



Byzantine versus Western Notation



Byzantine music notation has been the traditional medium for writing liturgical melodies of the Greek Orthodox Church for more than a millennium. Over the centuries, this notation was refined as it went through various stages of development and reformation. Its contemporary form (the “New Method” devised in 1814 by the “Three Teachers”: Bishop Chrysanthos of Madytos, Gregory the Protopsaltis, and George Hourmouzios “Hartophylax”) has proved to be the most practical and effective way to write melodies of Byzantine chant.¹

¹ The “New Method” proved to be more practical than the older notation for the reasons mentioned in the preface by Dimitri Conomos (although the new method did have a few imperfections, explained in an online article in Greek, located at: <http://www.stanthonysmonastery.org/music/Nerantzis/index.html>). The new method also prevailed over several other attempts in the nineteenth century to create a new notation for Byzantine music. In particular, the following six attempts to write Byzantine melodies in a different notation failed:

- 1) Agapios Paliermos wrote Byzantine melodies in a staff and an alphabetical notation (ca. 1797-1815).
- 2) In the early nineteenth century, an anonymous hand wrote Byzantine music in staff notation, known today as Sinai manuscript 1477.
- 3) In 1835, an unsuccessful alphabetical system was invented, known as “Bucharestios.”
- 4) In about 1842, another alphabetical system, devised by Monk Paisios of Xeropotamou, met with failure.
- 5) In the 1840s, George Lesvios published books of Byzantine music in a notation he concocted, which used Byzantine neumes to express absolute pitches instead of relative pitches. Although his notation met with temporary success in Athens (due to the support of the Greek government), it was harshly criticized by great chanters of his time (including Theodore Phokaeus and Constantine Byzantios the Protopsaltis), who persuaded the Ecumenical Patriarch Anthimos to condemn it with an encyclical. Thereafter, this notation was quickly abandoned.
- 6) In 1844, John Haviaras in Vienna began publishing liturgical hymns in Western staff notation. His music not only altered the notation but also the character of the Byzantine melodies by introducing four-part harmonies accompanied by a piano. Realizing the spiritual dangers entailed in this break from tradition, the Patriarchate of Constantinople officially condemned the liturgical use of such music. (Its encyclical is available online at: <http://www.stanthonysmonastery.org/music/encyclical.pdf>). A few decades later, John Sakellaris would also publish many harmonized liturgical hymns in Western staff notation.

For more details, see: Παπαδόπουλος, Γεώργιος, *Ιστορική Ἐπισκόπησις τῆς Βυζαντινῆς Ἐκκλησιαστικῆς Μουσικῆς*, Ἀθῆναι, 1904, σελ. 228-230, 351-354. See also: Στάθης, Γρηγόριος Θ., *Ἡ Παλαιὰ Βυζαντινὴ Σημειογραφία καὶ τὸ Πρόβλημα Μεταγραφῆς τῆς εἰς τὸ Πεντάγραμμον*. Βυζαντινά - Τόμος 7ος, Θεσσαλονίκη, 1975, σελ. 218-219.

In recent times however (primarily since the late nineteenth century), many Byzantine melodies have been transcribed into Western staff notation. Although this has made Byzantine melodies more accessible to the Western world, such transcriptions have the following drawbacks:

1) Byzantine notation² contains several qualitative symbols that describe how a particular note or group of notes should be chanted. Western notation also possesses many qualitative symbols, but most of them are inapplicable to Byzantine chant.

2) Byzantine melodies are, for the most part, an amalgamation of specific melodic formulae. These melodic formulae can be easily recognized by a chanter when they are written as a particular combination of neumes. When they are written in Western notation, however, they cannot be so readily recognized. As a result, they will tend to be executed in a dry manner, note-by-note, rather than as a flowing musical phrase. Furthermore, these melodic formulae consist of nuances that are not expressly written even in Byzantine notation. Nevertheless, when an experienced chanter recognizes the melodic formula, he will add these nuances in accordance with the tradition. On the other hand, in Western notation this is less likely to occur, since the chanter will not recognize the melodic formula.

3) Because Byzantine notation is descriptive, it grants an experienced chanter the freedom to add to a melody the embellishments he has learned through oral tradition. The same score may also be executed slightly differently by another experienced chanter who hails from a different “school” of Byzantine music. Furthermore, the same score may also be used by a beginner to chant in a simple manner. On the other hand, Western notation is usually assumed to be determinative, and as such it eliminates all such freedom of interpretation.³ A more serious drawback resulting from this determinative aspect is that Byzantine melodies written in Western notation are necessarily either too analytical or too simplified.

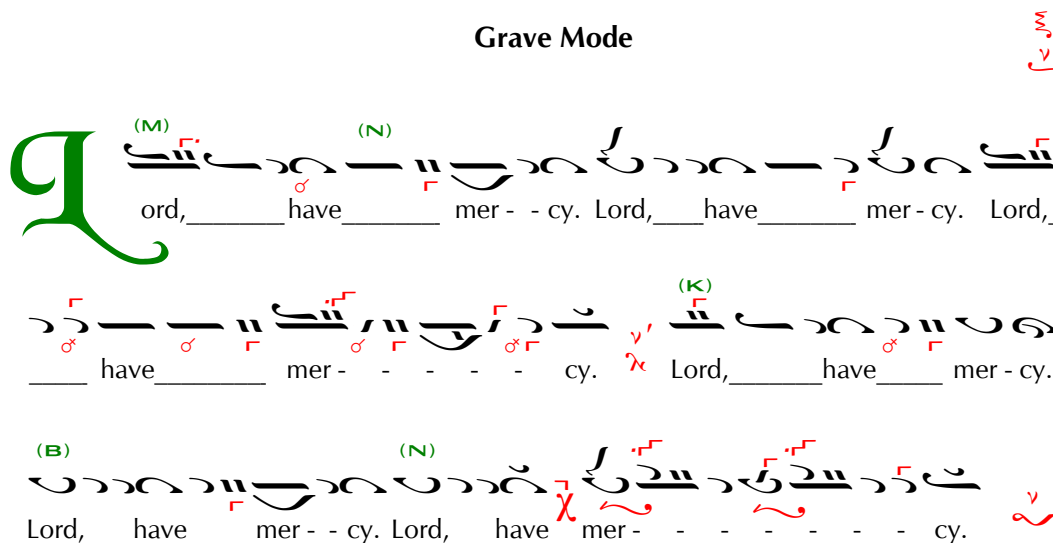
4) Western notation describes a melody in terms of *absolute* pitches, whereas Byzantine notation describes a melody as *relative* pitches within a particular predefined scale. This kind of notation makes vocal music easier and more intuitive to execute, especially if the melody consists predominantly of small jumps, as does Byzantine music. A small advantage of this relativity of Byzantine notation is that it grants chanters the flexibility to transpose easily a music text to an appropriate key, depending on their vocal range or on the pitch of the priests’ petitions. This is only a small advantage, since music in Western notation can also be transposed

² For the sake of brevity, the remainder of this essay will use the term “Byzantine notation” to denote the aforementioned post-Byzantine notation of the three teachers. Likewise, the term “Western notation” will be used hereafter to refer to the contemporary Western staff notation that has been used as the standard for compositions in the West since the seventeenth century.

³ To repeat the words of Professor Demetrios Giannelos quoted in footnote #43 of our introduction: “A descriptive notation, such as that of Byzantine music, describes the essentials of the piece, leaving to oral tradition the task of completing with precision whatever is not described. On the contrary, a determinative form of writing, such as Western notation with staves, determines with great precision the manner of execution, to the point that the interpretation of the person executing it is delineated by factors that depend directly on the definitive indications of the music symbols. These indications can be so absolutely restricting that they preclude all room for interpretation.”

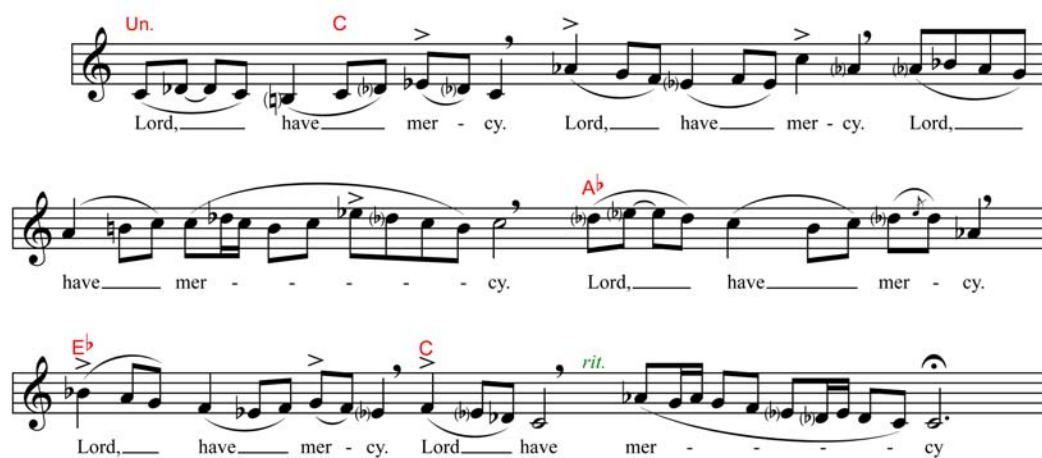
without too much difficulty, especially if it is based on a solfa (Do-Re-Mi) system. However, a greater advantage of this relativity becomes evident when modulations come into play, especially when they are introduced on notes that are not their natural tonics. The score in Byzantine notation remains the same notationally, and is thus easily recognizable as a phrase, whereas the same music written in Western staff notation may result in nonstandard key signatures or numerous accidentals, and as such will not be easily recognized as a phrase. As a result, such music becomes extremely difficult to sight-read. To see an example of this difficulty, compare the following transcriptions in English of the end of the five-mode “Kyrie Eleison” by Nileus Kamarados, and notice how burdened with accidentals the version in Western notation is:

Grave Mode



Byzantine notation for the Grave Mode. The notation consists of three lines of neumes. The first line starts with a large green 'Q' symbol. Above the first line are green letters (M), (N), and (K). Above the second line is a green letter (B). Above the third line is a green letter (N). The text below the neumes is: "ord, have mer - - cy. Lord, have mer - cy. Lord, have mer - - - - cy. Lord, have mer - cy. Lord, have mer - - - - - cy." There are red symbols (sigma and lambda) and a red 'v' symbol at the end of the third line.

Grave Mode



Western staff notation for the Grave Mode. The notation consists of three staves. The first staff has a red 'Un.' above the first measure and a red 'C' above the second measure. The second staff has a red 'A^b' above the first measure. The third staff has a red 'E^b' above the first measure, a red 'C' above the second measure, and a green 'rit.' above the third measure. The text below the staves is: "Lord, have mer - cy. Lord, have mer - cy. Lord, have mer - - - - cy. Lord, have mer - cy. Lord, have mer - - - - - cy." There are many accidentals (flats and naturals) throughout the notation.

5) Standard Western notation is incapable of accurately expressing the proper intervals of Byzantine music. Although it can approximate most Byzantine scales such that the error is never greater than 2 μόρια (33 cents), it cannot approximate the scale of the soft chromatic modal genre without producing an error of less than 4 μόρια (67 cents). This large error considerably alters the ὕφος (the “hue”) of troparia in this modal genre. (This problem is discussed at greater length online at: <http://www.stanthonysmonastery.org/music/Chromatic.htm>)

6) Many people familiar with Western music have learned to associate music written in Western notation with a certain style of singing that is foreign to the traditional style of Byzantine chant. For example, some of them might tend to sing music in Western notation with excessive vibrato, with a subtle crescendo on every note, or in a disjunctive manner (i.e., by silencing their voice for a fraction of a second before beginning the next note). Although Byzantine notation in and of itself will not hinder such people from applying this same Western style of singing to it, it will nevertheless serve as a visual reminder that Byzantine chant is quite different from Western singing.

Although the words “sing” and “chant” in English can both be used in reference to executing liturgical music, we prefer to use the word “chant” instead of “sing” in order to preserve the same distinction that exists between the corresponding words in Greek. Photios Kontoglou of blessed memory (1895-1965) explained that the distinction between these two terms in Greek lies in the spiritual differences between secular and ecclesiastical music. In particular, he wrote: “Spiritual feelings are expressed only by ecclesiastical music. Only ecclesiastical music can express the secret movements of the heart, which are completely different than what worldly music expresses. For this reason, the two kinds of music [European and Byzantine] are totally different, just as shown by the words ‘sing’ (τραγουδῶ) and ‘chant’ (ψάλλω).”⁴

7) The rules of standard Western notation dictate that a new time signature be inserted within a melody every time the rhythm changes. But since Byzantine melodies are characterized by syllabic rhythm (i.e., the rhythm is derived from the pattern of accentuated syllables), such melodies transcribed into Western notation would be burdened by dozens of time signatures, thus rendering the score awkward. Moreover, melodies written in Byzantine notation can easily be annotated with “abridged rhythm” (συνεπτυγμένος ρυθμός), which, in the words of Demetrios Sourlantzis, lends the melodies “grandeur, solemnity, modesty, sacredness, and nobility.”⁵

8) Standard Western notation has key signatures for music only in the major and minor keys. Byzantine music, however, consists of many modes that are neither major nor minor (e.g., the hard chromatic modal genre, the diatonic grave mode, etc.). Therefore, in order to write such melodies in Western notation, one must either devise a non-standard key signature or burden the score with repeated accidentals.

⁴ Translated from a radio broadcast available online at: www.analogion.com See also: Cavarnos, Constantine, *Byzantine Sacred Art*. Institute of Byzantine and Modern Greek Studies, Belmont, Massachusetts, second edition, 1992, p. 148.

⁵ Σουρλαντζής, Δημητρίου Γ., *Βυζαντινή Θεία Λειτουργία*, Θεσσαλονίκη, 1992, σελ. στ’.

9) There are more than 100 orthographical rules for Byzantine music notation (which we have compiled in English at: <http://www.stanthonysmonastery.org/music/ByzOrthography.pdf>) that determine when, for example, a petastē must be used instead of a psēfistón. There are also hundreds of unwritten formulaic rules for Byzantine music that dictate which melodies are permissible for a given syllabic pattern. Combined, these rules help to ensure that new compositions (in any language) remain within the bounds of traditional Byzantine music, while still allowing for creativity. New compositions, however, can stray from these traditional bounds more easily when written in Western notation, since composers can write an untraditional musical line without readily realizing that they have deviated from the traditional musical formulae.

10) A person who knows Byzantine music notation has access to the vast repertoire of the traditional music of the Greek Orthodox Church in its purest form, whereas one who knows only Western notation must either rely on the few existing transcriptions of Byzantine music (with all their aforementioned drawbacks) or, even worse, resort to singing modernistic compositions, most of which have strayed far from the style of traditional Byzantine music.

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The only significant drawback to Byzantine notation is that it is harder to learn than Western notation. There are only about twenty symbols in Western notation that one needs to know in order to read simple vocal music (such as the transcriptions in our website). Since a large number of people in contemporary Western society have been introduced to this notation early in their lives, many can become proficient at sight-reading such music with relatively little effort. Byzantine notation, on the other hand, has about one hundred symbols and combinations of symbols that need to be learned, and few people in the West have ever even seen this notation before in their lives. Nevertheless, the task of learning it is by no means insurmountable. Proof of this is the many people throughout the Western world who have managed to learn it through books and recordings of traditional chanters, with little or no help of a teacher. Experience has shown that one can learn Byzantine notation in less than a week.⁶

If one is interested in learning Byzantine notation well (i.e., not just figuring out the mechanics of Byzantine chant, but achieving a certain degree of proficiency in this sacred art form), the best way to do so is to find a teacher who can give private lessons. But since teachers can be difficult to find, the next best way to begin learning is with the audio-visual resources available online. These resources are listed in our “Byzantine Music Links” page, located at: <http://www.stanthonysmonastery.org/music/Links.htm>. We suggest beginning with the link “Teach Yourself Byzantine Notation: exercises with recordings, by Margaziotis.”

⁶ Gregorios Stathis, a professor of music in Athens, once visited the Republic of Georgia and attempted to teach Byzantine notation to forty men and women who had never seen it before in their lives. After spending six hours with him every day for six days, without difficulty they learned to chant not only simple troparia but even elaborate compositions written in Byzantine notation.