# *THE SIMPLE MOTIVIC FORMULAS IN THE HEIRMOLOGICAL CHANTS IN THE FIRST MODE, BASED ON THE PRINTED* BULGARIAN HEIRMOLOGION

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**ABSTRACT**

The research study on the melodic language of the syllabic heirmological chants is based on Angel Iwanow Sewliewetz' *Bulgarian Heirmologion* (1875). The 58 hymns in the first mode have been analyzed in terms of their melodic structure. In this paper, we have applied the theoretical principles of the method used by Bozhidar Karastoyanov in the analysis of the Russian type of chant called *Znamenny Rospev and of the Bulgarian stichiraric type of chant.* The events of the melody are analyzed from a broader perspective, where four different structural levels have been established: *melodeme,* motif, melodic phrase and period. The importance of this theory lies in the possibility of a multi-layered examination of the complex nature of each constituent element, which enables the discovery of phenomena like the undulating structure, the sonic realization, the prosodic realization and the relationship with the graphic signs of notation. The present article is dedicated to the simple cadential and recitative motifs. These motifs have been classified, typologized and analyzed. A second thesis deals with the sonic realization of the linear construction. Each motif is projected on a vertical scale, which enables the measurement of the ratios between the sonic heights of the various elements. The third level of research is the realm of prosody, where each melodic object has its dimensions, according to which the texts are applied to music. The next level of the motivic research is the representation of motifs through the notation introduced by Chourmousios and Chrysanthos. This enables certain changes of the graphical representation of the motif. We need to consider another aspect of the configuration, i.e. the modal categorization of the motif. This consists of the fact that a

motif can be represented in a certain mode, i.e. it fits in a certain segment of the corresponding modal scale. The work of identification and research of the cadential and recitative formulas of the heirmological chant in the first mode has been completed. Both the simple and the complex motivic formulas have been described and standardized, and several articles have also been written on the subject. To the already existing tables dedicated to the *Znamenny Rospev* and to the late stichiraric chant, we can now add the table showing the formulas dedicated to the heirmological chant.

**Key words**: Bulgarian Heirmologion, heirmological chant, cadential motif, simplest recitative motif, echos I

## 1. Introduction

The research study on the melodic language of the syllabic heirmological chant is based on Angel Iwanow Sewliewetz' *Bulgarian Heirmologion* (1875). The 58 hymns in the first mode are analyzed in terms of their melodic structure.

As in other types of monodic church chants, the principle of melodic formulas clearly stands out, entitling us to consider that the issue is still very much alive. In this paper, we have applied the theoretical principles of the method used by Bozhidar Karastoyanov[16] in the analysis of the Russian type of chant called *Znamenny Rospev* and of the Bulgarian stichiraric type of chant. The essence of this theory can be summarized as follows: there is a wider spectre of events of the melody, in which four different structural tiers stand out: *melodeme*, motif, melodic phrase and period. The importance of this theory lies in the possibility of a multi-layered examination of the complex nature of each constituent element. This enables the examination of the multiple layers of each element and the discovery of phenomena like: undulating structure, sonic realization, prosodic realization and the relationship with the graphic signs of notation. Thus, a monodic motif is a melodic construct, structured as an intonational wave, which has a certain sonic realization, displays various prosodic features and is represented through various combinations of graphic signs.[17] A motif[18] represents the second tier of melodics and is structured from the elements of the first tier – *melodeme*, *toneme*, *prosodeme*, *grapheme* [19].

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[16] See the works of Bozhidar Karastoyanov listed in the bibliography: [1], [2], [3], [4], [5], [6], [7], [8], [9].

[17] Мотивные модели построены на базе простейших волн: восхождение-нисхождение; восхождение – высокий участок – опускание; низкое начало и восхождение к высокому финалису и т.д. in: [9, p. 7].

[18] Мелодический мотив является структурной единицей второго уровня, входит в состав мелоди-ческих предложений и состоит из простейших единиц – мелодем, in: B. KARASTOYANOV, *Die melodischen Formeln des Znamenny Rospevs im Fitnik von Fedor Krestjanin* (Manuscript of the 7th decade of the 17th century, Russische National Bibliothek, Sammlung Pogodin 1925), Vienna 2005, [9, pp. 183-194].

[19] Б.П. КАРАСТОЯНОВ, Структурни единици от втори порядък в монодията и техните формулни осъществявания. In: Българско музикознание, год. XXVI, 2002, книга 2, с. 5-17.

In total, five motif groups have been identified in the course of this research study: two groups of simple motivic formulas and three groups of compound motivic formulas. This study will focus on the first two groups: cadential and recitative motifs.

## 2. The melodic structure of the simple motifs

As mentioned earlier, the basic structure of each motif is undulating, whence it can be assumed that a linear construction is achieved with an ascending segment and a descending one. The research has revealed that each cadential segment of a musical phrase is based on a single simple motif. The important characteristic of a cadential motif is the presence of a long element – the *finalis*. The other major group is that of recitative motifs, characterized by the presence of the recitative fragment proper. Unlike the cadential motifs, the recitative ones are typically "open", without cadence.

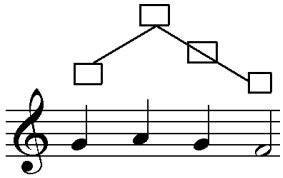
A simple motif consists of a diverse number of elements – the so-called *melodemes.* The following example illustrates two different motifs, each consisting of three *melodemes*. The simplest cadential motif includes the rise to the climax, the climax and the *finalis*. The simplest recitative motif comprises the rise towards the climax, the climax and the recitative segment. Sometimes different versions of the recitative motifs occur, when one more unstressed syllable is added at the end.

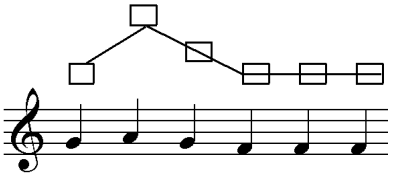
**Example 1**: Cadential motif and recitative motif

The other motivic models should be considered as change, extension or shortening of this standard structure.

A second type of cadential motifs can have four *melodemes*, since a descending element intervenes between the climax and the *finalis*. There are also motivic models displaying two descending elements. In the recitative motifs where the distance between the climax and the recitative repetitions is increased, a descending segment appears to fill this interval.

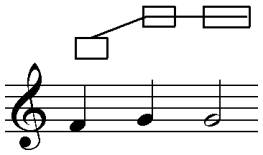
**Example 2**: Cadential and recitative motifs with a descending segment after the climax

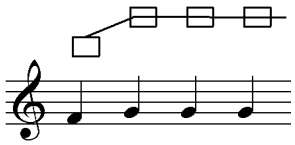




A specific group of cadential motifs is made up of those cadential motifs in which the climax holds a very high position, thus also playing the role of a high *finalis*. By contrast, the recitative motifs contain more frequent examples where the climax and the recitative repetitions have identical pitches.

**Example 3**: Cadential and recitative motif





Most motifs are characterized by a gradual uniform melodic movement. However, several variants have been found in which this uniform melodic movement is modified. In some examples, the climax is reached through a higher leap (higher by two, three or more degrees).

In addition, many incomplete motifs have also been found. Both in certain cadential motifs and in the recitative motifs, certain elements are omitted, such as the rise to the climax. Such shortenings of the elements are often influenced by prosody and related to another characteristic of the motif, namely: the length of its elements, indicated by *morae*. Cadential motifs are characterized by the presence of at least one long element - the *finalis* – while the rest of the *melodemes* can be both short, and longer. One of the fundamental differences that distinguish a recitative motif from a cadential one is the exclusive presence of short elements. The cause must be sought in the nature of the recitative motifs with their simple rendering, where the long elements are not appropriate. The following example illustrates a cadential motif consisting of two short *melodemes* (the rise to the climax, the climax and a long *melodeme – finalis*), with a length of four *morae*. For comparison, we offer another cadential motif consisting of three *melodemes* (short rise to the climax, long climax and *finalis*), this

time with a length of 5 *morae*. Given that the recitative motifs do not include longer elements, this feature applies only to cadential motifs.

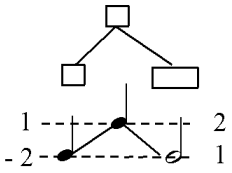
**Example 4**: Comparison of two cadential motifs with elements of different lengths

### 3. The tonemic realization of simple motifs

A second thesis in the interpretation of melodic units deals with the sonic realization of the linear construction. In the aforementioned *Znamenny Rospevs,* the simple, single-tone *toneme* is considered the main *tonemic* unit. Each motif is projected on a vertical scale, which enables the measurement of the ratios between the sonic heights of the various elements. With few exceptions, most *tonemes* in the recitative motifs are simple and on the same pitch. In the cadential motifs, on the contrary, there also appear complicated tonemic realizations.

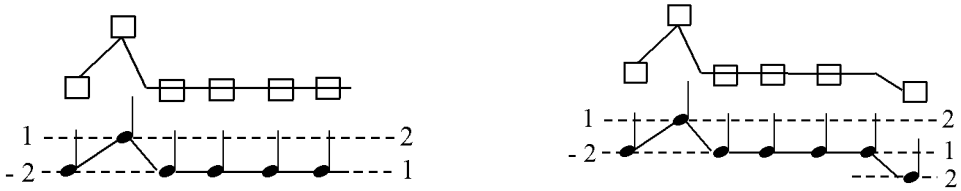
The example illustrates the cadential motif with three melodemes, represented on a scale with two positions. It can be seen that the *rise* to the *climax* is one position lower than the *climax*. On the other hand, the *climax* is one position higher than the *finalis*.

**Example 5**: Climax in the cadential motif with three melodemes



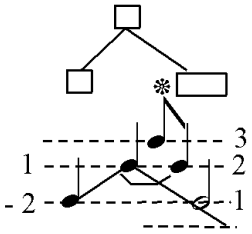

In the following recitative motif, consisting of a *rise* to the *climax*, the *climax* and the recitative repetitions, a scale with two positions is used. However, the variant of the motif in which an *unstressed syllable* is added at the end is projected on a scale with three positions.

**Example 6**: Climax in the recitative motif




The appearance of the complex *tonemes* in the cadential motifs is very often related to the ornamentation of the *climax* (by alternating sounds or anticipation). Although ornamentation is atypical for recitative motifs, three examples containing such modifications have been found.

**Example 7**: Cadential motif with ornamented climax

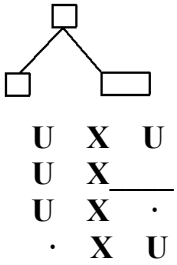



**4. Prosodic properties of the simple motifs**

The third level of research of the monodic structural elements is the realm of prosody. Each melodic object has its dimensions, according to which the texts are applied to music. Each motivic formula is based on a metric foot consisting of simple elements – the so-called *prosodemes* - which apply stressed and unstressed syllables to music. Texts of different lengths are often adapted to a motif, which leads to the use of different prosodic variants: they can be shortened *prosodemes* (which is frequent in recitative motifs) or a complex *prosodeme* (in cadential motifs); sometimes an additional *prosodeme* is introduced (which is possible in both variants).

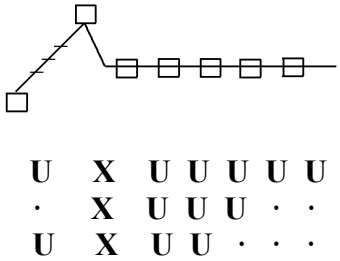
The example below illustrates the cadential motif in several variants: with a full prosodic metrical foot, consisting of a weak pre-positional *prosodeme*, a strong positional one and a weak post-positional one. The second line consists of the variant with a compound *prosodeme*, while the other two variants present the shorter version of the prosodic verse.

**Example 8**: Cadential motif in various forms




Overall, the simple metrical foot is typical for the recitative motifs. Strong *prosodemes* are associated with the stressed syllables of the text, whereas weak *prosodemes* are associated with the unstressed syllables of the text. The number of weak *prosodemes*, corresponding to the post-stressed syllables, depends on the size of the text. In shorter texts, the recitative repetitions are fewer, as shown in the following example.

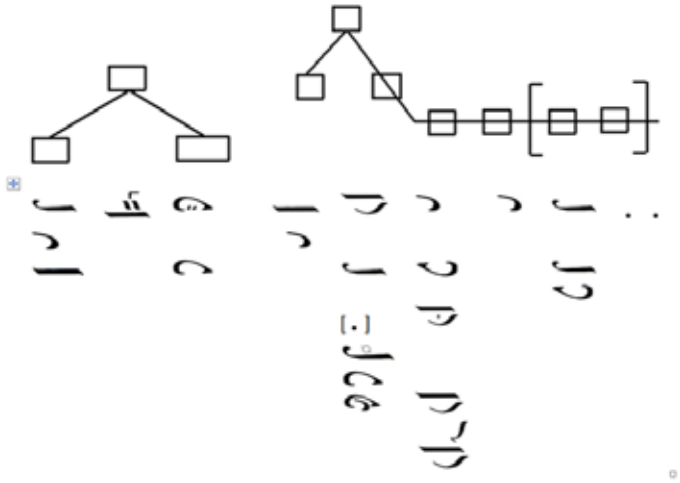
**Example 9**: Recitative motifs of different lengths




**5. The graphic representation of motifs**

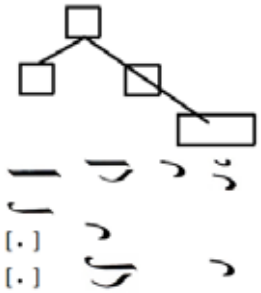
The next level of the motivic research is the representation of motifs through the notation introduced by Chourmousios and Chrysanthos. As known, this is a late diastematic notation which does not express a particular pitch of the sounds. This enables certain changes of the graphical representation of the motif. Very often, this affects the first element of the motif (the *rise* to the *climax*), because it is connected to the occurring one. The example illustrates both a cadential motif and a recitative one with numerous and various *graphemes*, not only for the *rise* to the *climax*, but also for the *climax*.

**Example 10**: Cadential motifs with a great number of *graphemes*



Other changes occur in the series of reference pitches, which are modified in some elements of the motif: when the *rise* to the *climax* is on a lower position, new diastematic relationships are formed between it and the next *climax*, which entails changes in the *graphemes*.

**Example 11**: Changes in the series of reference pitches

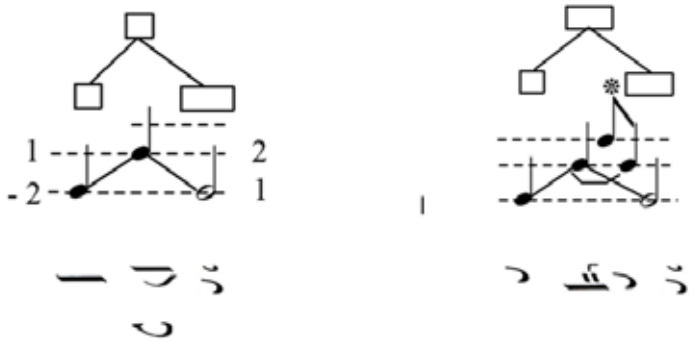


The changes in the graphic representation are closely related to the various prosodic realizations of the motif. It must be emphasized here that this quantitative variant of the prosodic plan does not change the essential content of a formula. Such formulas can be formed by shortening, extension or partial alteration of the individual signs.

A particular case is that of the formulas displaying an ornamentation of certain elements, especially in cadential motifs. The following example illustrates the replacement of a simple *toneme* with a complex *toneme* within the same motif. This is a motif that has two variants, where in the former the *climax is represented by a simple toneme, while in the latter,*

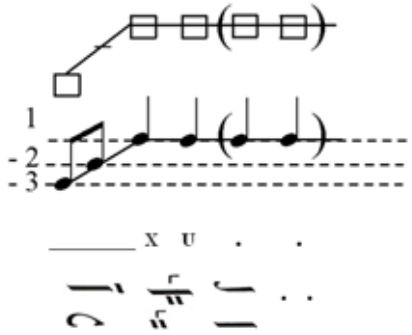
*the climax* is ornamented. What results is a complex formula of *graphemes*. This principle is typical for several ornamented cadential formulas of the first mode.

**Example 12**: Replacement of a simple *toneme* with a complex *toneme*




In the recitative motifs, the complicated melodic and prosodic resolutions occur quite rarely; consequently, the groups of compound neumes within them are equally rare. Some complicated graphic representations are rendered through a compound *prosodeme* that unites the *rise* to the *climax with the climax*. Thus, in the example below, this compound prosodeme is notated with a series of neumes consisting of *oligon* with *kentema*, *oligon* with two *kentemata* and *gorgon*. Another variant consists of various *graphemes*: *elafron*, linked to *kentemata*, *gorgon* and *oligon*.

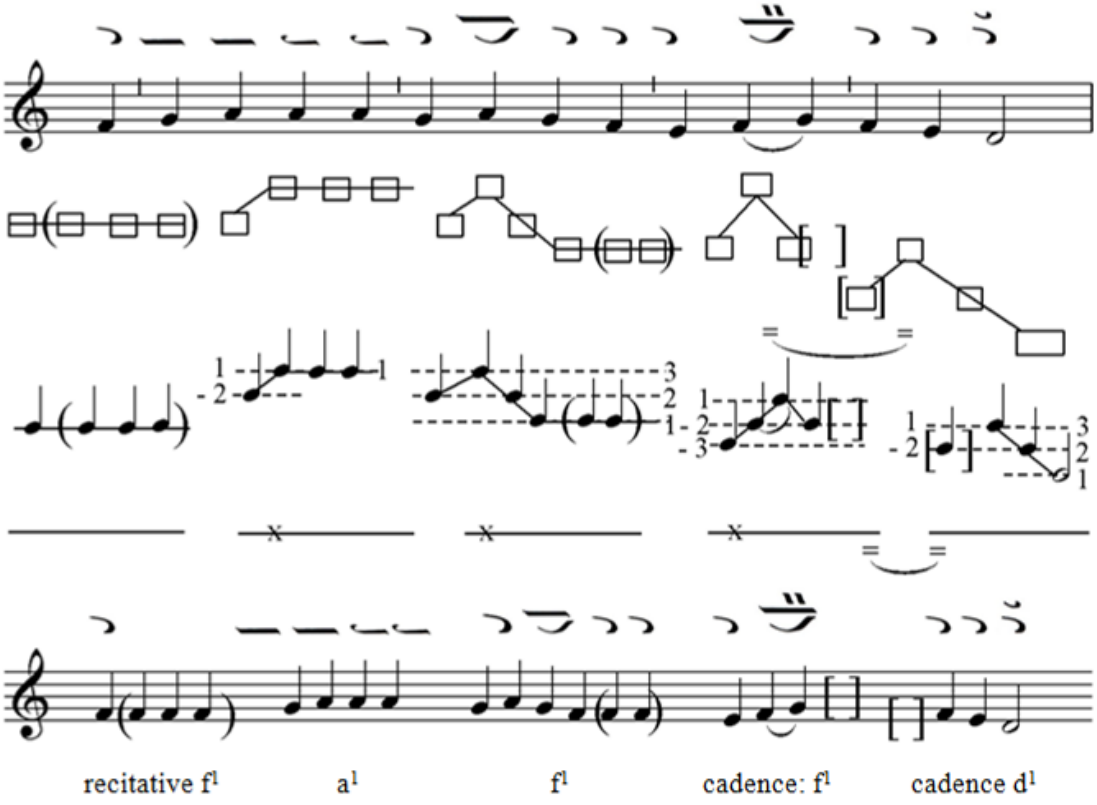
**Example 13**: Complex *prosodeme*




We need to consider another aspect of the configuration, i.e. the modal categorization of the motif. This consists of the fact that a motif can be represented in a certain mode, i.e. it fits in a certain segment of the corresponding modal scale. In the examples analyzed, it is the first mode of the Bulgarian heirmological chant that is represented, as is known, by a diatonic scale. According to the treatises on didactic theory, the first mode begins with the sound D[1]

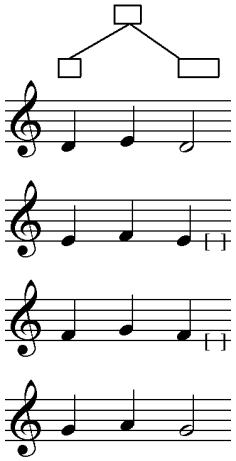
and has $G^1$ and $D^1$ as *finalis*. A sequence of formulas has its own fixed sonic realization, which is determined particularly in the cadential motifs. In a melodic phrase, the pitch of the line, characteristic for the motif, is decided by the cadence based on which the recitative motif is achieved.

**Example 14**: Modal categorization of the motif




Some of the cadential and recitative formulas analyzed have only one realization of the sound pitch. At the same time, however, very many examples have different representations of the sound pitches; thus, the recitative motif No.1 appears on four different pitches of the recitative line: $D^1$, $E^1$, $F^1$ and $G^1$.

**Example 15**: Recitative motif no. 1 – different representations of the sound pitches



Starting from the specific character of the diastematic notation, these sonic variants are notated through the same graphic formula, as in this case the pitch position is irrelevant. And given that notation represents only one melodic object, without paying attention to the sequence of sounds, this pitch is expressed by a martyria at the end of the cadential formula. These pitch variants do not alter the motivic structure in the recitative motifs either, nor do they have any melodic relevance, which is why they are not represented by a different notation. The pitch of the lines depends on the other motifs of the phrase and on its cadence.

## 6. Conclusions

The work of identification and research of the cadential and recitative formulas of the heirmological chant in the first mode has been completed. Both the simple and the complex motivic formulas have been described and standardized, and several articles have also been written on the subject.[20] To the already existing tables dedicated to the *Znamenny Rospev* and to the late stichiraric chant, we can now add the table showing the formulas dedicated to the heirmological chant.

[20] See the papers mentioned in the bibliography: [11], [12], [13], [14], [15], [16].

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