Byzantine Notation Exercises

adapted into English from those of John D. Margazioti

A ByzantineChant.Org Publication

Introductory Comments

Before beginning, it is necessary to learn the names of the notes of the Byzantine Scale:

Ni - Pa - Vou - Ga - Dhi - Ke - Zo.

These names correspond to the Western scale names of:

"Do, Re, Mi..." (the Solfège and European scale system)

or

"C, D, E..." (the American scale system).

Try to use the Byzantine note names when chanting the exercises; while it will be an adjustment, it will get easier with time, and will be well worth your effort. This method of chanting a hymn (or exercise) is called *parallegē*. It may be helpful to write in the note names at first; the initial exercise has already been filled out for you.

Byzantine notation is a symbolic notation that is read from left to right. When ascending, it is also read bottom to top; conversely, when descending, it is read top to bottom. It is a relative notation, meaning that the symbols don't tell you on what note you should be, but how large of a jump you should make from the previous note. There are 10 ascending and descending symbols to learn; we will call these quantitative symbols (since they tell us where to go, musically, and by how much).

Each quantitative symbol initially gets one beat. This will be adjusted by other symbols, which will be introduced later in the exercises. Most music has a two beat meter, meaning you will count: "One, two, One, two, One, two, etc.". The first beat is the strong beat and the second beat is the weak beat. The exercises will start out this way, but they will change later. This will be indicated by the words Duple Meter, Triple Meter, or Quadruple Meter (2 beats, 3 beats, or 4 beats to a measure). Each set of 2 (or 3 or 4) notes will be set apart by a vertical "bar" line; this separates one set of notes from another. In most *regular* music, these *bar lines* are only used when the meter varies from Duple Meter.

The beginning exercises will start on Ni; this is indicated by the Greek letter following the exercise number. Since this is a relative notation system, you can pitch *Ni* wherever is comfortable for your chanting range. In the midst of the music, there will be other markers called "Note Markers" which tell you what note you should be on at that moment. While these exercises should technically be chanted using the *Diatonic* scale, feel free to use the Western Major scale. The adjusted intervals will come with time, practice, and voice/ear training.

As a final note, this is not a textbook on Byzantine notation, but an exercise manual. Therefore, explanations are as brief as possible and are not meant to replace a qualified teacher or Byzantine Theory/Notation textbook.

Exercises

Quantitative Characters

Connected Ascents and Descents

The following exercises mainly introduce quantitative symbols (symbols that tell you where to move in the scale) that are directly connected to the previous note. This includes such motions as *stay the same, go up one,* and *go down one*. There are three major ways to ascend one note, and just one way to descend. These variations in ascent tell you *how* to ascend. While these symbols can correspond to the interval of a second in Western music, the distance of that ascent/descent is not always the same (and sometimes does not actually correspond to a major or minor second, at all); so, it is easier to say, "go up one."

Ison, Oligon and Apostrophos

= Ison (+0)

Ison means to stay on the same pitch as the previous note (or starting pitch).

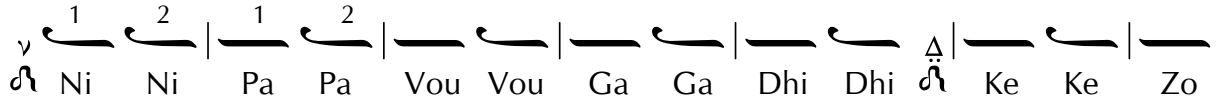
= Oligon (+1)

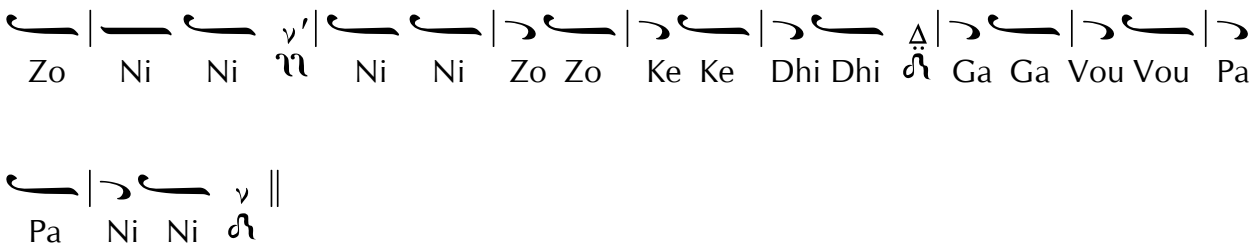
Oligon means to ascend one note from the previous pitch (or starting pitch).

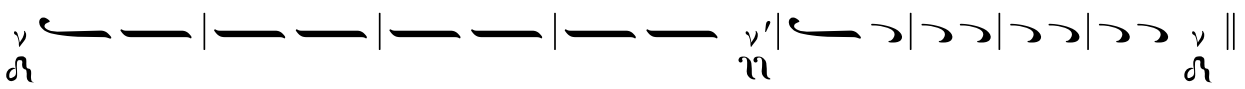
= Apostrophos (-1)

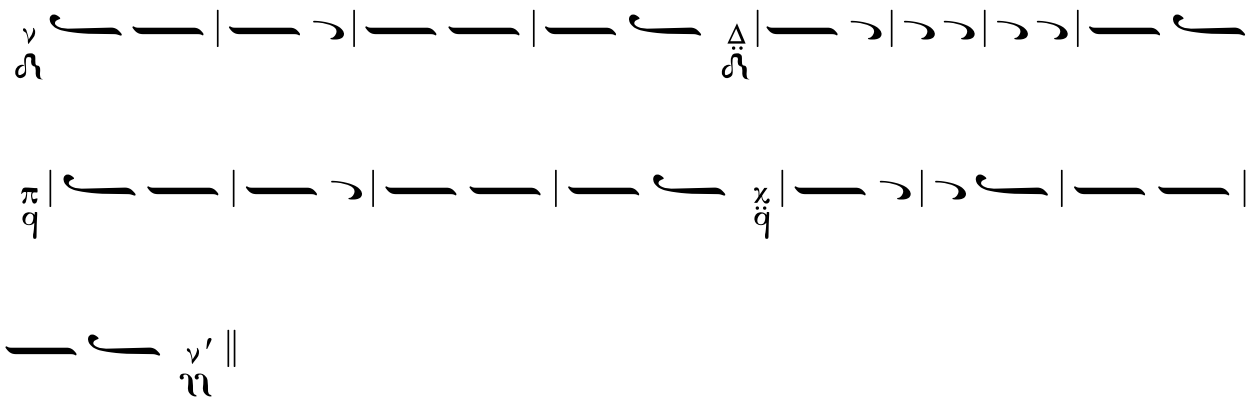
Apostrophos means to descend one note from the previous pitch (or starting pitch).

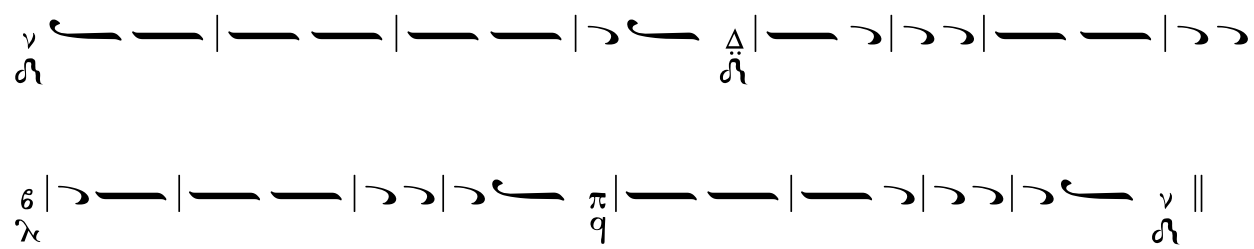
Duple Meter:

1. 



2. 

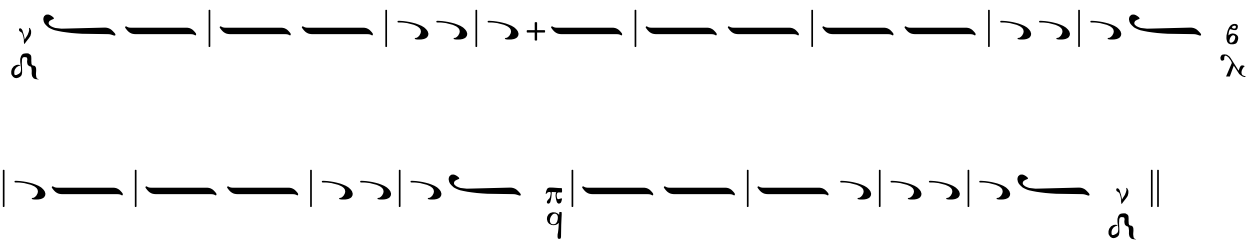
3. 

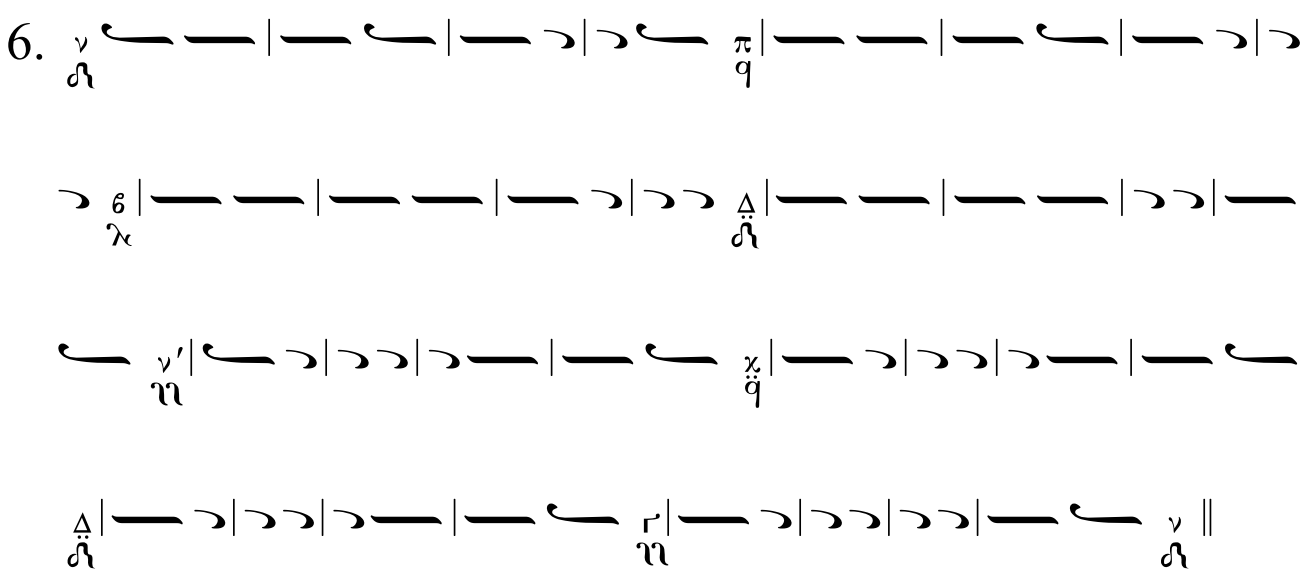
4. 

Cross

\+ = Cross

The Cross (or "Plus Sign") signifies an appropriate place to breath, or, if a breath is not needed, a slight break (or pause) in the melody. Its function is similar to a *breath mark* in Western music. This can often be used to separate the syllable that ends a word from the syllable that begins the next (especially if it is the same syllable).

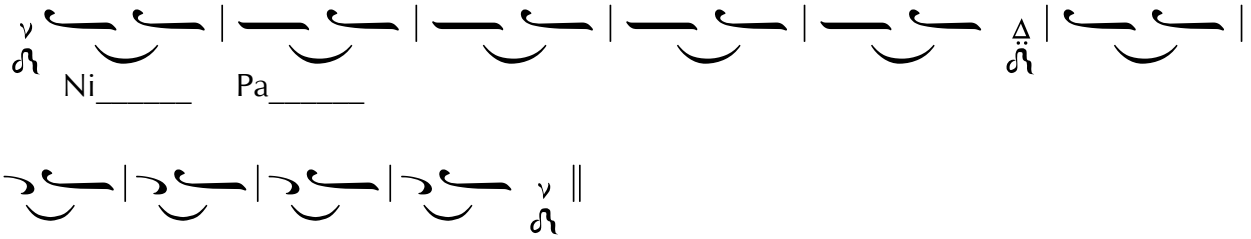
5. 

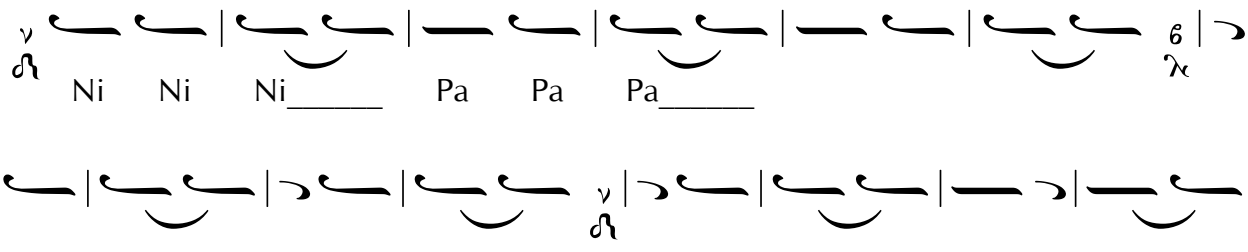
6. 

Hyphen

 = Hyphen

The Hyphen joins two notes together, functioning just like a *tie* would in Western music. While the Hyphen isn't often seen in Byzantine music, it introduces the concept of holding one note (or pitch) for longer than one beat. When chanting with the note names, you should not rearticulate the name on the second beat.

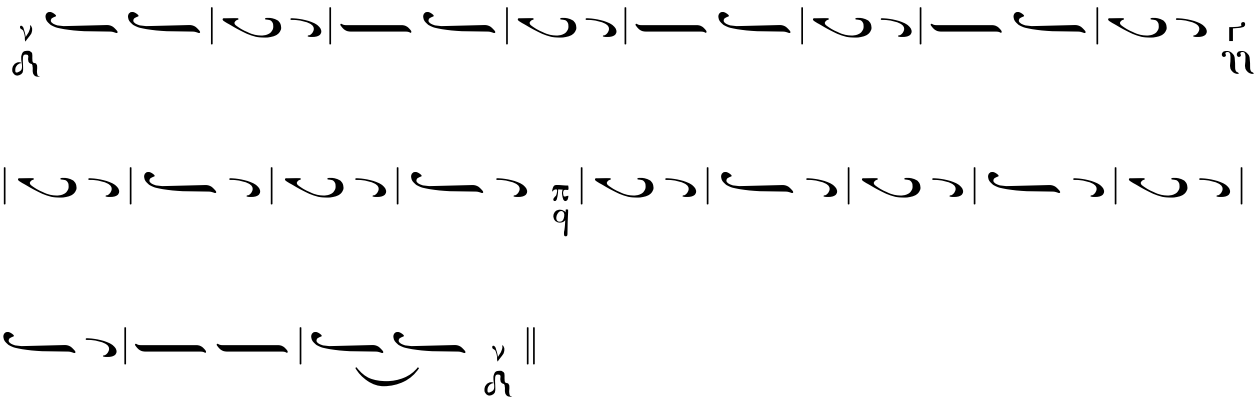
7. 

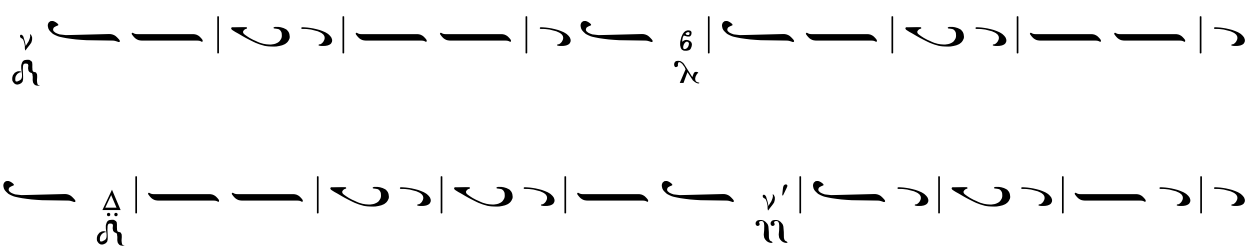
8. 

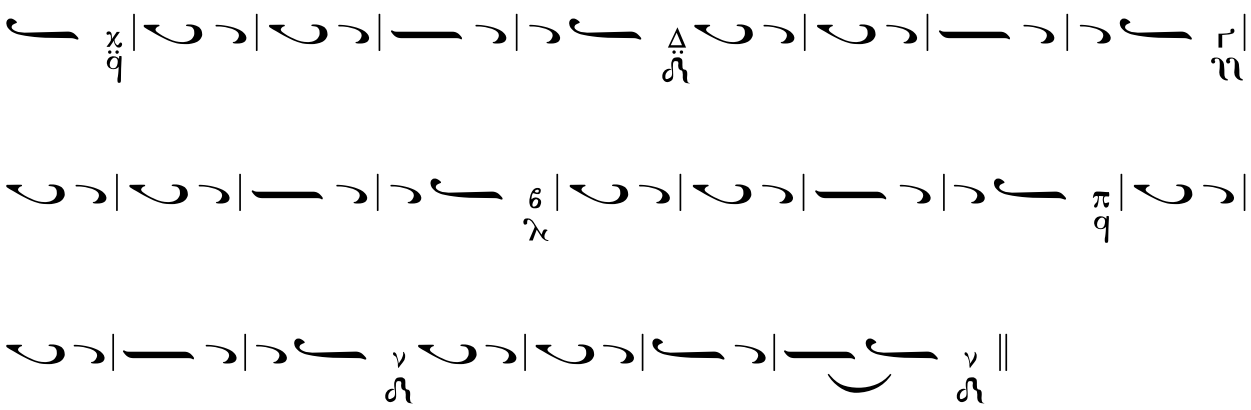
Petaste

Petastē (+1, stressed) =

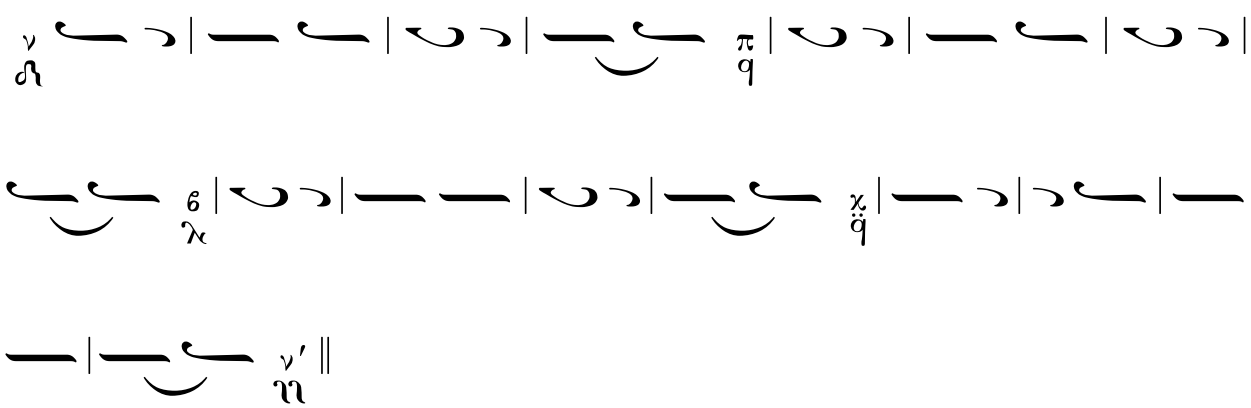
The Petastē means to go up one note from the previous pitch (or starting pitch), with an accent or with emphasis. It is different from the Oligon in that it accompanies a stressed syllable or a stressed beat, and is often performed with a vocal flutter, if there is time. It is always followed by a descending symbol.

9. 

10. 



11.



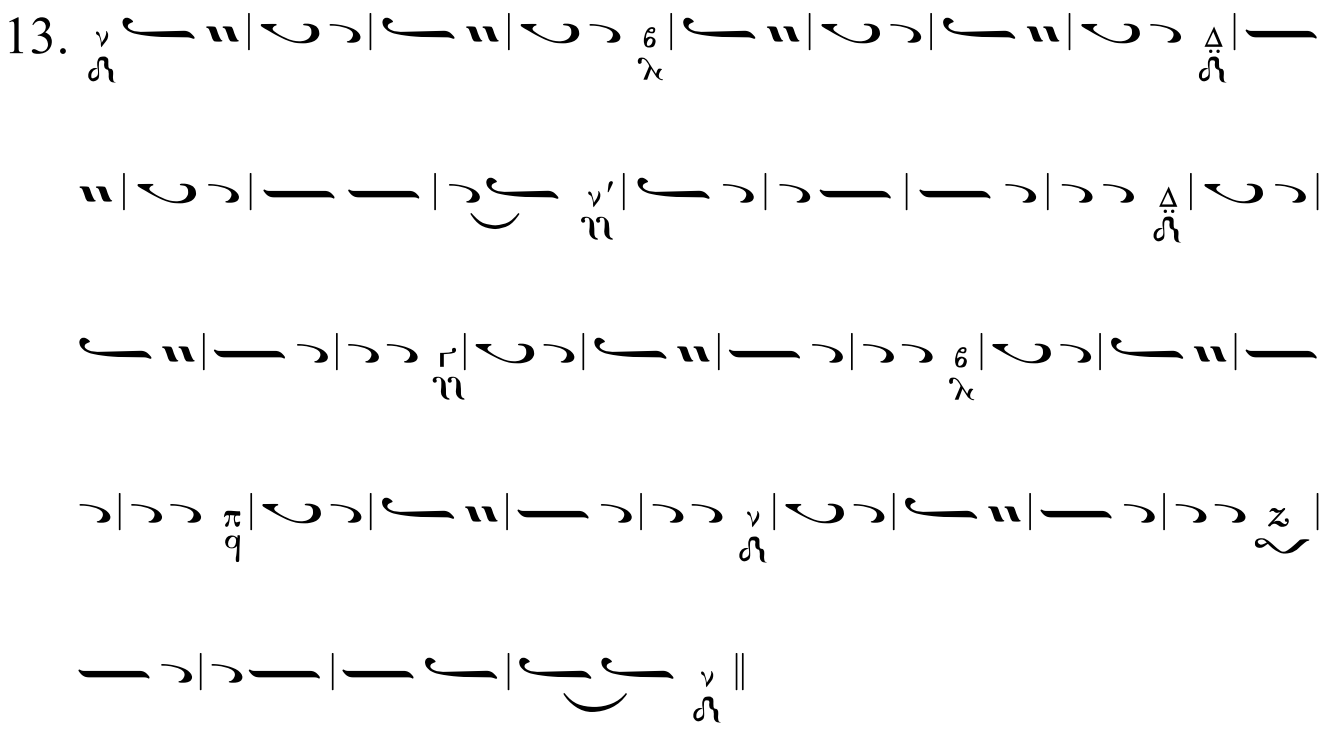
Kentemata

᷍ = Kentēmata (+1, unstressed)

The Kentēmata means to ascend one note from the previous pitch (or starting pitch), with no accent and it is connected to the previous note. It is different from the Oligon in that it is always on the unstressed beat, and is slurred from the previous note. It cannot receive a new syllable or word (except when chanting nonsense syllables, as in the Kratēma used in monasteries). When chanting exercises with the Kentēmata, it can be helpful to first do it with the note names, then on the syllable "la". With the note names, you articulate this symbol, but "la" is not articulated; rather, the vowel is the only thing that continues (as demonstrated in Exercise 12).

12.

Exercise with Oligon, Petastē and Kentēmata

13. 

Time Characters

Adding time

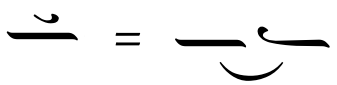
The following exercises introduce some of the symbols that change the duration of a quantitative symbol (like those we have seen above). We can call these *time characters*, since they adjust how you much time you give each symbol. The first time characters we will look at increase the duration of a symbol, adding a certain number of beats to that note. Because we are adding time, sometimes we change from the *duple meter* we have been using so far. Some of the exercises will introduce triple meter and quadruple meter.

Klasma

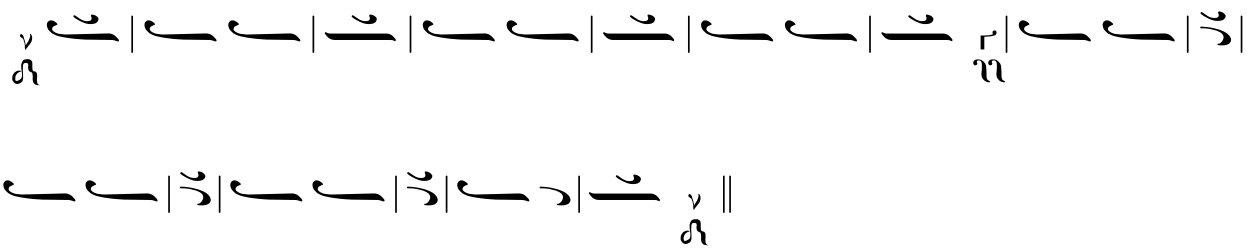
 = Klasma

Klasma adds a beat to the symbol on which it resides. It looks like a sideways apostrophe and can be placed above or below a quantitative symbol (it is most often placed on top).

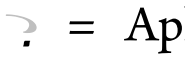
You will only see one klasma used per symbol (so any symbol with a klasma is initially two beats), and it functions the same as if you were to tie the quantitative symbol to an ison using a Hyphen:



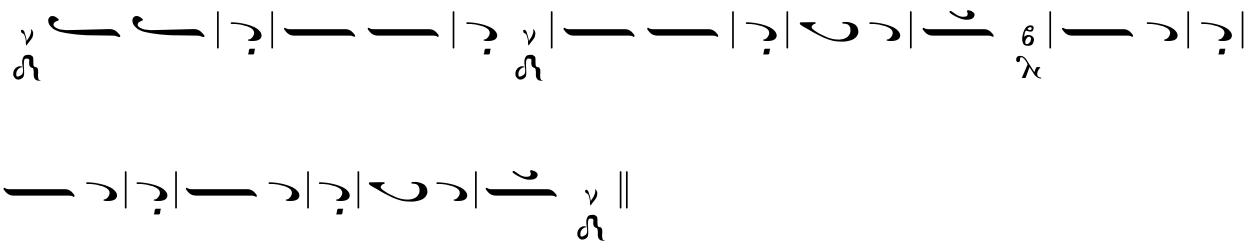
14. 

15. 

Aple



Aplē adds a beat to the symbol under which it is placed. It functions the same as a klasma, although it is only found by itself under "thinner" symbols, like the apostrophos (or another that we will see later), and is always placed beneath the quantitative symbol.

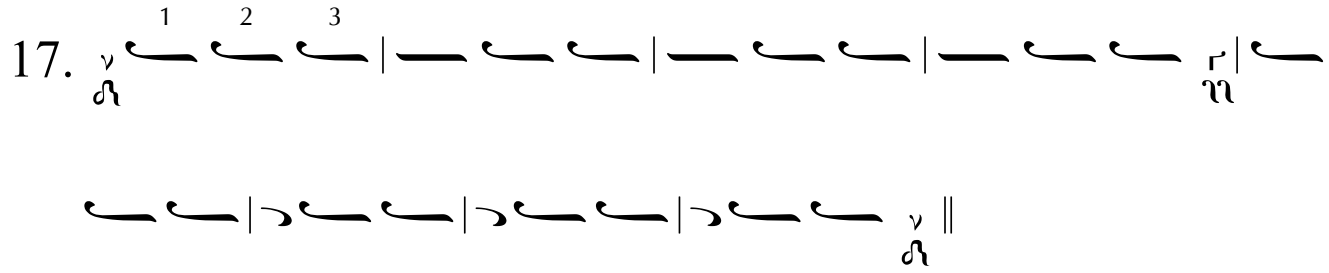
16. 

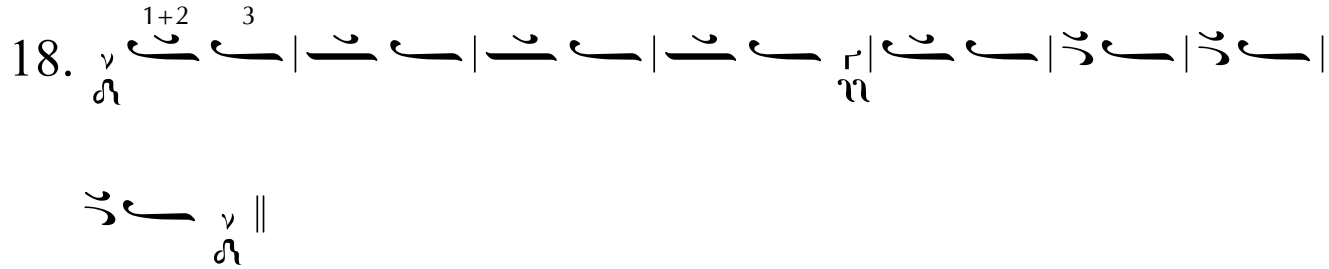
Triple Meter

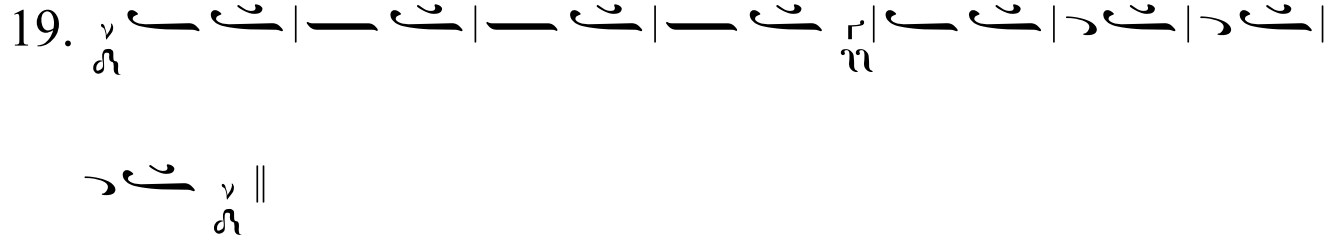
The next few exercises introduce the concept of *triple meter*: these are sections of music where the notes are separated into groupings of three beats. While some hymns can be written entirely in triple meter (like some of the Psalm verses after *Lord, I have cried*, as sung for long Vigils), most hymns use triple meter sparingly, and often for phrases where the syllable stresses necessitate a triplet feeling (or the words desire it, in order to word

paint the text). If the hymn briefly switches from a predomintantly two-beat rhythm (duple meter) to a three-beat rhythm (triple meter), this will often be signified by a bar line before and after the triple meter section (to separate it from the rest of the music), and the first note (or at least one in the triple-meter group) will have the number "3" sitting on top of it; this "3" tells you that the current grouping of notes will have a triple-meter feel, which is different from the surrounding music. This rhythm ends at the following bar line and switches back to the original meter (and, if the "3" resides on the first note of the group, it will end three beats from where the numerical indicator was). The same applies to quadruple meter sections (except with the number "4"), as will be discussed below.

Triple Meter:

17. 

18. 

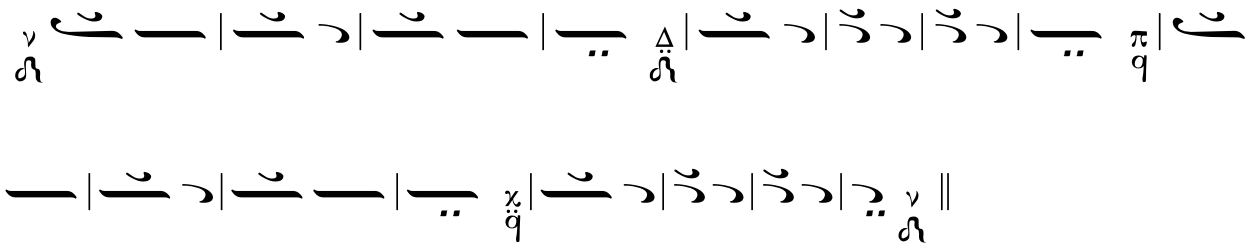
19. 

Diplē

= Diplē

Diplē adds two beats to the symbol under which it is placed (hence, two dots). It is always placed beneath the quantitative symbol, although it cannot be placed on a Kentēmata (because it is an unstressed symbol, and therefore should not be held long). This symbol automatically changes the rhythmic grouping of notes from duple into either triple or quadruple meter.

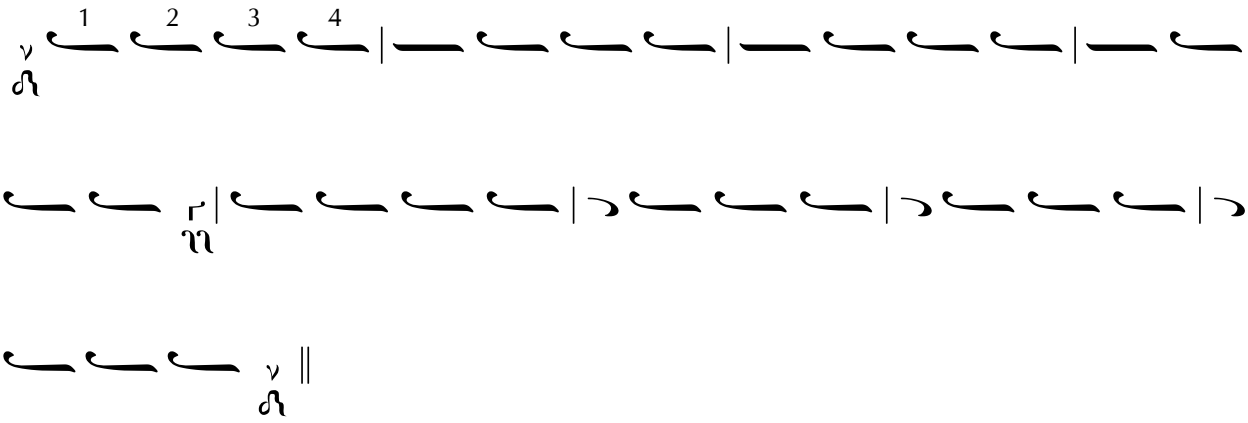
20. 

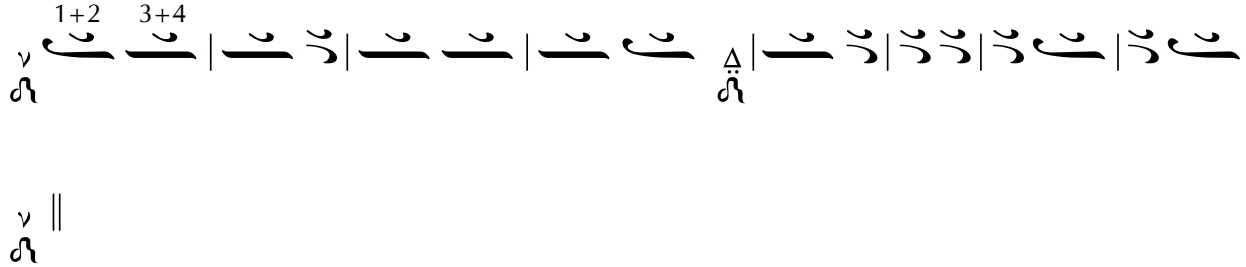
21. 

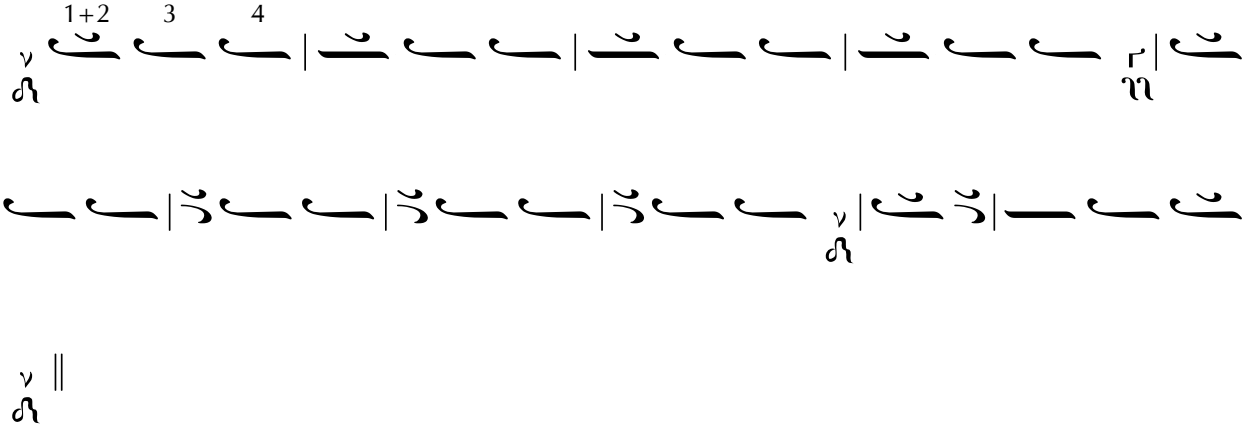
Quadruple Meter

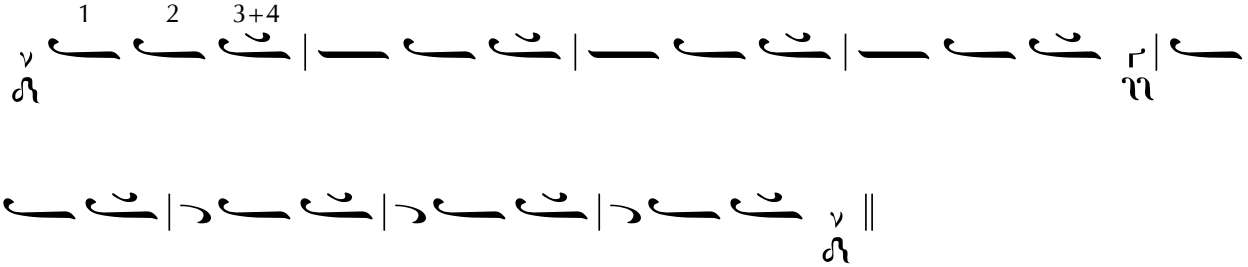
The next few exercises introduce the concept of *quadruple meter*: these are sections of music where the notes are separated into groupings of four beats. Most hymns use quadruple meter sparingly, and often for the ends of phrases, in order to add in a breath for the chanters, or to keep the rhythm sounding like a duple (instead of briefly switching into triple meter). If the hymn briefly switches from a predomintantly two-beat rhythm (duple meter) to a four-beat rhythm (quadruple meter), this will often be signified by a bar line before and after the quadruple meter section (to separate it from the rest of the music), and the first note (or at least one in the quadruple-meter group) will have the number "4" sitting on top of it; this "4" tells you that the current grouping of notes will have a quadruple-meter feel, which is different from the surrounding music. This rhythm ends at the following bar line and switches back to the original meter (and, if the "4" resides on the first note of the group, it will end four beats from where the numerical indicator was). There can also be sections of 5, 6, or even 7 notes, although these are used very much more infrequently.

Quadruple Meter:

22. 

23. 

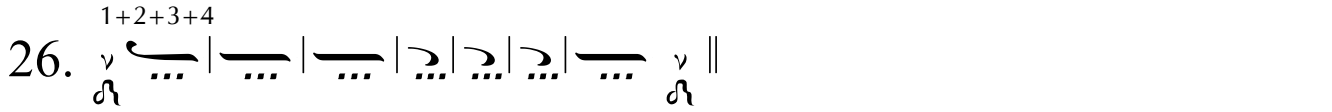
24. 

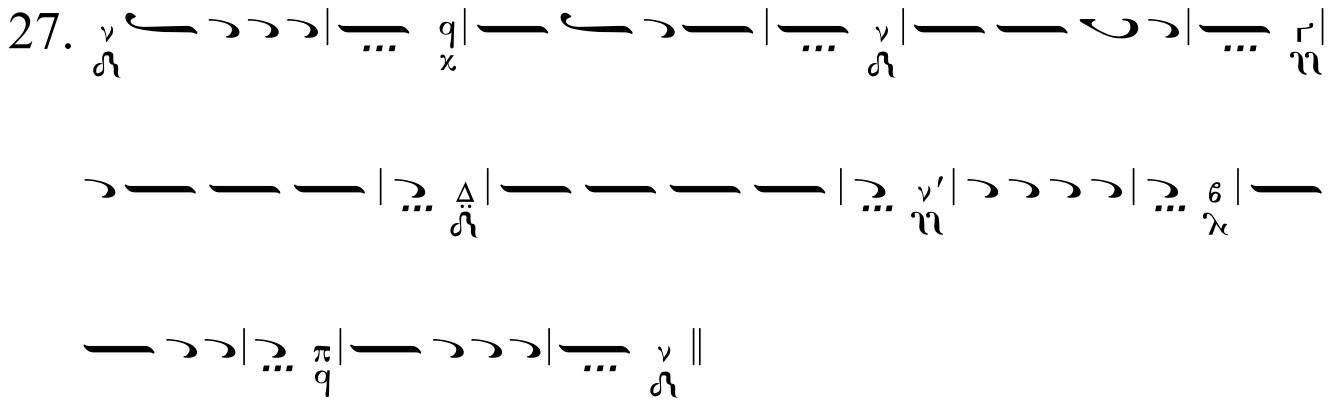
25. 

Triple

 = Triplē

Triplē adds three beats to the symbol under which it is placed (hence, three dots). It is always placed beneath the quantitative symbol, although it cannot be placed on a Kentēmata (because it is an unstressed symbol, and therefore should not be held long). This symbol automatically changes the rhythmic grouping of notes from duple into quadruple meter.

26. 

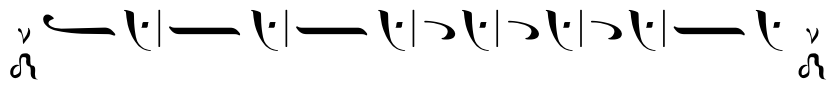
27. 

Rests

 = One-beat rest

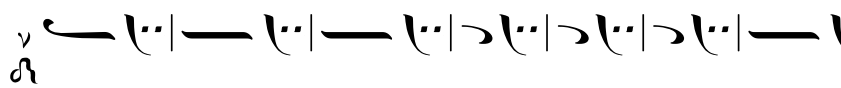
The rest symbol is a combination of a stress/emphasis symbol (called *Vareia*, which we will learn later) and a dot (Aplē). We saw that the Aplē repesented one beat of time (adding one beat to the symbol underwhich it sat). Here, there is no symbol...so it represents one beat of time. And, there is a Vareia before it, meaning that we are emphasizing (or stressing) time. Hence, you will rest (or pause) one beat in the midst of the music. If there are more dots, you will rest that many beats (two dots = a two-beat rest; three dots = a three-beat rest).

Duple Meter:

28. 

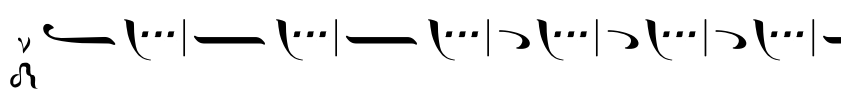
 = Two-beat rest

Triple Meter:

29. 

 = Three-beat rest

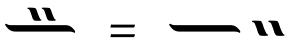
Quadruple Meter:

30. 

Quantitative Characters

Combination symbols

Because Byzantine Notation is meant to be easy to sight read, viewing as much in one glance as possible, very often multiple symbols are combined vertically or horizontally. The way that symbols are combined is predictable, so over time you can begin to recognize patterns; this will allow you to read ahead in the music more easily. Just as a reminder, symbols are read left to right. When ascending, they are also read bottom up. When descending, they are read top down.



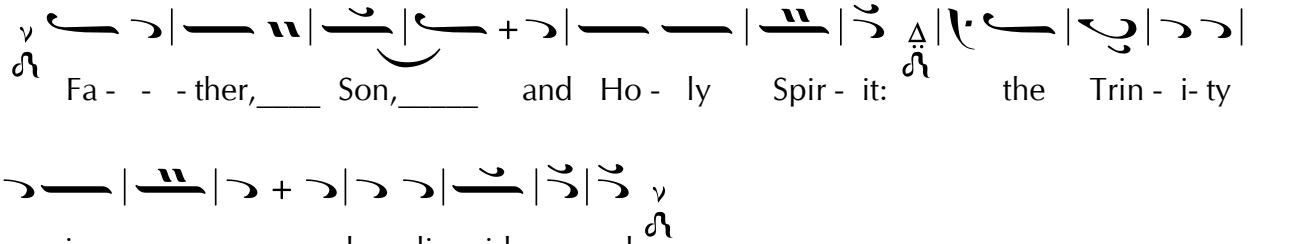
This is a two beat symbol combining oligon and kentēmata, meaning "up one, up one". There are specific reasons determining when you should vertically combine these symbols, although that will not be discussed here. The second beat of this combination symbol will be unstressed and connected to the first beat (due to the presence of the kentēmata). It can take a syllable, which will occupy two beats.

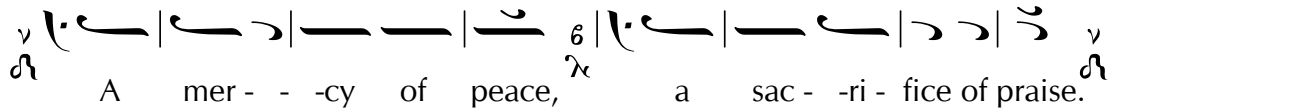
This is a two beat symbol combining apostrophos and kentēmata, meaning "down one, up one". The bar beneath them (which looks like an *oligon*, and indeed could be called *oligon*) just serves to support the two symbols and bar/tie them together, making them one unit, or group. This combination symbol can also take one syllable, which will be connected to the second beat.

31. 

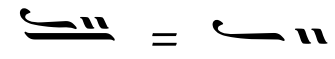
Examples using ascending and descending characters for short church melodies*

Duple Meter:

32. 

33. 

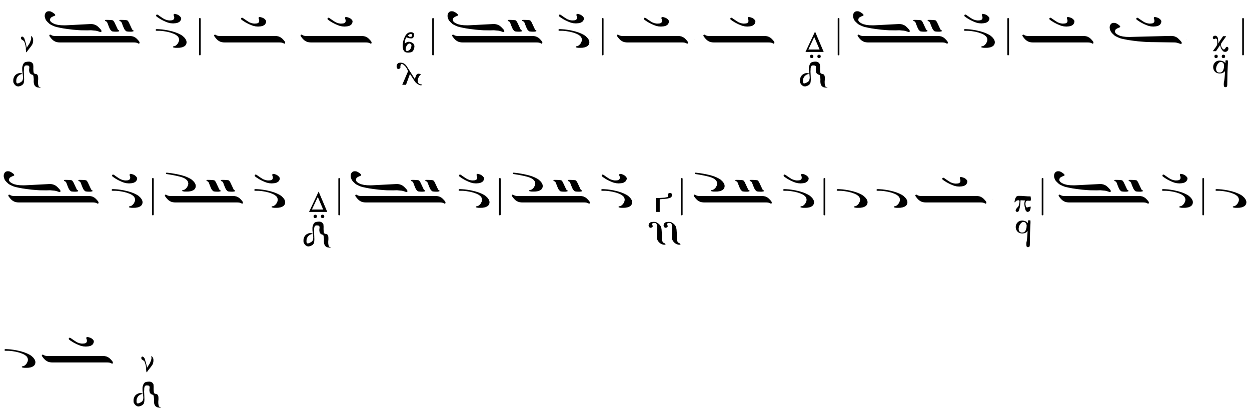
Combination symbols (cont.)

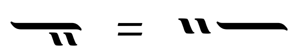


* The following melodies (and others herein) are simplified and intended to showcase the symbols learned thus far. They are therefore not written absolutely correct orthographically, due to the number of symbols yet learned by the student.

This is a two beat symbol combining ison and kentēmata, meaning "stay the same, up one". The bar beneath them is again not chanted, but is there to support and combine the symbols. This combination symbol can again take one syllable, which will be connected to the second beat.

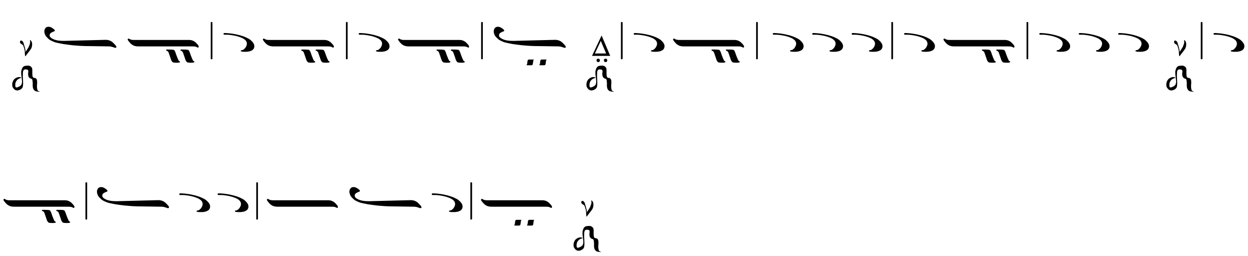
Quadruple Meter:

34. 

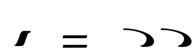


This is a two beat symbol combining kentēmata and oligon, meaning "up one, up one". Because we read this symbol bottom-up, we chant the kentēmata first. This means that this combination can't take a syllable, since the kentēmata cannot take a syllable; this symbol will be connected to the previous symbol and will continue its syllable. More differences (from the oligon-kentēmata combo) will become apparent when we learn some faster rhythms.

Triple Meter:

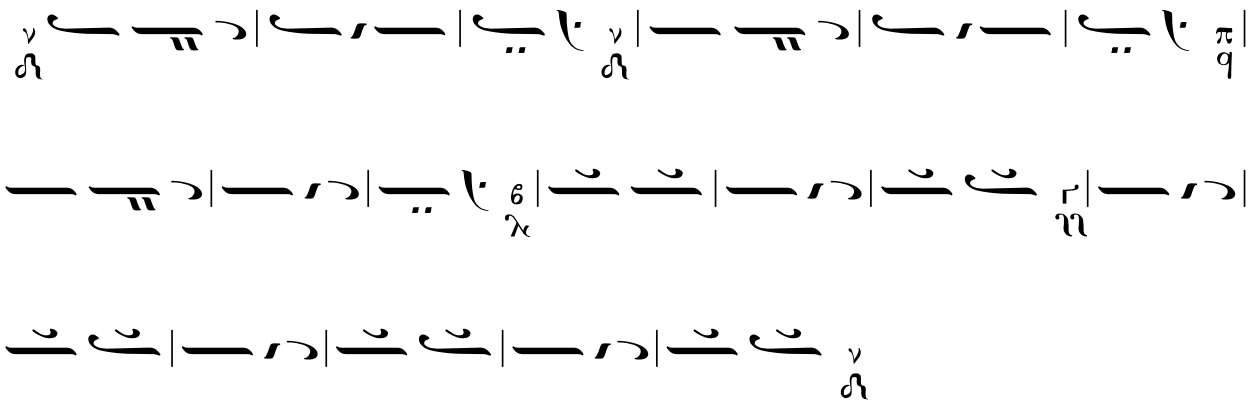
35. 

Yporroe



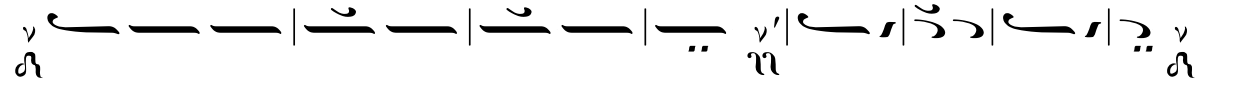
The Ypporoē means "down one, down one". Because it intrinsically contains two symbols, it takes up two beats, and cannot take a syllable. When it is modified by a qualitative symbol (whether that be rhythmic or otherwise), if the modifier is placed on the top, it applies to the first "apostrophos"; if it is placed on the bottom, it modifies the second apostrophos. There are again reasons why you would write an ypporoē instead of using two consecutive apostrophoi (Greek pl. of apostrophos), but they will not be discussed here; nevertheless, this symbol diversity and unique usage helps establish visual patterns that the chanter can recognize, making sight reading easier.

Quadruple Meter:

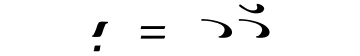
36. 

Triple Meter:

37. 

38. 

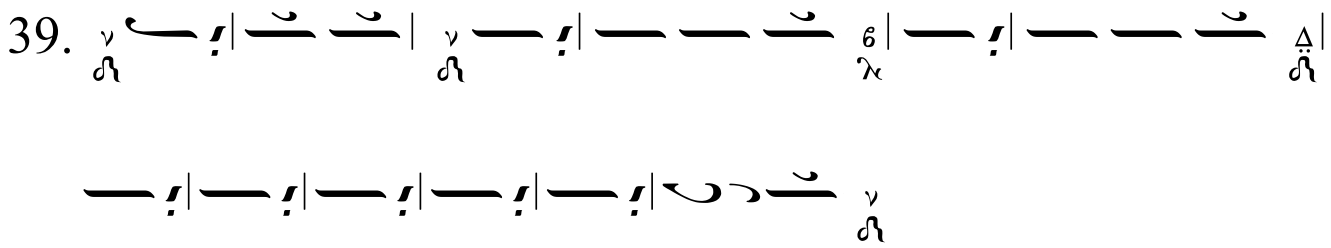
Ypporoe with Aple



The Aplē (single dot), here, is placed below the Ypporoē. As we discussed above, a time symbol on the bottom affects the second "down one" of the Ypporoē. This means that the first "down one" of the Ypporoē is one beat and the second "down one" is two beats, which means essentially the same thing as an apostrophos followed by an apostrophos

with a klasma on top. However, this symbol combination again gets no syllable (in constrast with the which uses apostrophoi). The Aplē could be easily replaced with a Diplē or Triplē, with the corresponding elongation of the second "down one". Just as a note, the Aplē cannot go on top.

Quadruple Meter:

39. 

Ascending and Descending Jumps

Jumps in Byzantine notation are indicated by four symbols (two ascending and two descending), and by mathematical combinations of the various quantitative symbols. (Sometimes these jumps can also be called *discontinuous* ascents or descents). Before we continue, there is a brief concept to introduce. You can learn all the jumps by memory very easily, but they will not fully make sense and you will only know how to jump with the symbols you've learned, and nothing larger. What you need to know is that ascending symbols can be in an active mode or in an inactive (supporting) mode. The two ascending jump symbols are very *thin*. Therefore, they get a supporting oligon to bulk them up. Depending upon the position of the jump symbol, that oligon is inactive (worth 0 in ascent) or active (worth +1 in ascent). This will govern all the combinations hereafter. It will make more sense in context of course.

For all of the upcoming jumps, rather than using the Western concept of jumping up a third, or fourth, etc., we will refer to these jumps by how many notes you will land from your current note. Therfore, a *third* would be similar to a jump of two notes, and a *fourth* would be similar to a jump of three notes. This convention is used because the intervals between notes can change depending upon what scale you are chanting, or where you are in that scale. Therefore, rather than getting bogged down with the terms perfect, major, minor, augmented, or diminished to describe the type of ascent or descent, we will just say to jump up *two notes in the scale*.

Jumps of Two Notes

Because we are now moving into jumps, you may find that larger jumps are just mathematical additions of other symbols; there are only ten quantitative symbols, so at some point they get reused. For now, it is ok to just memorize what the symbol looks like, but keep in mind that there is a method to calculating the size of the jump. This will be discussed more in-depth in a theory book. The terms used there will probably be "inactive" and "active" symbols...but let's just press forward for the time being.

Kentema

Kéntēma (+2)

The Kéntēma means to jump up two notes from where you are. If you are currently on Ni, the Kéntēma tells you to chant Vou. By itself, however, it is rather small. Rather than leave it by itself, the notation gives it an oligon as a helper. The Kéntēma can be placed to the right of the oligon or beneath it, as is shown below.

or = +2

There are two different versions of this symbol to reduce confusion with the Ypporoē; they are mirror images of each other. When the Kéntēma is on the right of the oligon, the music will stay on the same note or ascend after the jump; if the Kéntēma is below the oligon, the music will always go down if a quantitative charater directly follows it. Also, if you notice, the Kéntēma looks a lot like one of the Kentēmata, which is exactly right! Kentēmata is the plural of Kéntēma.

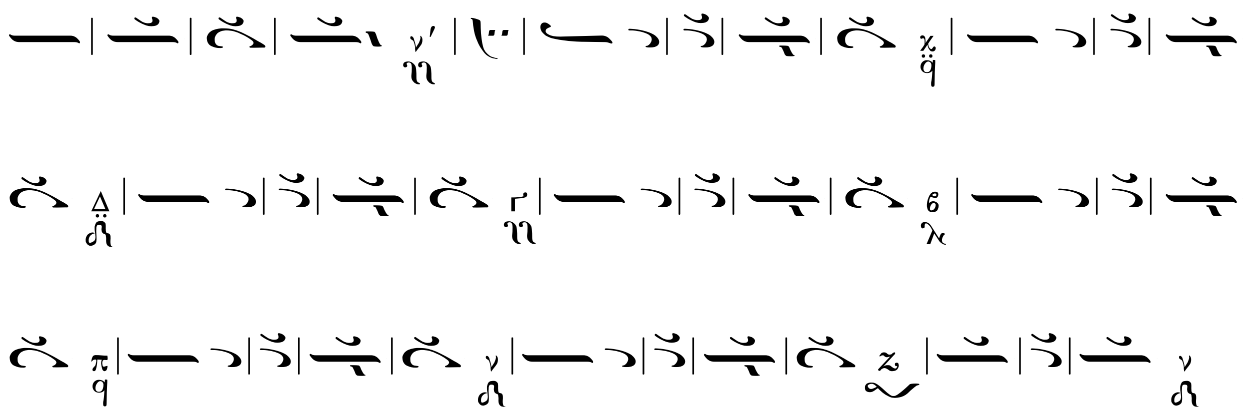
Elaphron

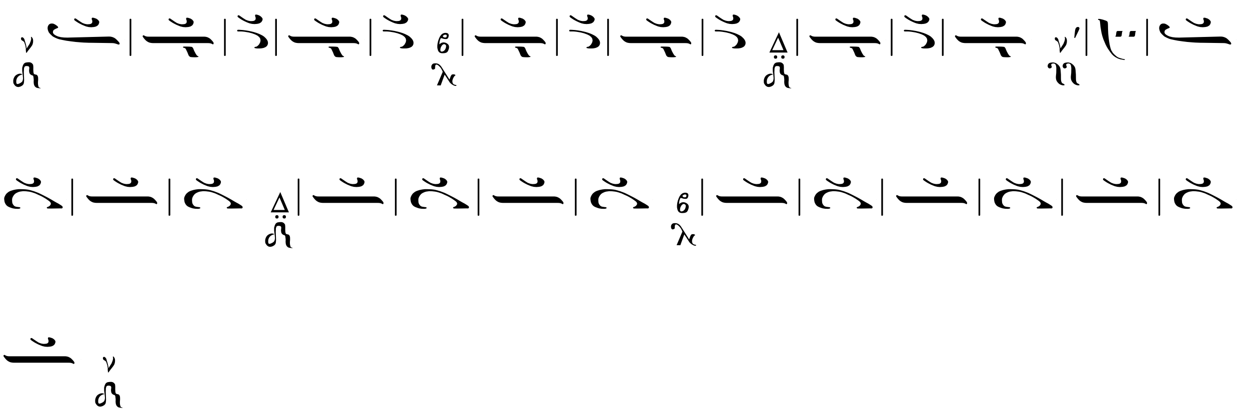
Elaphrón (-2)

The Elaphrón is our first downward jump. It means to jump down two notes. If you are on Dhi, chant Vou; if you are on Ga, chant Pa.

Duple Meter:

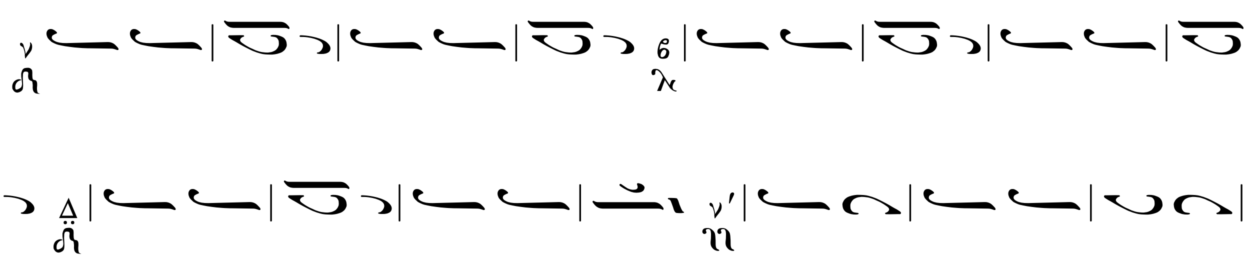
40.

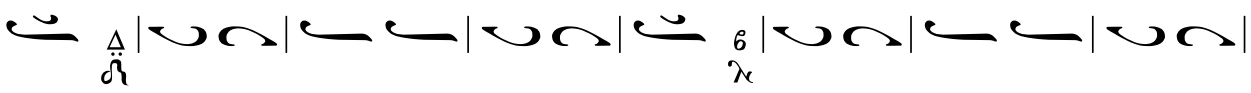


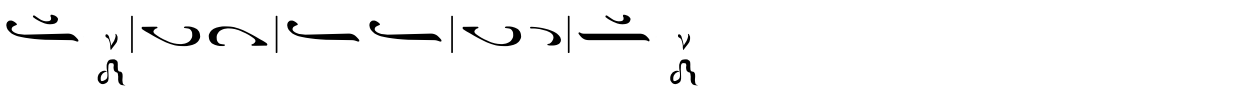
41. 

 = +2 (stressed, with a flutter)

This symbol means to jump up two, and the new note should be stressed; if there is time, a vocal flutter should also be added. This symbol has no specific name because it is just a combination of the petastē and oligon, which here are added together vertically (1+1=2), and it takes on the quality of the petastē. As with the petastē, this symbol is always followed by a descending symbol.

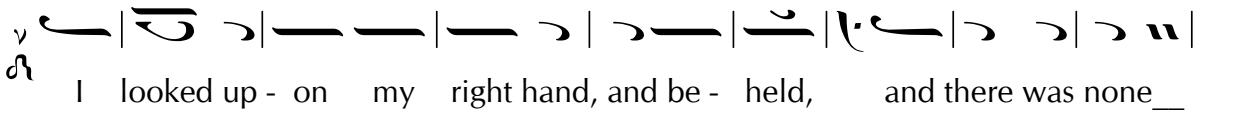
42. 





43. 

Melody

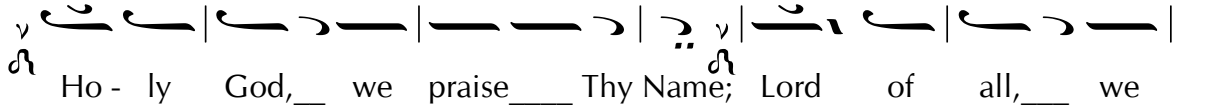
44. 

I looked up - on my right hand, and be - held, and there was none__

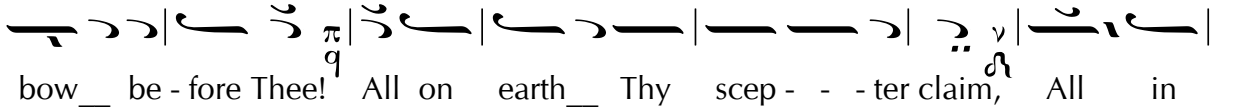
that did know me.

Prayer

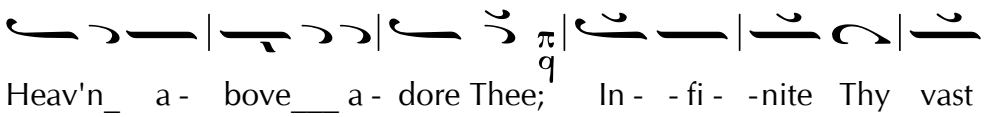
Triple Meter:

44a. 

Ho - ly God,__ we praise____ Thy Name; Lord of all,___ we



bow__ be - fore Thee! All on earth__ Thy scep - - - ter claim, All in



Jumps of Three Notes

= +3 = -3

To jump up or down three notes, we combine two symbols, adding them vertically: kéntēma + oligon (2 + 1) or elaphrón + apostrophos (-2 + -1).

Quadruple Meter:

45.

= +3 (stressed, with a flutter)

To transform an ascending jump into a stressed/fluttered note, the oligon is replaced with a petastē. Correspondingly, this symbol is an accented jump of three notes with a flutter.

46.