

## The essentials of Byzantine Notation

In order to read (or perhaps, more equitably, to codify) a psaltic notebook, much information is essential. Thus, the technique of choir singing should be detected step by step, on the one hand, in combination with the singing approach of the signs of the psaltic art and the musical lines (the great *theseis*) that is shaped by them, while, on the other hand, in combination with the (continuously reused in the psaltic compositions) alternation of the modes of the Byzantine octoechia and the rhythmical forms of Greek rhythm, and, finally, in combination with the evident structure of any one composition (morphology) and the inherent design of its structure (melopœia). These data (of equal respect and complementary) shape, in the end, the particular sound, the expressed sentiment, the whole aesthetic of any psaltic interpretation, as much from the choir (where it is examined in this respect) as from that of the soloist (that it constitutes the primary core of corresponding choir singing). It is obvious that I am referring here to three pairs of data. I repeat:

1. the singing approach of signs and musical lines of (the eminent *theseis*) of the psaltic art;
2. the modulation as much of the modes of Byzantine octaechia as of the rhythmical forms of Greek rhythm; and

3. the revealed structure (morphology) and inherent “plan of composition” (melopœia) of any composition.

Based on the written, but primarily the oral tradition of the psaltic art, for each one of the above elements it is possible to speak extensively, most extensively. Because, however, I do not wish to extend the presentation, I will limit myself here to an indicative analysis of only the first unit of data—specifically, I will speak (with all possible brevity) on the essential characteristics of Byzantine notation, pointing out simply —for each case— one rudimentary pre-theory, accompanied with corresponding musical examples:

On the subject of a singing approach of the signs of the psaltic art my personal belief is that our interest should, of course, be focused on two elements: firstly, on the signs that supports the repetition of each syllable poetic text set to melody and secondly on the signs that extend the timing of the chanted syllable of any musical text. Word and melos, poetry and music, are the essential characteristics of Byzantine music. Thus, there exist concrete signs that are inserted into any musical text, signs that serve to enlarge, not only the poetic (repetition of the syllable), but also the musical (augmented, extended time) text. These signs are the essential characteristics of Byzantine notation. Analytically:

A. Regarding the repetition of the syllable, Byzantine notation uses the following marks:

### **Kentemata, hyporroee and bareia**

For the kentemata, I present the following interesting interpretation from an anonymous theoretical treatise (the so-called *Akribeia*), where the sign's character is marvellously described: that is to say that they are not composed with other signs but are placed in all the signs (ascending and descending), in the same way that cement sticks building materials together.

*Teacher:* The treatment of these signs is difficult and complex since this sign to which I am referring, the two kentemata, is outside the order of "voiced" (diastematic) signs. For what reason? Because it is neither a pneuma nor a soma. For the pneuma subjects, but the soma is subjected. But these two kentemata neither subject nor are subjected. And they can not be placed alone, but only with other voices. Furthermore they have two characteristics that no other sign possesses: the first one of these is that the ascending voices are grouped with the ascending voices, and in the same way also the descending are placed with the descending. But these two kentemata can be found with the ascending as well as with the descending voices [...] The second characteristic, which is the more difficult and the more admirable, is the following: (that) when each of them <the kentemata> was alone, it had two voices; but when they were put together, both of them, they lost their voices, i.e. the four, and they don't have neither three nor two, but only one [...]

*Pupil:* So, I pray you, show to me in a clearer and more simple manner what was the aim of this

*maker, that he let the two kentemata have just one voice and not more?*

*Teacher: You are right and you are well aware, my son, that the man who made these was an artist. But he who made these signs from the beginning to the end, or in other words from the ison through all the rest, he made them in many ways: some <he made> for ascending and descending voices, other for rest, and others again for cheironomy. And as a wise artist he saw that just as the cheironomy is in need of many signs for the <various> figures, thus also the mode is in need of many signs for the voices of the melos; be them firm or melodic, slow or quick. He made the oxeia a lighter voice than petasthe and the oligon lighter than the oxeia. And again he was looking for a voice briefer than the oligon and he figured out as a wise man that this sign, must not be one of the somata but must be one of the pneumata, since the soma (body) is a heavy thing. So he brought in the two pneumata, i.e. the two kentemata, and made them one hypostasis, just as a man from the two elements earth and water makes clay as one hypostasis.*

In the same treatise, the hyporroë's parallelism with the two kentemata is pointed out: *The reason for and the interpretation of the hyporrhoe is analogous to that of the two kentemata. For when the technician had completed the ascending voices, he made the two kentemata. Thus after completing also the descending voices, he made the hyporrhoe. Now, those two kentemata were made to indicate an oscillation (saleuma) in the ascent, while this (the hyporrhoe) <was made> in order to flow, i.e. run in the descent. And as we have said that the two kentemata is a sign, that is neither pneuma, nor soma, i.e. neither subjecting nor being subjected, in the same way also the hyporrhoe neither subjects nor is subjected...*

Finally, the bareia is a voiceless sign that supports the repetition of a syllable when we have the descent of the voice. In the same theoretical text, the *Akribeia*, this double role of the bareia is beautifully pointed out: *the bareia was not only for the cheironomia, but for two reasons: partly for the modifications of the cheironomy, partly in order to gather both, i.e. the ascending and the descending voices in combination.* The bareia (as in times past was the case with the piasma, the seisma, the antikenoma and the xeron klasma), on the one hand, *gathers the ascending and descending voices in one place, i.e. on one syllable*, while, on the other hand, *it modifies the cheironomy in accordance with what is found in front of it...*

**Teacher:** *Why then do we need and various signs? But as it is, each one of them is different in accordance with the aims of the maker of the signs. The parakletike, the tzakisma, the parakalesma and the apoderma are for the cheironomy exclusively. But the bareia, and the piasma, the seisma, the antikenoma and the xeron klasma were made for two reasons: partly for the modifications of the cheironomy, partly in order to gather both, i.e. the ascending and the descending voices in combination.*

**Pupil:** *Which are the modifications in the bareia etc., seeing that you said nothing of modifications in the cheironomy in the parakletike and the other <signs mentioned in connection with it>?*

**Teacher:** *It is for the sake of the order of the voices, of which we have spoken in this way: That the parakletike and the others don't gather the ascending and descending voices in one place, i.e. on one syllable, like the bareia and the piasma and the antikenoma [...] the bareia, because it gathers the ascending and descending voices on one syllable, modifies the cheironomy in accordance with*

*what is found in front of it, or in other words a bareia and an oxeia in front, <or> a bareia and above an oligon and a tzakisma, and below an apostrophos and another apostrophos in front of it...*

B. Byzantine notation uses the following signs for the extension of time:

### **Tzakisma (or klasma) and Diple [oxeia]**

For the tzakisma (or klasma) I present once again from the anonymous theoretical treatise of the *Akribeia* the following interesting interpretation, where the sign's double understanding is revealed: it is characterized (at the same time) as an hemiphone and hemichrone (it has half of an augmentation of time). This, in practice, means that during the time that it adds, it functions partly with a vocal value and partially with a time value. Chrysanthos also describes it in this way in his *Great Theory*: *The note of the neume which bears the klasma, spends two chronoi and, during the delay, the voice waves, so to say.* The way in which this undulation is performed is described by the sign's double name; as we can read in another theoretical treatise, *the tzakisma is the vocal equivalent of clicking your fingers [...]* For this reason it is called *tzakisma*.

*The tzakisma has this gift of grace – which one? That it is placed on all the signs, “voiced” as well as “voiceless”, and on the ison as well – for wheresoever it may be found, be it high or be it low, there it always receives a cheironomic interpretation, and for that reason <it> is called hemiphone (“half-voice”). If it were “voiceless” it would deprive the oxeia of its interval value, just like the*

*ison, but since it is a hemiphone it doesn't deprive it of its interval value, but on the contrary it adds strength to it. It is interpreted cheironomically also in the voiceless signs, but with a voice, and without a voice it will not be found...*

The dipole, in theory, is a double oxeia (as already described long ago in the theoretical treatise of the so-called Hagiopolitis: *In single position, the Oxeia is an activating sign [...] But when it is written twice and is called Dipole, its effect is (only) a lengthening one.* The dipole has (as all the “double” signs) an interesting symbolic representation, at least as it is recorded in the above text of *Akribeia*.

**Teacher:** *...the dipole was also made for the sake of the argia (rest), but it has no voice (interval value). For two combined oxeiai received an argia and for the sake of the argia they lost their value and their dynamic quality. They gained the argia and were deprived of three things: firstly, they in themselves were originally two voiced somata, but now they are one dead, i.e. voiceless, soma (body). Secondly, they had sharpness in the voice and in the cheironomy, but now they have humility. Thirdly, they used to have two separate voices, now they don't have any at all, as if two men had gained the world but had lost their souls. And what are the “souls” of the two oxeiai? The voices. Verily they had a small gain, i.e. the argia, but they lost their voices.*

**Pupil:** *As far as I can see, master, this is not fair. For the two apostrophoi, even if they did not gain the argia, yet still possess a voice and their original cheironomy. How come that we despise the two oxeiai, i.e. the dipole, for not having one voice, like the two apostrophoi. Since they too have become one soma?*

**Teacher:** *Even if the two apostrophoi have become one soma, they have not for that reason changed their position. For they were not high up and then descended low down, but they are*

*always to be found in a descending position and both before and after their unification they always retain their position. And who retains his station, retains his honour as well. But the two oxeiai are not like this, seeing that they have fallen from their station and their glory and have been united in one. As if two men with a reputation for bravery had grasped each other in order to wrestle and one of them was not stronger than the other but both of them had equality of strength and in consequence of the impetus of strength and the equality of both of them a stalemate (argia) has occurred, since the one is unable to conquer the other, thus also the two oxeiai in consequence of the impetus of their mutual struggle have concluded in a duration (argia) and a silence, i.e. "voicelessness" (lack of interval value), and for that reason the dipole is called a "voiceless" sign <that is> slow, or in other words immobile, as if a soldier had left his army and is standing idle.*

In practice, it also functions in a double fashion, as a sign of (extended) augmentation that never leaves the voice unaffected. The analysis of the dipole (but also the other extended signs of augmentation) is one of the finest elements of psaltic expression that deserve to be particularly attended to, as much by the soloists, as by the members of a psaltic choir.

There exist, of course, other combinations of two or more energies worthy of attention (that are always applied at the point where the syllable of a poetic text is repeated), as, for example, in the following:



### **The antikenoma with the aple**

As Chrysanthos comments: *When the antikenoma is underwritten to an oligon followed by a descending neume, it calls for a modulating sound. When an haple, a dipole, or a triple, is put under the antikenoma and it's followed by a descending neume, the sound is pronounced suspended and unbroken.*

### **The Syndesmos (which was called the heteron parakalesma)**

This is a sign with a unique interpretation, especially when it connects repeated syllables; Chrysanthos writes: *The heteron links ascending with descending neumes, as ison with an ison, an oligon with an ison, and an apostrophos, an elaphron or a chamele with an ison. The notes are tied, pronounced in a smooth and faint way. How it acts upon the voice is described in its old name (parakalesma); as commented by the monk Gabriel: ... as the supplicator makes his supplication in a meek voice, so also the parakletike and the parakalesma are not chanted loudly, but in a calm voice....*

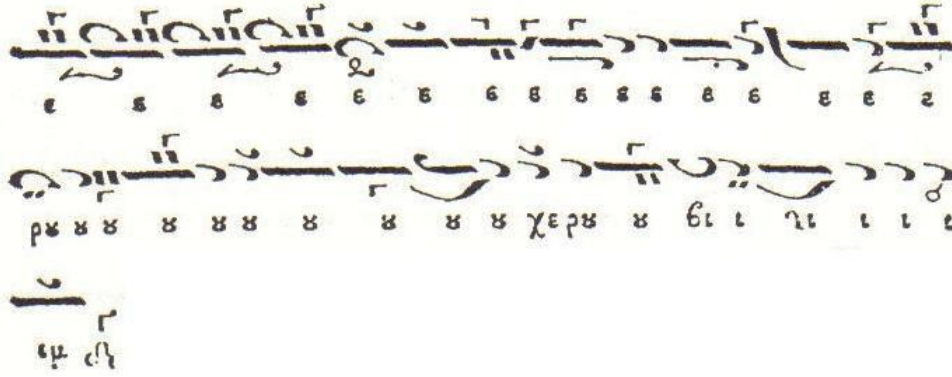
Unless these fine and specialized observations are applied to the famous theseis, in other words, placed within the wider unified musical line framework, which they shape. No definitive technical and artistic choral interpretation can be made. In a different case, the chanting simply remains on the level of metrophony (that is to say, an elementary musical syllablization); unfortunately,

this is a performance model which characterizes most contemporary choral singing approaches:

*At this point, allow me to present to you just one musical example; it's the first part from a Cherubicon, composed in the third mode by Gregorios the protopsaltes. You can see here all the above mentioned elements of the Byzantine notation (a lot of the two kentemata, the diple, the clasma, the hyporrhoe, the antikenoma, the bareia, the syndesmos, etc.). And, of course, I have two choices as to how I sing it: one usual (the syllabic one – in which I shall sing just the metrophony) and another one (perhaps more difficult), in which I have to bear in mind all the above points made about the specific signs and chant according to that model, i.e. artistically...*

ἦχος γ'. Γα,

The image displays a musical score for a Cherubicon in the third mode, composed by Gregorios the protopsaltes. The score is written in Byzantine notation, featuring eight lines of music. Each line consists of a series of notes connected by lines, with various signs such as kentemata, diples, clasma, hyporrhoe, antikenoma, bareia, and syndesmos. Below the notation, the syllabic text is written in Greek letters and symbols, including 'οι', 'α', 'Χε', 'ε', 'δ', 'γ', and 'ε'. The text is arranged in a way that corresponds to the notes above it, illustrating the syllabic singing approach.



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All observations pointed out here, however indicative (unfortunately) and fragmentary, had no other aim than to broadly describe the quintessence of the psaltic art, the art that not only a choir of chanters is called to serve, but also any individual chanter. It is a desire that was excellently defined by Apostolos Konstas from Chios, using two words: “ἀγγελικὴ μελωδία” [: *angelic melody*]; his observations have diachronic value and deserve our attention:

*“... the great teachers [...] gave attention only to the rhythm and the artistic melos was performed only with rhythm and metrophony [...]; as for today’s wise men of the nation, the rest, may the shaping I be absent from them, as they are also absent from European music, and the metrophony be enough for them [...]. The lines belong only to the Romaioi [...]; the later teachers, each one doing one thing and then another, another, lost both the fruit and the art altogether. However, their grace is desired by every musician, because the exegesis exists so that the line is not lost; however, absent from the exegesis is the melos of line, since the line has within it the great voices and the small, the shapings, the semi-voices and the cheironomy. Through it [the exegesis], whoever learns each line tires in the beginning, however, chants without hesitation in the end, as*

*if he knew it by heart. The exegesis is learned easier than this; however, the chanter loses the nature and energy of the line. Counting and canting, he must take much care so that he does not lose a voice and, thus, lose the entire piece."*

He, indeed, is the one who characterizes whoever reaches the end of this journey, the end of this search, as a "*full chanter*" who can "*make merry*". This is a psaltic state to be zealous of, desirable, but also essential for each member of any choir...