *The Dumbarton Oaks Research Libr. and Coll.*
and the *Slavic Department* of Harvard University)

Copenhagen 1960

Les 2 volumes ne sont vendus qu'ensemble. - Prix: br. cour. dan. 57.50

Vol. 5. R. P. BARTOLOMEO DI SALVO:

CANTI ECCLESIASTICI DELLA TRADIZIONE ITALO-ALBANESE. I
CANTI DELLA SICILIA

(sous presse)

Vol. 6. STUDIES ON THE FRAGMENTA CHILIANDARICA PALAEOSLAVICA. II

Ed. ROMAN JAKOBSON:

FUNDAMENTAL PROBLEMS

OF EARLY SLAVIC MUSIC AND POETRY

(sous presse)

Vol. 7. JØRGEN RAASTED: INTONATION FORMULAS AND MODAL
SIGNATURES IN BYZANTINE MUSICAL MANUSCRIPTS. Copenhagen 1966

Prix. br. cour. dan. 46.-

Vol. 8. CHRISTIAN THODBERG: DER BYZANTINISCHE ALLELUIARIONZYLKUS
STUDIEN IM KURZEN PSALTIKONSTIL

Kopenhagen 1966 - Prix: br. cour. dan. 69.-

Vol. 9. DIMITRIJE STEFANOVIĆ: THE TRADITION OF THE SLAVIC STICHERARION
(en préparation)

Serie Transcripta. Grand in 8°.

Vol. 1. DIE HYMNEN DES STICHERARIUM FÜR

SEPTEMBER, übertragen von EGON WELLESZ

Copenhagen 1936 - Prix: br. cour. dan. 16.40