

Brainstorming on the Encoding of Eastern Neumes: Middle-Byzantine Notation as a Case-Study

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Abstract

The effort to encode neumatic notations has primarily focused on Western European repertoires, with little attention given to the neumes employed in the East. To address this gap, we propose to apply our knowledge of the MEI Neumes Module and Eastern notations to raise awareness on some methodological issues that have hindered modern scholars from encoding Eastern neumes. Our case study is the Middle Byzantine notation, employed from the mid-12th-century to about 1815 across a large geographical area encompassing mainly Eastern Europe and part of the Middle East. This notation has been chosen since it has many points of contacts with Western notations but, at the same time, its basics differ radically from what we encounter in the West.

In the East, music scripts are of the 'articulatory' type, serving as a guide on how to make music, almost similar to a tablature style of notation. In Western notation the performance is captured mostly within the neume. In the East notation is context sensitive and its interpretation depends on different factors, such as the genre and style of *melopoeia*, the mode, the melodic formula, the place within the musical phrase, the poetic text, and the liturgical frame. This fundamental difference has also an impact on the kind and number of signs employed in the notations. Middle-Byzantine notation offers an impressive number of combinations and positioning of signs including neumes that provide specific interval information and subsidiary or cheironomic signs indicating the musical 'Gestaltung', which implies rhythmical properties, grouping, and phrasing of the interval signs, dynamics, ethos of the

formulas, as well as different levels of ornamentation and melodic expansion, according to the context. Possibly, the most difficult feature to be captured in the encoding of Middle-Byzantine notation is the relative position of the signs in the notational space; indeed, their relative positioning (above, below, next) can change the overall interpretation of all the related signs.

When considering the graphical appearance and semantic of neumes, we should adopt both approaches to the encoding of Middle-Byzantine notation. It is crucial to be able to capture in the encoding even the finest details because this notation is very precise and conveys musical meaning through the tiniest graphical feature. On the other hand, encoding the semantic of the neumes should remain possible and open since, besides the basic intervallic structure of the pieces, the other dimensions of the music have to be interpreted in the light of oral tradition. Therefore, it would be desirable to include information on historically informed practice, which is available through musical treatises, manuscripts, and the oral tradition of Byzantine Chant. Middle-Byzantine neumes are therefore rich in metadata and their encoding should also include the names of the neumes in Greek, possibly with transliteration, translation, and etymology.

We hope that our presentation can actively contribute to the ongoing discussions on encoding of non-Western early notations, particularly the Middle-Byzantine notation, and encourage a collaborative effort to find the most effective way to encode Eastern neumes.

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