

**Nazarii NAZAROV**

*PhD in Philology, Senior Researcher, Postdoc at Educational and Scientific Institute of Philology, Taras Shevchenko National University of Kyiv, Volodymyrska str., 60 Kyiv, Ukraine*

*ORCID: 0000-0002-9051-7382*

**To cite this article:** Nazarov, N. (2021). Indoievropeiskyi muzychnyi idiom ta etnohenez indoievropeitsiv [Indo-European musical idiom and Indo-European ethnogenesis]. *Folia Philologica*, 2, 42–60, doi: <https://doi.org/10.17721/fovia.philologica/2021/2/5>

## INDO-EUROPEAN MUSICAL IDIOM AND INDO-EUROPEAN ETHNOGENESIS\*

*This article for the first time proposes a methodological bridge between comparative and historical linguistics, classical philology (on the one hand) and ethnomusicology (on the other hand). Thus, it is possible to verify the results obtained independently in various fields of humanities of the 20th century. The present article compares rhythmical patterns of songs with explicit ritual use from different ethnic groups speaking Indo-European languages (Slavic, Baltic, Greek, Albanian, Iranian, and others). In these songs, there are two main types of stable rhythm patterns (0101/0100 and 011/010) which correlate with two main types of Indo-European poetic metrical patterns independently reconstructed by Indo-European linguistics. It suggests that folk songs preserved a range of possible Indo-European rhythmic patterns, even though languages have changed prosodic properties over time. The present study follows the track of previous studies, which showed partial parallels in Baltic, Slavic-Balkan, and Indo-Aryan song patterns, which loans could not explain. Further analysis of rhythmic patterns revealed their connections with prosodic and syntactic properties of Indo-European sentence. Relative rhythmic complexity of possible Indo-European musical idiom may be correlated to the rhythmic complexity of textiles that may be connected to some Indo-European speaking ethnic groups. The parallels outside the Indo-European cultural range show possible Uralic and Caucasian components of Indo-European musical idiom, which may indicate components of ethnogenesis of Indo-European ethnic groups. Thus ethnomusicology may be regarded as an independent source for studying prehistory, along with linguistics, archeology, and genetics. Though proposed in the 20th century by B. Bartok, V. Goshovsky, G. Luko, this program of ethnomusicological research has not yet been implemented.*

**Key words:** *Indo-European, ethnomusicology, folklore, rhythm.*

**Назарію НАЗАРОВ**

*кандидат філологічних наук, старший науковий співробітник, докторант Навчально-наукового інституту філології, Київський національний університет імені Тараса Шевченка, вул. Володимирська, 60, м. Київ, Україна, 01033*

*ORCID: 0000-0002-9051-7382*

**Бібліографічний опис статті:** Назаров, Н. (2021). Індоевропейський музичний ідіом та етногенез індоевропейців. *Folia Philologica*, 2, 42–60, doi: <https://doi.org/10.17721/fovia.philologica/2021/2/5>

## ІНДОЄВРОПЕЙСЬКИЙ МУЗИЧНИЙ ІДИОМ ТА ЕТНОГЕНЕЗ ІНДОЄВРОПЕЙЦІВ\*\*

*У теперішній статті здійснено порівняльний аналіз ритмічних патернів пісень із виразними ритуальними функціями із різних етнокультур, що послуговуються індоевропейськими мовами (слов'янських, балтських, грецької, албанської, іранських та інших). У цих піснях є дві головні стабільні ритмічні послідовності, що збереглися здебільшого в клаузулах (0101/0100 та 011/010). Ці клаузули корелюють із двома головними типами індоевропейських метричних зразків, що були незалежно від фольклорних свідчень реконструйовані лінгвістами-індоевропейцями в 20 столітті. Це означає, що фольклорні пісні зберегли низку імовірно ще індоевропейських*

\* The article has been prepared within the scope of the scientific project “Ecolinguistic Modes of Discursive Space of Ukraine in the European Multicultural Continuum” supported by the National Research Foundation of Ukraine (registration number 2020.02/0241, “Leading and young scientists research support”).

\*\* Статтю підготовлено в рамках проєкту “Еколінгвістичні модули дискурсивного простору України в європейському полікультурному континуумі” за підтримки Національного фонду досліджень України (р.н. 2020.02/0241, конкурс “Підтримка досліджень провідних і молодих учених”).

ритмічних зразків, навіть попри, що з часом мови зазнали просодичних змін. Теперішнє дослідження продовжує часткові спостереження попередніх досліджень, які вказували на часткові паралелі між балтійськими, слов'янськими та індоарійськими пісенними патернами, які не можуть бути пояснені запозиченнями. Глибший аналіз ритмічних патернів показав, що вони пов'язані з просодичними та синтаксичними властивостями індоєвропейського простого речення. Відносна ритмічна складність індоєвропейського музичного ідіому може бути корелятом до ритмічно складної організації візерунків на текстилі із культур, що асоціюються з індоєвропейцями. Ритмічні паралелі з-поза індоєвропейського культурного ареалу вказують на можливі уральські та кавказоїдні компоненти індоєвропейського етномузичного ідіому, що може у свою чергу вказувати на компоненти етногенезу давніх індоєвропейців. Таким чином етномузикологія, збагачена лінгвістичним матеріалом, може слугувати незалежним джерелом інформації про доісторію, поряд із лінгвістикою, археологією та генетикою. Саме такою була донині не реалізована програма етномузикологічних досліджень, запропонована в 20 столітті Б. Бартоком, В. Гошовським, Г. Люко.

**Ключові слова:** індоєвропейці, етномузикологія, фольклор, ритм.

*Are these narrow range melodies <...> the remnants of a common ancient Slavic style? Unfortunately we do not have for this theory proofs as convincing as there are for the common origin of the Old Hungarian-Turkish melodies (Bartok & Lord, 1951: 54).*

*... the tunes of traditional peasant songs, and primarily those that belong to ritual or labor and are performed collectively, represent reliable material for researching the distant past of the musical culture of humanity. In this respect, it is not only equivalent to archaeological and linguistic materials but also surpasses their historical reliability (Goshovskiy, 1971: 14).*

### Introduction

The possibility of reconstructing some elements of common Slavic song folklore has been discussed for a long time (Bartok, Keldysh, Panof). There are also many individual genetic parallels found between different Slavic and not Slavic peoples (they will be referred to further). The idea of the probable reconstruction of the basic elements of the common Indo-European folklore musical language is not new (Ivanyts'kyu, 2009).

Nevertheless, we do not know a generalizing work based on the material of ancient and modern Indo-European song traditions, which could give an idea of the general features of the Indo-European musical idiom. An exception is a book by V. Petr published in the late 19th century (Petr, 1899), but it is outdated in many methodological approaches, although it retains a certain interest.

The possibility and even need for such study are backed by similar researches in the field of Common-Kartvelian ethnomusical idiom (Maisuradze, 1983) and Altaic musical affinities (Skvortsova, 2009) that proved to be a separate source for the history of ethnogenesis.

Some ethnomusicological studies have come to conclusions similar to those of linguistics without interfering with linguistic studies of Indo-European and Slavic antiquities. The article by Gabor Lükő (Lükő, 1964) 'Zur Frage der Musikkultur in der slawischen Urzeit' deserves separate consideration, since its methodological approaches and the results obtained are of great importance for our study, because many of his methodological observations may well be interpolated to a more comprehensive, Indo-European, material (which is partly done by Lükő himself).

Since the split of the common Slavic unity, the Slavic peoples were located in geographically remote regions and under the influence of different cultures, the emergence of those common features to their languages and musical cultures should be attributed to the Common Slavic stage. The songs of the narrow ambitus are especially important. Many of them are ritual songs related to agriculture, for example – summer songs of haymaking and harvesting, wedding songs, and lullabies (Lükő, 1964: 238)

In general, the article provides 14 melodic types from different Slavic regions (from Arkhangelsk to Serbia), which have a similar ritual function, ambitus, harmony, and melodic outline. Some of these types have similarities with the Gregorian chant of the Catholic Church. However, the Eastern Slavs did not encounter it too much and therefore could inherit this type only from the pre-Christian era.

Moreover, there is a remarkable similarity in the modal and intonation characteristics of the Gregorian chant and the Romanian folk song "Mioritsa" (belonging to the most ancient mythological, pagan stratum). Since Romanians do not belong to the Catholic rite, the common features of the Gregorian chant and this song should be attributed to the general folklore layer of Indo-European origin, from which the creators of the Gregorian chant

drew material (Lükő, 1964: 254). We could add that this happened more than once – for example, Luther also made church chants from folk songs.

In the light of our further research, this opinion of Lükő seems to us more than justified. Further, Lükő gives examples of the convergence of ambitus, mode, and melody in ritual ancient Greek chants and Slavic ritual songs (Lükő, 1964: 254).

Further, the researcher concludes that ritual songs with a narrow ambitus among the Slavic peoples belong to their common, even Proto-Slavic heritage. This is due to the extremely consistent systematic nature of the observed parameters of the material – strict connection to certain calendar rituals, narrow ambitus, and modal characteristics coincide in numerous tunes (according to Lükő's observations, in many thousands) (Lükő, 1964: 258-259).

Then Lükő focuses on analyzing the modal features of songs, and as an experiment, he tries to describe them in terms of ancient Indian musical theory and finds some analogies in the construction of a melody (especially the role of the tetrachord). Lükő considers the similar melodies in the Ugro-Finnish peoples and ancient Jewish chants to be probable prehistoric borrowings from the Indo-European peoples (in the latter – during the Persian captivity in Babylon)<sup>1</sup>.

Based on a comparison of Slavic folklore scales and scales of the Gregorian chant, Luko gives a list of probable scales of Indo-European origin (Lükő, 1964: 277-278). Lükő considered the final sound of songs, most often located on the 2-3 degrees of the tetrachord, to be one of the most important features inherited from the Indo-European time (Lükő, 1964: 286). Curiously, V. Petr came to a similar conclusion. In his opinion, one of the features of the Common Indo-European musical layer is the ending of the song on the "mesa" – he used the ancient Greek terminology, understanding the "mesa" as the middle tone of the scale (Petr, 1899: 285-286).

G. Lükő did not take the opportunity to take into account the rhythmic characteristics of ritual songs with a narrow ambitus of different Indo-European peoples (although he calls for this – Lükő, 1964: 287), which could have made his results even more convincing.

This is precisely the task of our present study.

<sup>1</sup> In the light of our current research, Jewish parallels can be attributed to the impact of the first Mediterranean agricultural cultures, cf. part 3.1 of the article.

## 1. Theoretical framework

### 1.1 The possibility of applying the comparative historical method to folk music

Due to the two-sided nature of the sign that has material and mental constituents, separate fragments of the disappeared sign systems can be reconstructed based on the comparison of their daughter-systems. It is due to this that the reconstruction of the Proto-Indo-European language achieved great success in the 19th-20th centuries (Beekes, 2011).

Moreover, since the 19th century, attempts have been made to reconstruct fragments of the common Indo-European poetic thesaurus, which have had a noticeable successes: starting with the discovery of A. Kuhn, a significant number of etymologically related expressions have been found in geographically non-neighboring Indo-European folklore traditions, which indicates their common Indo-European origin (Schmitt, 1967; Watkins, 1963; West, 2007; Nagy, 1979).

Since the musical component of folklore is a semiotic system isomorphic to language (Kharlap, 1972; Goshovskiy, 1971: 14-20), the general principles of comparative genetic research used in linguistics, with some important reservations, are applicable for comparative genetic research of the language of folklore, both in its verbal and musical dimensions.

The verbal component of the song is the speech realization of the language, and the musical component of the song is the concrete realization of the ethnomusical idiom. Under the ethnomusical idiom, we understand the same thing as V. Goshovskiy under the "musical dialect", however terminologically the last name is misleading, since we are talking not about music of a modern type and not a dialect in its linguistic understanding, but about a phenomenon isomorphic to language in general.

Still, we accept the definition given by V. Goshovskiy. According to him, an ethnomusical idiom is 1) "a set of tectonic elements of songs that are widespread in a certain territory", 2) "specific local varieties of tunes of songs known outside the given dialect", 3) "the presence or absence of certain song types and genres", 4) "the adaptation of the tunes of national or migration songs to the laws of the local musical dialect" (Goshovskiy, 1971: 19). At the same time, the dialect's distinctive features can dominate either at one, or at sev-

eral, or all levels of the organization of the musical text (Goshovskiy, 1971: 20).

The strict association of a certain melodious type to certain seasonal, personal or cult events is akin to the conventional "association" of a sign to its meaning. It is due to the arbitrariness of the "sound / meaning" ("tune / ritual") connection that comparative genetic studies are possible. It is arbitrary in exactly the same way as the connection between the plane of expression and the plane of meaning in verbal language (Saussure; Jakobson), due to which the methods of comparative genetic linguistics can be considered as potentially applicable to the analysis of traditional folk tunes (cf. Goshovskiy, 1971: 14, 17).

Therefore, with the known different semantics (e.g., connection with ritual or dance), two similar tunes (rhythmic patterns) should not be unambiguously recognized as borrowings: it may well be a question of a formal coincidence, which also happens in natural languages, provoking the emergence of folk (or amateur) etymology.

From all the aspects of Indo-European comparative historical studies only the study of the Indo-European musical idiom still remain underdeveloped: the initiative of individual researchers at the end of the 19th century did not achieve the scale of a separate discipline, for which such a broad topic could claim.

However, already in the first monographic studies of the rhythm of the Slavic folk song – by Sokalsky and F. Kolessa – attempts were made to compare the rhythms of certain Indo-European poetic traditions known at that time with the rhythms of the Ukrainian and Russian folk songs (Kolessa, 1970: 33, 107-108). It is necessary to return to this problem from the perspective of the results of linguistic and ethnomusicological studies made in the XX-XXI centuries. V. Goshovskiy also called for a comparison of Slavic song with other Indo-European traditions (Goshovskiy, 1971: 30).

Before embarking on the reconstruction itself, one should point out a clear understanding of the boundaries of the reconstruction and its well-known conventionality.

Nevertheless, its heuristic and explanatory strengths are evident, allowing us to shed additional light on the issues of:

- chronologization and localization of the culture of the speakers of the Proto-Indo-European language,
- better understanding their ethnogenesis,

- identifying possible ethnic components from which their community originated.

The synthesis of ethnomusicology and comparative historical linguistics results will finally allow considering "musical folklore as a full-fledged historical material" (Goshovskiy, 1971: 5).

### 1.2 "Basic vocabulary" of song traditions

If there is a proven genetic kinship between Indo-European languages and folklore and other spheres of spiritual and social life of Indo-European peoples<sup>2</sup>, then there must be a relationship between their musical traditions as well. This fact naturally follows from the previous ones. However, it must be provided with an evidence base which is what this study is devoted to.

Superficially it may seem that the musical tradition of peoples seems to be prone to greater creolization compared to the language. But in linguistics, the problem of genetic affiliation has been overcome by highlighting the basic vocabulary, the comparison of which in combination with grammar allows one to substantiate the kinship of languages based on what is most typical for them.

Similarly, in the musical idiom of each nation, you can find features that unite it with the idioms of genetically related peoples (for example, the common stock of Hungarian and Permian folk music) – and features acquired in interaction with neighbors belonging to a different linguistic and ethnic group. A more conservative layer is represented by ritual folklore. For example, the ritual songs of Western and Central Ukraine have a deep commonality, dating back to common Slavic samples (Czekanowska, 1968). Cf. similar outcomes of a recent study (Klymenko, 2021).

Individual observations on the kinship of rhythm and other parameters of songs of different Indo-European peoples were pointed out earlier and we will refer to them in the appropriate places.

### 1.3 Common Indo-European state of folklore metric

In the modern notion of metrics, two points of view are accepted, the first recognizes the impor-

<sup>2</sup> I consider it superfluous to cite a cumbersome bibliography for such trivial facts, but one can cite the most important and new works that the author was guided by: Gamkrelidze, Ivanov; Beekes; Mallory; Melnichuk; Illich-Svitych; Benveniste. The existence of common Indo-European folklore has not been in doubt since the time of A. Kuhn (1853), see the bibliography and some features of this relationship in: Schmitt, 1967; West, 2007.

tance of musical parallels, and the second does not (Korchagin, 2011). However, this seeming contradiction concerns only the study of the author's poetry of a modern type, which has already finally emancipated from the musical component. Thus, concerning the metric of the traditional language of folklore, the question of separation from the musical principle is not at all questioned.

In 1888, long before the work of A. Meillet (Meillet, 1923), P. P. Sokalsky compared the meters of Russian and Ukrainian folk songs with Avestan, Vedic and ancient Greek ones. The comparisons of F. Kolessa in 1907 were more substantiated: "Who will not observe the close relationship between the above forms of Vedic verse and these verses of Ukrainian folk songs <...> In terms of rhythmic structure, the poems of the Avesta are even closer than the Vedic ones to the Slavic folk songs. <...> Saturnian verse bears a great resemblance to our kolomyika meter (8+6 syllables meter)" (Kolessa, 1970: 108-110).

1) *(ЕЗ, т. XI, стор. 24.)*  
 2) *(Там же, стор. 214, № 4.)*  
 3) *(О. Колбег, Рокуче, т. I, № 113.)*

(Kolessa, 1970: 108).

In general, with these comparisons, one can see the emergence of synthetic ethnomusical and linguistic Indo-European studies.

Based on a comparison of ancient Greek, ancient Indian, Latin, Old Irish, Old Slavonic, as well as Anatolian, Tocharian traditions of versification, Indo-Europeanists made attempts to reconstruct the primary state of the Proto-Indo-European metric (Fantuzzi, 1984; Jansen, 2003; Meillet, 1923; Nagy, 1979; Watkins, 1963; West, 1973; 1973a; Ivanov, 1980). The result of these comparisons can be summarized as follows.

The Indo-European verse consisted of 7-8 syllables. The number of syllables was the main organizing factor. In the initial part of the verse, the quantity of vowels was not taken into account. Only in the final part of the line (clausula) did the first fea-

tures of quantitative versification emerge. Accordingly, these clausules were the first rhythmically stable segments of the Indo-European verse:

0011<sup>3</sup>, i.e. from the point of view of the Indo-European prototype, clauses 0011<sup>3</sup> and 0010 will be the reflexes of the same proto-clause.

0101 and 0100 should be taken as reflexes of the same prototype.

Already in the Common Indo-European period, there was a tendency towards pairing lines with the endings 0101 and 011.

Thus, in 1960-1970, the Indo-Europeists came, based solely on the linguistic comparison, to conclusions that were strikingly close to the results of studies of East Slavic ethnomusicologists of the first half and middle of the 20th century: in the song phrase, rhythmic regularity begins to spread from its end (Kolessa, 1970: 59-60; Elatov, 1966: 41-42). Accordingly, it is appropriate to compare and search for Indo-European affinities of the rhythmic patterns only in the clausules of verses / song phrases since it is clear that regularity at the beginning of phrases is the result of later independent development.

B. Bartok (Bartok & Lord, 1951: 38) drew attention to the constant discrepancy between the rhythm of music and word stress in different archaic traditions of singing, which suggests that once there has been uniformity between them.

According to Bartok, transcribing folk music is always an oversimplification, like any other documentation. We have only two reliable forms of displaying folk singing – height (vertical) and rhythm (horizontal). Timbre (Bartok's "third dimension") is difficult to convey in by-hand documentation (Bartok & Lord, 1951: 3). Our model assumes another simplification – we will focus mainly on rhythm, as the melody was secondary to the rhythm and text at the early stages. Cf.: "The primary purpose of the performers is to convey this meaning to the listener; the melody is a secondary factor ..." (Bartok & Lord, 1951: 9).

Many folklorists agree that the primary verbal marking of the syllable (stress, vowel quantity) coincided with the musical one (Elatov, 1964), and the musical rhythm was at first secondary to the verbal one (Kharlap, 1972: 227). From this fol-

<sup>3</sup> Hereinafter, we use a simplified notation, meaning 0 is a rhythmically unmarked element (short), 1 is a rhythmically marked element (long), while one "1" equals at least two "0".

lows our intermediate hypothesis, which we prove by further consideration of the material: the Slavic rhythms in the clausules, which do not always coincide with the verbal stress, are traces-remnants of the primary (probably, Common Slavic and Indo-European) unity of singing (music) and speech, when the musical durations coincided with verbal stress or vowel quantity.

### 1.5 Principles of reconstruction of a musical "prototype"

The vocabulary of the Indo-European language indicates a high level of social organization (Benveniste) and various forms of sign activity – poetry, law, social organisation (Mallory & Adams, 2014; Schmitt, 1967; Tuck, 2006; Watkins, 1963; West, 2007). So, we can assume the same complexity and expressiveness, endowed with recognizable features, for the ethnomusical idiom as well (cf. "there is no reason to believe that the folk music of the Slavs before their split was completely primitive" – Goshovskiy, 1971: 45, also cf. p. 35).

The main principle of etymologization is the coincidence of the formal parameters of words and their meanings in different related languages. The semantics of a folk song is its association with a certain type of context (ritual, labor, narrative), which can be reflected in the verbal text itself (though the verbal level can be modernized<sup>4</sup>), and the formal parameters like the modal, intonational, and rhythmic characteristics of the melody. We adopt the definition of "melodies as a sign system containing information about the original function of a song" (Goshovskiy, 1971: 13).

Etymon in the narrow linguistic understanding is the reconstructed initial linguistic state from which reflexes-reflections originate. For the rhythm-melodic pattern of a melody, these can be those linguistic conditions that are the prototype of the song pattern frozen over time.

However, it is impossible to reconstruct a particular song. According to Kharlap, musical creativity until the turn of the XIV-XVI centuries presupposed not individual compositions, but "rhythmic and melodic formulas – meters and scales <...> Each formula can be a class of musical works, which in turn can be classes of poetic texts" (Kharlap, 1972: 223).

<sup>4</sup> Compare the opinion that the "structure" of language in general and of individual genres is more stable than individual words (Lehman, 1991: 5; Nazarov, 2015)

It is precisely such an invariant or invariants that we propose to discover in the course of our research. If we use the terminology proposed by V. Goshovskiy, then we restore the prototype, but not the archetype of the song text, since the latter is "one of the actually existing melodic variants" (Goshovskiy, 1971: 12-13). Seeking to find the latter would mean succumbing to the same methodological error as many Indo-European linguists at the dawn of the formation of their discipline, who attributed the role of "proto-language" to Sanskrit.

To prove the common Indo-European origins of the phenomena of the musical language of folklore, a much smaller amount of collected material would be sufficient since it has a high repetition rate<sup>5</sup>. In addition, we do not need to resort to statistics since the more archaic variants of melodies<sup>6</sup>, although not so numerous, are more valuable than the quantitatively prevailing later melodies.

However, an Indo-European linguist is faced with the task of finding something similar in material, the preservation of which is (more or less) beyond doubt. For an Indo-European ethnomusicologist, it is also a matter of showing that his material (tunes of folk songs) is generally capable of retaining information for many millennia. Therefore, we have provided each example with "parallel passages" from the corresponding folklore tradition: it is they that prove the typicality of the rhythm of a certain melody for an archaic musical layer.

### 1.6 The Core Comparative Material

Ritual singing has retained considerable conservatism at all levels of text organization: in musical terms, they represent (for example, in Belarus (cf. Goshovskiy, 1971: 14) unison-heterophonic type of musical thinking, in contrast to the later harmonic-polyphonic, whereby the performers themselves clearly distinguish between these two types.

A clear distinction has remained between the metrics and music of ritual and non-ritual folklore in the folk song traditions of the Tajiks – Tadzhiikova, 1972: 250-251), Armenians (Atayan, 1965), as well as the peoples of northern India (Chaitanya Deva, 1980: 130-131).

<sup>5</sup> Compare 100 fairy tales by V. Propp, which were enough to detect repeated elements.

<sup>6</sup> from the point of view of folklore, such are ritual melodies with a narrow ambitus.

It is in relation to the ritual layer of musical folklore that Goshovskiy's remark is appropriate: "... The musical language is much more conservative than the spoken language", since the musical dialect "becomes a means of artistic communication of the people only within the radius of the spread of this dialect" (Goshovskiy, 1971: 12).

K. Kvitka, in his 1926 article, showed that songs with a narrow ambitus should be attributed to the most archaic retentions in the folklore of the Slavs and other peoples (Kvitka, 1926). His discovery was independently confirmed once again by another researcher (Wiora, 1957).

Therefore, the starting point of our research will be the songs selected by A. Chekanowska as material for research in a book about narrow range folk songs of the Slavs (Czekanowska, 1972: 177-222). As A. Chekanowska herself showed, the songs of the Slavic peoples with a narrow range almost always turn out to be calendar or wedding songs (Czekanowska, 1972: 85; cf. Petr, 1899). Unfortunately, however, the researcher was not interested in the genetic relationship of the songs (Common Slavic and Common Indo-European).

It is also strange that A. Chekanowska did not apply rhythmic analysis to the unique material she had collected (which, of course, made genetic comparisons more difficult). If to the already applied criteria for the selection of archaic material we add one more, and very important one, namely rhythmic, then the probability of accidental coincidences will be minimal, and judgments about the genetic relationship of the melodious types will have a reasonable basis (cf. Goldin, 1978: 73). Moreover, in archaic music, both harmony and melody are derived from rhythm (Kharlap, 1972).

A. Czekanowska herself did not rule out that the musical structures she discovered could belong to a common Slavic or "even earlier" stage (Czekanowska, 1973: 32-33). However, the researcher still leaves open the question of the origin of the archaic layers of folklore songs discovered by her: "It must be assumed that in this case we found ourselves on the traces of a very old agricultural, most likely pre-Slavic <...> culture. The ethno-social interpretation of this culture, as well as its attribution either to the Mediterranean culture, or to other very ancient cultures, as well as the establishment of the relationship of this culture to the Balto-Slavic ones seems to be the most important task" (Czekanowska, 1973: 38).

The term "pre-Slavic" (*preślowski*), which is very important for understanding the position of A. Chekanovskaya, remains unclear: did the researcher imply a genetic origin from a common Indo-European source or from a non-Indo-European substrate? In her other publication, the researcher expressed skepticism about the possibility of reconstructing even a common Slavic musical layer, since its remnants are quantitatively (!) not numerous in some folklores, that contradicts the ideas she had expressed previously.

The relative chronology of the discovered phenomena is facilitated by the developments of comparative historical linguistics in the field of reconstruction of the common Indo-European linguistic state. A. Czekanowska believed that the main information for the relative chronologization of the phenomena of instrumental music can be provided by archaeological finds (Czekanowska, 1973: 32).

Vocal music does not leave "material evidence", but, nevertheless, we can reasonably rely on the correlation of linguistic and ethnomusical data for a sufficiently accurate chronologization and attribution to a certain socio-cultural community.

All the tunes that serve us as a starting point for comparison are unambiguously homogeneous in terms of modality and ambitus (see the very title of the book by A. Czekanowska), which allows us to classify already selected tunes according to stable rhythms of clauses (see below, 2.3).

For each type, we will cite parallels from other Indo-European song traditions, similar in all parameters or in most of them: formal (ambitus, harmony, rhythm) and semantic (ritual use). These parallels will allow us to assert the existence of these same melodic types in the original Indo-European tradition of ritual singing.

We are aware that some common Slavic "features of the tunes are at the same time common Indo-European, while others are common to all mankind" (Goshovskiy, 1971: 32); therefore, it is necessary to delineate the groups of material that we are using for comparison in this work.

## 2. Comparison of Material

### 2.1 A Universal Layer – Isorhythmic rhythm with/without one long note in clause

The "zero level" of musical text production is so widespread that it is difficult to unambiguously associate it with any era or place. These are the iso-

rhythmic sequences of the narrow ambitus, which are widespread throughout the world and therefore difficult to localize in space and time. They are found in traditional Chinese chants (Picken, 1957), in Polynesian singing, and in a number of other Asian traditions (Czekanowska, 1981). Therefore, we do not take such tunes into account in our study as the most general ones.

## 2.2 Common Indo-European-Ural-Altai rhythmic layer

Unlike the simplest isorhythmic pattern (with a possible one long note clause), 0011 and 0010 have a more distinguishable occurrence and history.

A 0011 (Czekanowska, 1972: No. 13, 17, 20, 26, 32, 37, 39, 63, 70, 78, 86, etc.), similarly in other Slavic (Zhnivarski, 1990: 33; Khodyt' sonko, 43, 26, 21, 38, 83, 88, 124; Gritsa, 1990: 74, No. 23) and Armenian (Belyaev, 1963: 91, 93; Kushnarev, 1958: 63, No. 16) songs.

B 0010 (Czekanowska, 1972: No. 7, 9, 10, 16, 18, 19, 24, 27, 29, 85, etc.), similarly (Pisni Podilya, 1976: 78).

Rhythmic groups A and B are variants of the same pattern (Zemtsovskiy, 1975: 170, no. 31) since 0 can come from a pause for breathing, etc., cf. interchangeability of groups A and B in some songs.

In addition to Slavic songs, they are also found in other Indo-European, e.g. Ossetian (Galaev, 1964: 42), Albanian (Pllana, 1979: 233-235)

In addition, they are characteristic of the music of the Ural-Altai peoples, the Finno-Karelian runes (Kallio, 2014, passim; Krohn, 1900), the melody of the Turkic epic (Belyaev, 1963). Türkic songs usually have a rhythm of 0000001, if 0101 occurs, then not in clausules, but in phrases entirely consisting of it (Belyaev, 1937: 22, 24) and has an onomatopoeic function (depicting the rhythm of riding a horse, the clatter of hooves).

The 0101 rhythms, sometimes found in Hungarian songs, may well be considered a Slavic infiltration (Bartok & Lord, 1951). The Türkic epic is characterized by a syllabic verse consisting of 8 to 12 syllables, in which a clause of three syllables is stably marked (Zhirmunskiy, 1964: 7, 10, 19), which is sung to the rhythm 011. Thus, a typological parallel is evident: regularity spreads from the end of the line, but at the same time the Türkic melody has its own rhythmic originality.

This allows us to assume that groups 011/010 belong to the most ancient layer of Indo-European musical idiom, which constitutes the most ancient, common Eurasian (Nostratic?) layer of it.

## 2.3 Common Indo-European layer

In this subsection, we consider patterns already known from linguistic reconstruction (see section 1.3).

C 0101

D 0100

In the most ancient layer of the Ural and Turkic song material, it is not easy to find rhythms C and D (except for the tunes of those Turkic peoples, in whose ethnogenesis the Iranian element played a decisive role, for example, the Uzbeks and Bashkirs, see examples of this rhythm in the Uzbek epic (Belyaev, 1963) and in Bashkir (Kidaish-Pokrovskaya, 1977)).

Interestingly, in A. Czekanowska's anthology, rhythmic clauses C and D are often found only in combination with clauses A or B:

C / D + A / B (Czekanowska, 1972: No. 12, 16, 18, 21, 69, 71, 72, 74, etc.)

A / B + C / D (Czekanowska, 1972: No. 19, 25, 28, 33, 35, 42, 43, 44, 66, etc.)

Compare the combinations of the same clauses in the Modern Greek ritual songs (Yoshikazu, 1979: 18), in other Slavic traditions (Khodyt' sonko: 91; Fedorov, 1985: 183, No. 4; Pisni, 2009: 24, 37, 39, 109), as well as in the Ossetian heroic songs (Galaev, 1964: 39, 42), with the clauses that look like xxxx 011 + xxxx 0101.

Separately, they are also can found:

C 0101 (Czekanowska, 1972: No. 22, 23)

F. Kolessa considered this rhythm (0101/0100) to be related to the rhythms of the Rigveda (Kolessa, 1970: 108). A. Nikiforov pointed out that in the clausules of Ukrainian dumas, this rhythm coincides with the clauseuls of Russian epics and, therefore, can be dated back to a single source. We can add that only due to the consideration of 0101 and 0100 as "allomorphs" of one "morph" can we explain the stresses of *чумV полЮ* type, ubiquitous in Russian epics.

V. Elatov carefully studied the development and origins of the rhythm 0101 using the material of Belarusian folk songs and concluded that basically it goes back to the rhythm of wedding songs, and then to calendar-ritual songs, from where it penetrated into epics, then into later songs



with heroic content (Elatov, 1974). This is one of the main rhythms of songs of the Belarusian Kupalie (midsummer rites) (Tavlai 1986: 121-124), Bulgarian harvesting songs (Katsarova, 1965: 69). They are also characteristic of Ukrainian songs of the spring-summer calendar cycle and associate it with wedding rituals (Kvitka, 1985: 66-98).



(Kvitka, 1985: 78).

Compare rhythms of Bulgarian carols (Dzhidzhev, 1981: 134-135). I. Zemtsovskiy discovered the affinity of this rhythm in ritual Bulgarian and Lithuanian songs (Zemtsovskiy, 1983: 219; Goldin, 1978) also emphasized this affinity.



Russian wedding song from (P'yankova, 1973: 18).

It is noteworthy, that in Lükö's chrestomathy of songs appended to his article, there are numerous instances of both A / B and C/D clausules (Lükö, 1964: 240-248).

This rhythm is often found in **Lithuanian** ritual and working songs. Its archaic nature is emphasized by the fact that it often does not coincide with the verbal stress, as J. Čiurlionytė says, "going his own way." Such discrepancies in the rhythm of words and melodies are characteristic of the oldest songs (Čiurlionytė, 1999: 24-25). Thus, in hay making songs the refrain *valio* is sung to this rhythm (in general, the rhythm of the refrain, as well as its lexical content, is usually more archaic than the rest of the song (Zemtsovskiy, 1975)): 00001/ 0101 (Četkavskaitė, 2007: 39), in which you can see the echoes of the combination 011 + 0101. The same rhythm can be found in wedding songs: 111 111 /01 01 (Čiurlionytė, 1999: 236, sub. 237; cf. Čiurlionytė,

1999: 251), and in different ritual songs recorded on Edison phonograph at the first half of XX c. (Nakienė & Žarskienė, 2007: 99, 103; Nakienė & Žarskienė, 2005: 30, 63, 95).

It is also found in **Latvian** ritual songs. It is especially worth paying attention to the example (Goldin, 1978: 100, no. 6) and (Vitolin, 1973: 84).



(Vitolin, 1973: 84).

In Ukrainian and other East Slavic folklores, children's songs-rain spells remained, which retained the same rhythmic pattern with a complete coincidence of word stress and musical rhythm:

0100: *Іди, іди дощику* (Dovzhenok & Lugans'ka, 1991: 40-49, 54-55, № 7, 8, 15, 19, 23, 26, 28-31, 37-39, 53-57).

The Indo-European origin of clausules 0101/0100/01001 is confirmed by its presence, in addition to the reflexes shown above in the Balto-Slavic area, in ritual and similar songs of a narrow ambitus of various non-neighboring areas of modern Indo-European languages and peoples.

**Tajik**: about the popularity of rhythm in Tajik music see (Cvetayev, 1956: 109). It is especially frequent in wedding songs (Mironov, 1932: 76; Tadzhiikova, 1972: 250, 256, 257, 260, 261, 266; Karomatov & Nurdzhanov, 1978: 19), where there is also a derivative rhythm 01001 (Tadzhiikova, 1972: 262); in labor songs, there is a combination of 0101/0100 + 011/010 (Tadzhiikova, 1972: 259).



(Tadzhiikova, 1972, 251)

**Ossetian**: heroic songs (Galaev, 1964: 34-35, 39, 42; refrain of *uaraida* p. 37)

**North Indian**: Punjabi love song (Sinyaver, 1958: 61), rhythms of the Rigveda (primarily trishubh with the regular clause 0101/0100).

**Armenian**: song of a woman in labor (Belyaev, 1963: 91, 93), song of threshing (Czekanowska, 1981: 279 No. 85), song-healing spell (Czekanowska, 1981: 280 No. 87), a song at the birth of a child (Czekanowska, 1981: 281 No. 89),

without specifying the genre (Dzhagatspanyan, 2000: 66). “Yambic” rhythms are considered one of the main features of Armenian folk music (Dzhagatspanyan, 2000). Cf. also a table (Dzhagatspanyan, 2000: 84), which shows that the rhythm 0101 is found in Armenian folk music more often than in Azerbaijani; at the same time, one should not forget that the 0100 rhythm is “etymologically” equivalent to it, but it is not in the table. One of the most widespread rhythms of ashug music is 0101 (Dzhagatspanyan, 2000: 96).



(Czekanowska, 1981: 280).

**Swedish:** Walpurgis Night Songs (Ling, 1981: 102-103).

**German:** Christmas songs and other rituals (So sangen, 1993).

**French (Provence):** songs sung at the end of Lent, when children ask for butter and eggs (Baud-Bovy, 1957: 360).

**Romanian:** colinda (Drăgoi, 1957: 21, no. 4 / a, 4 / b), wedding song with the rhythm 01001 (Drăgoi, 1957: 19, no. 3 / b), old songs (Drăgoi, 1957: 16, no. 1 / c), 0101 + 01 (Drăgoi, 1957: 17, no. 2), and archaic ballads (Comişel, 1957: 46).

**Irish:** Love Song (Shaw, 1957: 423, *An chuinn thu mí*), an old song accompanying the archaic waulking (Baud-Bovy, 1957: 432)

**Albanian:** a song in archaic polyphonic style (cf. further) in March for the feast of *Dita e verës* “Summer day” (Lloyd, 1968: 218), a celebration of the meeting of summer, wedding and love songs (Lloyd, 1968: 216, 219). The sample (Lloyd, 1968: 218) is also notable for the combination of groups 0101 + 011.



(Lloyd, 1968: 218).

Note that in (Vitolin, 1973: 84) and in this example the etymologically cognate *vasareli* and *vera* are used in the same rhythmic group in clauses.

**Modern Greek:** Easter (Baud-Bovy, 1957: 365, ex. 15, 366, ex. 16)<sup>7</sup> and May songs (Baud-Bovy, 1957: 368-369), wedding (Chianis, 1965: 108), as well as labor (Yoshikazu, 1979: 18), religious content with the rhythm 01001 (Baud-Bovy, 1957: 364, ex. 13), an epic melody with clause 0101 (Baud-Bovy, 1957: 365, ex. 14). Moreover, the combination of lines with clauses 0101/0100 and 011/010 is noticeable in many songs (Yoshikazu, 1979: 18; Baud-Bovy, 1957: 368). In general, the Greek *stixos politikos* is very archaic in form: it consists of two hemistichs (8 + 7) and is actually the dominant metric model for almost all genres of Modern Greek folklore. In structure, it is similar to the prototype of the Greek hexameter, and its rhythmic stability had to be preserved when the vowel lengths disappeared (2-3 centuries BC) because of the stability of the melody.

**Ancient Greek.** The few records of ancient hymns clearly indicate the presence of clause 0101 (West, 1994: 302, 303, 304, 290).

Thus, all tunes that have preserved clauses 0101, 0100 are, according to V. Goshovskiy's classification, between the first, highest, and second degrees of kinship (Goshovskiy, 1971: 27) – they have a common genre and theme, rhythm and modal system. That is, their genetic relationship cannot be doubted.

## 2.4 Parallels to 0101/0100 in ritual songs outside of Indo-European traditions

According to Bela Bartok's observation, the most significant differences between the ancient layers of Hungarian music and its Slavic neighbors, especially the Serbs, lie in the rhythmic plan: the ancient Hungarian song is isorhythmic, while the Serbian one is heterorhythmic (Bartok & Lord, 1951: 37).

Syncopated rhythms are occasionally found in Hungarian music. Bartok considered such examples to be borrowings from the Slavic musical environment (Bartok & Lord, 1951, 56-58). And

<sup>7</sup> The opinion of Baud-Bovy that the Greeks could have borrowed this melody from the Franks (!) is not justified in the light of the systematic correspondences with other Indo-European traditions highlighted in the present study (Baud-Bovy, 1957).

this is confirmed by our observations: their distribution and function differs from the function of the Indo-European analogous rhythm. 0101 rhythms in Hungarian music are found mainly in dances, while in old song (Szegő, 1988) there is a model 000001/000011 characteristic of the Finno-Ugric peoples (common with the Karelian-Finnish epic, cf. Krohn, 1900).

Rhythms 01 in Hungarian and i-e music have different semantic meaning and use, and even in the neighboring region of Hungary, the Ukrainian region of Transcarpathia, rhythms 0101 are found mainly in ritual songs, and songs that have an explicit dance function are more prone to isorhythmic (Gusak & Kovtunova, 2016). It should be assumed that the Hungarian rhythm group 0101 is an innovative feature that coincides with the Slavic material only formally but differs significantly in semantics. It is especially noteworthy that the ritual Hungarian songs – for example, the meeting of the summer (Szegő, 1988) is isorhythmic, have a rhythm in clause 011/010, which makes them different from Slavic and other Indo-European materials.

On the other hand, one cannot fail to note some parallels with Georgian songs, which are also characterized by some syncopated rhythms (Gvardzhaldze, 1982: 14-15), which are associated with ancient cult songs-invocations. The core of such a formula (01) is genetically related to the rhythms of the two-part cult "perkhuli" and their "canonized syncopated rhythm formula" (Gvardzhaldze, 1982: 12). For example, these are:

harvesting song (Chkhikvadze, 1977: 31) with a constant repetition of the 0101 rhythms;

song to the Sun (Chkhikvadze, 1977: 35) with a constantly repeating rhythm 1001 (which is equivalent to 101);

wedding song (Chkhikvadze, 1977: 78-80) with rhythm groups 0101 and 1001.

In a comprehensive study (Maisuradze, 1983), Georgian folk songs' modal and intonation structure was analyzed in the context of other Kartvelian cultures (Megrelian, Svan) and neighboring Caucasian cultures. Like A. Chekanovskaya's research, it focused on the modal and intonational characteristics of songs, as well as their ambitus. It is noteworthy that the 0101 rhythm (moreover, in its pure form, without variant 0100) is present in many samples of different Kartvelian traditions, mainly in ritual choral songs, agricultural labor songs, and lullabies.

See music appendix (Maisuradze, 1983: 292-322) No. 1, 10, 11, 12, 14, 15, 16, 26, 30, 33, 43, 45 (harvesting with sickle), 46 (haymaking). Also, in the main text of the study (Maisuradze, 1983: p. 18 No. 17, p. 29 No. 1, p. 39 No. 43, p. 40 No. 47, p. 56 No. 68, p. 90 No. 114, p. 97 No. 45). The same rhythm is typical for some Chechen-Ingush songs (Maisuradze, 1983: 314, 320), but it looks like infiltration: many Chechen-Ingush songs have an ancient rhythm of 0 ... 001.



(Maisuradze, 1983: 296).

### 3. Contextualization of the results obtained

#### 3.1 Features of the Indo-European musical idiom and the ethnogenesis of the Indo-Europeans

Thus, the Indo-European musical idiom should correspond to the most archaic layers of the ritual song of the Balts, Slavs, Armenians, Balkan peoples, Tajiks, Ossetians, since “<...> primitive music is very far from Russian folklore, the formation of which we must attribute to the latter the steps of the primary era” (Kharlap, 1972: 226). The same level of complexity can be attributed to the culture of Indo-Europeans at the eve of their migrations (Lehman, 1991). Therefore, many songs that preserve ancient formal characteristics refer to the annual agrarian cycle, reflecting the elements of the religion of the Indo-European farmers.

Thus, despite its archaism, the ethnomusical idiom of the Indo-Europeans has a rather comprehensive set of individual features that prevent it from being dissolved among the most ancient musical idioms of Eurasia and the rest of the world.

**Specific features.** So, it is reliable to say that the Indo-European musical idiom was already different from the completely primitive "music", as it already had simple scales (Petr, 1899; Lükő 1964), while primitive music knew only the rhythmic organization (Kharlap, 1972: 227).

The relative **rhythmic** uniformity of the reconstructed I.-E. musical language should not be alarming since it is known that, for example, Karelian and Finnish songs of any content are sung to

one or several tunes, which may vary depending on the region (Krohn, 1900).

The most ancient layer of the Indo-European tunes does not go beyond the **range** of the third or fourth, which is generally characteristic of many ancient folklores.

In the oldest layer of the Indo-European musical idiom, there are rhythmic patterns characteristic also of the Ural-Altai peoples. Meanwhile, in the songs associated with family rituals and agriculture, parallels with ancient Georgian agricultural songs are abound, which indicates the possibility of comparing these data with the long-ago expressed hypothesis about the probable presence of two components that participated in the ethnogenesis of the Indo-Europeans: the Uralic and Mediterranean, possibly Kartveloid (Trubetskoy), as evidenced by the linguistic typology (Palmitis)<sup>8</sup>. It agrees with the idea that the Indo-European genes comprise a considerable part of Caucasian gene material (Anthony, 2019).

It is also worth mentioning that the Neolithization of the Black Sea steppes is traditionally associated with the Caucasian influence (Zaliznyak, 2019: 6). Moreover, according to the evidence of modern archeology (Zaliznyak, 2019: 14), in 4-3 thousand BC., the Middle Stog and Yamna cultures, probably the first Indo-Europeans, seemed to be sandwiched between the Finno-Ugric cultures to the north and the Kartvelian-speaking cultures to the south. It may hint at the probable origin of the components of the IE musical idiom, and ultimately – the Indo-Europeans themselves<sup>9</sup>.

The presence of folk polyphonic singing can be parallel evidence of the genetic connections of Indo-European musical cultures with the Kartvelian-speaking agricultural area. I. Zhordania, who studied Georgian polyphonic singing, pointed out the existence of a rich culture of polyphony in the Caucasus, and only its sporadic fixations in Europe and Asia. Interestingly, there are rich traditions of polyphonic singing in all cultures of the Balkans, Spain, and Portugal (echoes

of ancient agricultural cultures?), as well as in Latvia and Lithuania, Iceland, Ukraine, Southern Russia (traces of Indo-Europeanization and neolithization of the Finno-Ugric population?).

All Finno-Ugric peoples have only a tradition of unison singing, except the Mordovians, Komi-Permians, and Setu, which were strongly influenced by the Indo-European peoples, including the Indo-European peoples, including Slavs and Iranians. I. Zhordania's conclusions are very valuable: "In fact, all representatives of the Caucasian-Iberian group of languages are polyphonic, most of the speakers of Indo-European languages in Europe are polyphonic (although polyphony is expressed to varying degrees), in Asia they are monophonic, most of the Finno-Ugrians are monophonic (as well as the majority of the Turks), virtually all the peoples of the Sino-Tibetan group and almost all language families on the American continent are monophonic, and the overwhelming majority of the peoples of the Central and South African language families are polyphonic"(Zhordania, 1989: 245).

Connections or their absence with the African centers of polyphony is a subject of independent research. However, something else is clear – most likely, **polyphonic singing** was another feature of the Indo-European musical idiom.

### 3.2 Verification of the received data: textiles

However, there is another reliable way to verify the results obtained. The rhythmic patterns of songs are directly related to the rhythm of other types of signatory human activity. Therefore, the Proto-Indo-European community could already possess a reasonably high level of complexity of sign practices. Beside folklore and ritual practices, these could include the rhythmic patterns of the surviving textiles. Different color combinations in traditional textiles create a certain rhythm characteristic of each culture (Isaeva, 2009: 7, 13).

As shown in a number of publications (Tuck, 2006), until now, in Northern India and Central Asia, mnemonic songs have survived. Their rhythm and tonality are responsible for drawing up a specific pattern of woven carpets. At the same time, direct hints have been preserved in ancient Greek and ancient Indian monuments that a woman not only sings for her pleasure while weaving but in this way reproduces a certain patterned rhythmic pattern (Tuck, 2006: 541, 543). Cf. (Goshovskiy,

<sup>8</sup> In this regard, one of the hypotheses about the etymology of the Slavic *xlěbъ*, about its probable connection with the Georgian *xalli* "roasted grain" (plural – *xlebi*) suggested by Y. Mosenkis (Etymolohichnyy slovnyk ukrayins'koyi movy, 2012: 181) should be recalled.

<sup>9</sup> cf. Influences of the Caucasus on the steppe can be traced from the IV millennium BC in the monuments of the "steppe Maikop" of the Caucasus (Manich basin), as well as in the Azov-Black Sea steppes." (Zalizniak, 2016: 14)

1971: 41). This is a direct correlate to the “fabric of song” formula preserved in many Indo-European traditions and the very traditions of making patterned fabrics (Barber, 1975; 1991; 1996).

### 3.3 Verification of Received Data: Prosodic Structure of Sentence

Further, the folklore verse does not know the transfer of a part of the sentence to the next line (enjambement). Thus, a song line (musical phrase) corresponds to a syntactically complete sentence (despite the fact that both architectonically, in the place of the hierarchy of sign systems, they are correlated – Goshovskiy, 1971: 17, 18), and from the point of view of intonationally and harmony it is a complete musical phrase. It is entirely legitimate to postulate the same for the Indo-European period since there are enough examples from the living Indo-European folklore traditions and from the archaic stages known from the written monuments of antiquity.

Thus, when considering the linguistic conditions in which they could later crystallize into stable musical rhythms of clausules, one should resort to the reconstructed Indo-European syntax and accentology. They can answer what words and with what accent paradigms could occur in the final position of the sentence (which strictly coincides with the song line).

According to many researchers (Lehman, 1991: 5, 9, 13), the original word order in the Indo-European sentence was SOV, and in stylistically colored speech, it was SVO. P. Kiparski believes that there were no cardinal differences between the accent paradigms of the verb and the noun (Kiparski, 1973: 795). However, over time, the typology and accentology of the Proto-Indo-European language changed, and words that were previously rarely used there appeared more and more often in the final position of the line, which gradually led to a complete mismatch of accent positions in the word and in the musical clause.

The whole variety of stress of the daughter Indo-European languages is reduced to two main initial paradigms (Kiparski, 1973: 795):

– fixed stress on a thematic vowel, which we can interpret, with the structure of the Indo-European word “root + thematic vowel + ending”, as fully corresponding to the Indo-European clausule and its folklore reflexes 0011/0010;

– mobile, falling either on the root (“root + thematic vowel + ending”, or on the ending, which, according to our observations, completely corresponds to the Indo-European clause and its folklore reflexes 0101/0100.

These two types of stress, called baritona (10) and oksytona (01), permeated the entire morphological structure of Indo-European language, as they marked the difference between nominative / subjective genitive, accusative / objective genitive, locative / dative, active / static verb, active / medial voice of the verb, and athematic / thematic verb, as well as a whole series of other essential oppositions (Krasukhin, 2004: 347).

Thus, the data of ethnomusicology directly correlate with the data of comparative-historical linguistics, since 1) according to several researchers (Krasukhin, 2004; 353), dynamic stress has evolved into musical stress; 2) the rhythm gradually gave rise to a melodic pattern (Kharlap, 1972; Goshovskiy, 1971). That is, the evolution of musical stress and the development of melody can be considered, if not as parallel, then at least as convergent phenomena that influenced the prosodic structure of the word ensemble.

It was precisely the melody that acted as a mediator between the quantitative and dynamic stress and meter: having crystallized under the influence of the quantitative verse, it transferred the same sequences of strong and weak beats to the ictus verse. After all, most of the long vowels of daughter Indo-European languages are of late origin, and therefore their coincidence with musical material can shed light on the initial stage of their formation in the common Indo-European language, where they could be associated with the musical-intonational contour of the phrase. Thus, melody acted as the keeper of a more ancient linguistic state, a bridge between different eras of language development.

As it follows from this, persistent tunes were the missing link that was lacking to explain the phenomena of retention of metric patterns in spite of the evolution of the phonetic system of the language.

In a real speech, verbal stress is most clearly recognizable when it coincides with the phrasal one. That is, folklore singing preserved not only the ancient form of *poetic* speech but *speech* in general.

### Conclusions

We compared the traditional ritual song of the East Slavic peoples with related Indo-European traditions (Albanian, Armenian, Ancient and Modern Greek, Tajik, Indian, and others) and the music of neighboring non-Indo-European peoples. Thus, it was possible to discover the specifics common to all Indo-European traditions and clearly distinguishing it from the cult music of non-Indo-European peoples.

These affinities may be traces of the Indo-European musical idiom, another cultural complex

inherited from the Indo-European era, along with language, mythology, and material culture. Comparisons of the ritual tunes of the Indo-Europeans with the folk music of other peoples of Eurasia and the world made it possible to offer another argument in favor of the ethnic two-component nature of the Indo-Europeans: in the most ancient layer of their ritual tunes, parallels are traced with the Finno-Ugric and Kartvelian songs, and with the latter, it is the songs associated with rituals that are similar, including agricultural ones. This fact can speak about the origins of Indo-European agriculture.

### BIBLIOGRAPHY:

1. Атаян Р. Армянская народная песня. Москва: Музыка, 1965.
2. Беляев В. Якутские народные песни. *Советская музыка*. 1937. № 9. С. 11-26.
3. Беляев В.М. Очерки по истории музыки народов СССР. Вып. 2: Музыкальная культура Азербайджана, Армении и Грузии. Москва: Государственное музыкальное издательство, 1963.
4. Витоль Е. Латвийские пастушеские песни. *Проблемы музыкального фольклора народов СССР. Статьи и материалы*. Москва: Музыка, 1973.
5. Галаев Б. (собр.) Осетинские народные песни. Москва: Музыка, 1964.
6. Гварджаладзе Г.М. Типологические особенности ритмических основ грузинской народной песни. Автореф. дис. ... канд. искусствоведения. Тбилиси, 1982.
7. Гольдин М. Черты общности и связи в песенном творчестве латышей и соседних народов. Москва: Советский композитор, 1978.
8. Гошовский В.Л. У истоков народной музыки славян. Москва: Советский композитор, 1971.
9. Грица С.И. Украинская песенная эпика. Москва: Советский композитор, 1990.
10. Гусак Д., Ковтунова М. (упор.). Ой летіла ластовичка понад Марамориш: Старовинні пісні Марамороша. Київ: Лазурит-Поліграф, 2016.
11. Джагацпанян К.А. Ритмика армянской музыки. Дисс. ... доктора искусствоведения. Москва, 2000. 226 с.
12. Джиджев Т. Проблеми на метроритма структура на песенния фолклор. София: Изд-во БАН, 1981.
13. Довженок Г.В., Луганська К.М. (упор.). Дитячі пісні та речитативи. Київ: Наукова думка, 1991.
14. *Етимологічний словник української мови: в 7 томах*. Київ: Наукова думка, 2012. Том 6.
15. Елатов В.И. Ладовые основы белорусской народной музыки. Минск: Наука и техника, 1964.
16. Елатов В.И. Ритмические основы белорусской народной музыки. Минск: Наука и техника, 1966.
17. Елатов В.И. По следам одного ритма. Минск: Наука и техника, 1974.
18. Жирмунский В.М. Ритмико-синтаксический параллелизм как основа древнетюркского народного эпического стиха. *Вопросы языкознания*. 1964. № 4. С. 3-24.
19. Жнивварські пісні: Українські народні пісні: Пісенник (упор. О.О. Чебанюк). Київ: Музична Україна, 1990.
20. Жордания Дж. Грузинская традиционная полифония в международном контексте полифонической культуры (проблема происхождения полифонии). Тбилиси: Издательство Тбилисского государственного университета, 1989.
21. Залізник Л. Мезолітичні витоки перших індоєвропейських культур Європи за даними археології. *Археологія*. 2016. № 3.
22. Залізник Л.Л. Історія української індоєвропейістики. *Археологія*. 2019. № 2. С. 5-18 <https://doi.org/10.15407/archaeologyua2019.02.005>
23. Земцовский И. Мелодика календарных песен. Ленинград: Музыка, 1975.
24. Земцовский И.И. Из болгаро-литовских этномузыкальных параллелей (Balcano-Balto-Slavica как предмет музыковедения). *Балто-Славянские исследования 1982*. Москва: Наука, 1983. Вып. 3. С. 205-223.
25. Иванов Вяч. Вс. Происхождение древнегреческих эпических формул и метрических схем текстов. *Структура текста*. отв. ред. Т.В. Цивьян. Москва: Наука, 1980. С. 59-80.
26. Исаева Т.И. Архаичные и традиционные технологии в современном дизайне текстиля: Автореф. дис. ... канд. технических наук. Санкт-Петербург: Санкт-Петербургский государственный университет технологии и дизайна, 2009. 17 с.
27. Іваницький А. Історичний синтаксис фольклору: Проблеми походження, хронологізації та декодування народної музики. Вінниця: Нова книга, 2009. 404 с.

28. Кароматов Ф., Нурджанов Н. Музыкальное наследие таджиков Приамирья. *Ф. Кароматов, Н. Нурджанов. Музыкальное искусство Памира. Кн. 1.* Москва: Совесткий композитор, 1978. С. 3-23.
29. Кацарова Р. (ред.) Българско народно творчество в тринадесет тома. Т. 13. Народни песни с мелодии. София: Наука и изкуство, 1965. 660 с.
30. Квітка К. Вибрані статті. Т.1. Київ: Музична Україна, 1985.
31. Квітка К. Первісні тоноряди. *Первісне громадянство.* 1926. № 3.
32. Квітка К. Ритмічні паралелі в піснях слов'янських народів. *Музика.* 1/1923. С. 19-23.
33. Кидайш-Покровская Н. (ред.) Башкирский народный эпос. Москва: Наука, 1977.
34. Клименко І. В. Обрядові мелодії українців у контексті слов'яно-балтського ранньотрадиційного меломасиву: типологія і географія. Автореф. ... доктора мистецтвознавства. Київ: Національна музична академія України імені П.І. Чайковського. 2021.
35. Колесса Ф.М. Ритміка українських народних пісень. В кн.: *Колесса Ф.М. Музикознавчі праці.* Київ: Наукова думка, 1970. С. 19-23.
36. Корчагин К.М. Современные зарубежные исследования метрики. *Вопросы языкознания.* 2011. № 4. С. 90-115.
37. Красухин К. Аспекты индоевропейской реконструкции: акцентология, морфология, синтаксис. Москва: Языки славянской культуры, 2004.
38. Кушнарєв Х.С. Вопросы истории и теории армянской монодической музыки, Ленинград: Музгиз, 1958.
39. Леман В.П. Новое в индоевропейских исследованиях. *Вопросы языкознания.* 1991. № 4. С. 5-30; № 5, С. 5-26.
40. Линг Я. Шведская народная музыка. Москва: Музыка, 1981. 127 с.
41. Майсурадзе Н. Проблемы генезиса, становления и развития грузинской народной музыки. Дисс. ... доктора исторических наук. Тбилиси: Академия наук Грузинской ССР, Институт истории, археологии и этнографии им. И.А. Джавахишвили, 1983. 345 с.
42. Миронов Н. Музыка таджиков. Сталинабад, 1932.
43. Музичний фольклор з Полісся у записах Ф. Колесси та К. Мошинського (Систематизація матеріалу, вступна стаття, пісенні паралелі Ф. Колесси). Київ: Музична Україна, 1995. 432 с.
44. Назаров Н. Индоевропейське походження формул українського фольклору: Сучасна інтерпретація спостережень О.О. Потєбні. *Мовознавство.* 2015. № 6. С. 66-71.
45. Петр В. О мелодическом складе арийской песни. Историко-сравнительный опыт. Санкт-Петербург, 1899.
46. Пісні Волині й Поділля. Наш роде хороший... Вип. 1. Луцьк: ВМА «Терен», 2009. 216 с.
47. Пісні Поділля. Записи Насті Присяжнюк в селі Погребище 1920-1970 рр. Київ: Наукова думка, 1976. 524 с.
48. Пьянкова С. Некоторые особенности напевов в русской свадьбе. *Проблемы музыкального фольклора народов СССР.* Москва, 1973. С. 17-36.
49. Синявер Л.С. Музыка Индии. Москва: Музгиз, 1958.
50. Тавлай Г.В. Белорусское купалье: обряд, песня. Минск: Наука и техника, 1986. 174 с.
51. Таджикова З. Свадебные песни таджиков (по материалам Зеравшанских экспедиций). *История и современность. Проблемы музыкальной культуры народов Узбекистана, Туркмении и Таджикистана.* Москва: Музыка, 1972.
52. Федоров А.И. (отв. ред.). Хороводные и игровые песни Сибири. Новосибирск: Наука, 1985. 248 с.
53. Харлап М.Г. Народно-русская музыкальная система и проблема происхождения музыки. В кн.: *Неклюдов, С. (сост.). Ранние формы искусства. Сб. статей.* Москва: Искусство, 1972. С. 221-273.
54. Ходить сонко по вулиці: Українські народні колискові пісні (упор. О.Ю. Шевчук). Київ: Музична Україна, 1990. 160 с.
55. Цветаев М. А. О некоторых особенностях таджикских народных мелодий. *Труды АН Таджикской ССР.* 1956. Т. XLII. 107-123.
56. Чайтанья Дева Б. Индийская музыка. Москва: Музыка, 1980.
57. Чхіквадзе Г. (упор.) Грузинські народні пісні. Київ: Музична Україна, 1977.
58. Эвальд З.В. Песни Белорусского Полесья. Москва: Советский композитор, 1979. 119 с.
59. Anthony David W. Archaeology, Genetics, and Language in the Steppes. *The Journal of Indo-European Studies.* 2019. Vol. 47. № 1-2.
60. Barber E. The Proto Indo-European Notion of Cloth and Clothing. *Journal of Indo-European Studies.* 1975. № 4. P. 294-320.
61. Barber E. *Prehistoric Textiles: The Development of Cloth in the Neolithic and Bronze Age.* 1991.
62. Barber E. A Weaver's-eye View of the second Millenium Tarim Basin Finds. *Journal of Indo-European Studies.* 1996. № 23. P. 347-356.
63. Bartok, B., Lord, A. *Serbo-Croatian Folk Songs.* New York: Columbia University Press, 1951.

64. Baud-Bovy S. La strophe de distique rimés dans la chanson grecque. In: *Studia memoriae Belae Bartók sacra*. Budapestini: Aedes Academiae Scientiarum Hungaricae, 1957. S. 355-374.
65. Beekes R. *Comparative Indo-European Linguistics*. Amsterdam; Philadelphia: John Benjamins Publishing Company, 2011.
66. Četkauskaitė G. Lietuvių liudies dainų antologija. Vilnius: Lietuvos muzikos ir teatro akademija, 2007. 228 lap.
67. Chianis S. *Folk Songs of Mantinea, Greece*. University of California Press, 1965. 171 p.
68. Čiurlionytė J. Lietuvių liaudies melodijos. Vilnius: Lietuvos muzikos akademija, 1999. 339 lap.
69. Comişel E. La ballade populaire roumaine In: *Studia memoriae Belae Bartók sacra*. Budapestini: Aedes Academiae Scientiarum Hungaricae, 1957. P. 27-50.
70. Czekanowska A. Problem związków ogólnosłowiańskich a wąskozakresowy typ melodyczny. *Muzyka*. 1968. № 1. S. 31-48.
71. Czekanowska A. Ludowe melodie wąskiego zakresu w krajach słowiańskich. Kraków: Polskie Wydawnictwo Muzyczne, 1972. 264 s.
72. Czekanowska A. Znaczenie badań muzykologicznych dla studiów nad etnogenezą słowian. *Slavia Antiqua*. 1973. T. XX. S. 29-42.
73. Czekanowska A. *Kultury muzyczne Azji*. Kraków: Polskie Wydawnictwo Muzyczne, 1981.
74. Drăgoi S.V. Musical folklore research in Rumania and Béla Bartók's contribution to it. In: *Studia memoriae Belae Bartók sacra*. Budapestini: Aedes Academiae Scientiarum Hungaricae. 1957. P. 9-25.
75. Fantuzzi N. "Preistoria dell'esametro e storia della cultura greca arcaica: a proposito di alcuni studi recenti". *Materiali e discussione per l'analisi dei testi classici*. 1984. № 12. 35-60.
76. Jansen M. The metrical schemes of the hexameter. *Mnemosyne*. 2003. Vol. LVI. Fasc. 3. P. 343-348.
77. Kallio K. *Parallelism and Musical Structures in Kalevala-Metric Poetry*. In: *Parallelism in Verbal Art and Performance: Pre-Print Papers of the Seminar-Workshop 26th-27th May 2014, Helsinki*. P. 94-105.
78. Kiparski P. Inflectional accent in Indo-European. *Language*. 1973. № 49 (4). P. 794-849.
79. Krohn I. De la mesure à 5 temps dans la musique populaire finnoise. *Sammelbände der Internationalen Musikgesellschaft*. 1900. № 1. S. 142-146.
80. Lloyd A.L. Albanian folk song. *Folk Music Journal*. 1968. Vol.1. № 4. P. 205-222.
81. Lükő G. Zur Frage der Musikkultur in der slawischen Urzeit. *Studia Slavica Academiae Scientiarum Hungaricae*. 1964. № 3-4. S. 237-289.
82. Mallory, J.P., Adams, D.Q. (2006). *Oxford Introduction to Proto-Indo-European and the Proto-Indo-European World*. Oxford University Press.
83. Meillet A. *Les origine Indo-Européennes des mètres Grecs*. Paris: Les presses universitaire de France, 1923. 80 p.
84. Nagy G. "On the Origins of the Greek Hexameter: Synchronic and Diachronic Perspectives." In: *Studies in Diachronic, Synchronic and Typological Linguistics: Festschrift for Oswald Szemerényi on the Occasion of his 65th Birthday*, ed. by Bela Brogyanyi. Amsterdam / Philadelphia: John Benjamins Publishing Company, 1979. P. 611-631.
85. Nakienė A., Žarskienė, R. (ed.). *Žemaitijos dainos ir muzika 1935-1941 metų fonografo įrašai*. Vilnius: Institute of Lithuanian literature and folklore, 2005.
86. Nakienė A., Žarskienė, R. (ed.). *Lietuvių etnografinės muzikos fonogramos (1908-1942) = The Phonograms of Lithuanian Ethnographic Music (1908-1942)*. Vilnius: Institute of Lithuanian literature and folklore, 2007.
87. Picken L. Twelve ritual melodies of the T'ang dynasty. In: *Studia memoriae Belae Bartók sacra*. Budapestini: Aedes Academiae Scientiarum Hungaricae. 1957. S. 147-173.
88. Pllana Sh. Das albanische Volkslied in Kosovo. *International review of the Aesthetics and Sociology of Music*. 1979. Vol. 10. № 2. P. 215-236.
89. Schmitt R. *Dichtung und Dichtersprache in indogermanischer Zeit*. Wiesbaden, 1967.
90. Shaw M.F. Gaelic Folksongs from South Uist. In: *Studia memoriae Belae Bartók sacra*. Budapestini: Aedes Academiae Scientiarum Hungaricae, 1957. S. 417-434.
91. Skvortsova N. On evidence for the genetic relationship between Turkic and Mongol song traditions. In: *Jarkko Niemi (ed.). Perspectives on the Song of the indiginous peoples of northern Eurasia: Performance, genres, musical syntax, sound*. Tampere: Tampere University Press, 2009. P. 73-87.
92. *So sangen sie in den dreissiger Jahren: Lieder und Sprüche, vorgetragen von Frauen aus Császártöltés und Katymár*. Wien, 1993. 172 S.
93. Szegő J.G. *Ismeretlen moldovan nótafák*. Budapest: Európa, 1988. S. 231
94. Tuck A. Singing the Rug: Patterned Textiles and the Origins of Indo-European Metrical Poetry. *American Journal of Archeology*. 2006. № 110 (4). P. 539-550.
95. Watkins C. Indo-European metrics and archaic Irish verse. *Celtica*. 1963. № 6. P. 194-249.
96. West M.L. *Ancient Greek Music*. Clarendon Press, 1992.
97. West M.L. Indo-European Metre. *Glotta*. 1973. № 3/4. P. 161-187.



98. West M.L. Greek Poetry 2000–700 B.C. *The Classical Quarterly*. 1973a. № 23 (2). P. 179-192.
99. West M.L. Indo-European Poetry and Myth. 2007. Oxford: Oxford University Press.
100. Wiora W. Älter als die Pentatonik. In: *Studia memoriae Belae Bartók sacra*. Budapestini: Aedes Academiae Scientiarum Hungaricae, 1957. S. 185-208.
101. Yoshikazu N. Some Greek Folk Songs of an Aegean Island Naxos. *Hitotsubashi Journal of Social Studies*. 1979. Vol. 11. № 1. P. 17-30.

#### REFERENCES:

1. Anthony, David W. (2019). Archaeology, Genetics, and Language in the Steppes. *The Journal of Indo-European Studies*. Vol. 47. № 1-2.
2. Atayan, R. (1965). *Armyanskaya narodnaya pesnya*. Moskva: Muzyka.
3. Barber, E. (1975). The Proto Indo-European Notion of Cloth and Clothing. *Journal of Indo-European Studies*. 4: 294-320.
4. Barber, E. (1991). Prehistoric Textiles: The Development of Cloth in the Neolithic and Bronze Age.
5. Barber, E. (1996). A Weaver's-eye View of the second Millenium Tarim Basin Finds. *Journal of Indo-European Studies*. 23: 347-356.
6. Bartok, B., Lord, A. (1951). *Serbo-Croatian Folk Songs*. New York: Columbia University Press.
7. Baud-Bovy, S. (1957). La strophe de distique rimés dans la chanson grecque. In: *Studia memoriae Belae Bartók sacra*. Budapestini: Aedes Academiae Scientiarum Hungaricae. S. 355-374.
8. Beekes, R. (2011). *Comparative Indo-European Linguistics*. Amsterdam; Philadelphia: John Benjamins Publishing Company.
9. Belyaev, V. (1937). Yakutskiy narodnyye pesni. *Sovetskaya muzyka*. 9. 11-26.
10. Belyaev, V.M. (1963). *Ocherki po istorii muzyki narodov SSSR. Vyp. 2: Muzykal'naya kul'tura Azerbaydzhana, Armenii i Gruzii*. Moskva: Gosudarsvennoye muzykal'noye izdatel'stvo.
11. Chaitanya, Deva B. (1980). *Indijskaya muzyka*. Moskva: Muzyka.
12. Chianis, S. (1965). *Folk Songs of Mantinea, Greece*. University of California Press.
13. Chkhikvadze, H., upor. (1977). *Hruzyns'ki narodni pisni*. Kyiv: Muzychna Ukraina.
14. Comişel, E. (1957). La ballade populaire roumanie In: *Studia memoriae Belae Bartók sacra*. Budapestini: Aedes Academiae Scientiarum Hungaricae. 27-50.
15. Czekanowska, A. (1981). *Kultury muzyczne Azji*. Kraków: Polske Wydawnictwo Muzyczne.
16. Czekanowska, A. (1968). Problem związków ogólnosłowiańskich a wąskozakresowy typ melodyczny. *Muzyka*. 1. 31-48.
17. Czekanowska, A. (1972). *Ludowe melodie wąskiego zakresu w krajach słowiańskich*. Kraków: Polske Wydawnictwo Muzyczne.
18. Czekanowska, A. (1973). Znaczenie badań muzykologicznych dla studiów nad etnogenezą słowian. *Slavia Antiqua*. T. XX. 29-42.
19. Czekanowska, A. (1981). *Ukraińska muzyka*. In: *Mala encyklopedia muzyki*. Warszawa: PWN. 1062-1063.
20. Dovzhenok, G. V., Lugans'ka, K. M. (upor.) (1991). *Dityachi pisni ta rechitativi*. Kiïv: Naukova dumka.
21. Drăgoi, S. V. (1957). Musical folklore research in Rumania and Béla Bartók's contribution to it. In: *Studia memoriae Belae Bartók sacra*. Budapestini: Aedes Academiae Scientiarum Hungaricae. 9 – 25.
22. Dzhagatspanyan, K. (2000). *Ritmika armyanskoy muzyki. Dissertatsiya... doktora iskusstvovedeniya*. Moskva.
23. Dzhidzhev, T. (1981). *Problemi na metroritma strukturota na pesenniya folklor*. Sofiya: Izd-vo BAN.
24. Elatov, V.I. (1964). *Ladovyye osnovy belorusskoy narodnoy muzyki*. Minsk: Nauka i tekhnika.
25. Elatov, V.I. (1966). *Ritmicheskie osnovy belorusskoy narodnoy muzyki*. Minsk: Nauka i tekhnika.
26. Elatov, V.I. (1974). *Po sledam odnogo ritma*. Minsk. Nauka i tekhnika.
27. Etymolohichnyy slovnyk ukrayins'koyi movy: v 7 tomah. 2012. Kyiv: Naukova dumka, Tom 6.
28. Evald Z.V. (1979) *Pesni Belorusskogo Poles'ja*. Moskva: Sovetskij kompozitor.
29. Fantuzzi, N. (1984). Preistoria dell'esametro e storia della cultura greca arcaica: a proposito di alcuni studi recenti. *Materiali e discussione per l'analisi dei testi classici*, № 12, 35-60.
30. Fedorov, A.I. (1985). *Horovodnye i igrovye pesni Sibiri*. Novosibirsk: Nauka.
31. Galaev, B. (1964). *Osetinskie narodnye pesni*. Moskva: Muzyka.
32. Goldin, M. (1978). *Cherty obshchnosti i svyazi v pesennom tvorchestve latyshey i sosednikh narodov*. M.: Sovetskij kompozitor.
33. Goshovskiy, V.L. (1971). *U istokov narodnoy muzyki slavyan*. Moskva: Sovetskij kompozitor.
34. Gritsa, S.I. (1990). *Ukrainskaya pesennaya epika*. Moskva: Sovetskij kompozitor.
35. Gusak, D., Kovtunova, M. (upor.). (2016). *Oy letila lastovichka ponad Maramorish: Starovinni pisni Maramorosh*. Kiïv: Lazurit-Poligraf.

36. Gvardzhaladze, G.M. (1982). *Tipologicheskiye osobennosti ritmicheskikh osnov gruzinskoy narodnoy pesni*. Avtoref. dis. ... kand. iskusstvovedeniya. Tbilisi.
37. Isaeva, T.I. (2009). *Arkhainnyye i traditsionnyye tekhnologii v sovremennom dizayne tekstilya*: Avtoref. dis. ... kand. tekhnicheskikh nauk. Sankt-Peterburg: Sankt-Peterburgskiy gosudarstvennyy universitet tekhnologii i dizayna. 17 s.
38. Ivanov, Vyach. Vs. (1980). Proiskhozhdeniye drevnegrecheskikh epicheskikh formul i meticheskikh skhem tekstov. *Struktura teksta* [otv. red. T.V. Tsiv'yan]. Moskva: Nauka, 59-80.
39. Ivanyts'kyy, A. (2009). *Istorychnyy syntaksys fol'kloru: Problemy pokhodzhennya, khronolohizatsiyi ta dekoduvannya narodnoyi muzyky*. Vinnytsya: Nova knyha.
40. Jansen, M. (2003). The metrical schemes of the hexameter. *Mnemosyne*. Vol. LVI. Fasc. 3. 343-348.
41. Kidaish-Pokrovskaja, N. (ed.). (1977) *Baškirkij narodnyj èpos*. Moskva: Nauka.
42. Kallio, K. (2014). Parallelism and Musical Structures in Kalevala-Metric Poetry. In: *Parallelism in Verbal Art and Performance: Pre-Print Papers of the Seminar-Workshop 26th–27th May 2014, Helsinki*. 94-105.
43. Karomatov, F., Nurdzhanov, N. (1978). Muzykal'noye naslediyе tadjhikov Priamir'ya. In: *V. Karomatov, N. Nurdzhanov. Muzykal'noye iskusstvo Pamira. Kn. 1*. Moskva: Sovestkiy kompozitor. 3-23.
44. Katsarova, R. (red.) (1965). *Bŭlgarsko narodno tvorcestvo v trinadeset toma. – T. 13. Narodni pesni s melodii*. Sofiya: Nauka i izkustvo.
45. Kharlap, M.G. (1972) Narodno-russkaya muzykal'naya sistema i problema proiskhozhdeniya muzyki. V kn.: *Neklyudov, S. (sost.). Rannie formy iskusstva. Sb. statej*. Moskva: Iskusstvo. 221-273.
46. Khodyt' sonko (1990). *Khodyt' sonko po vulytsi: Ukrayins'ki narodi kolyskovi pisni* (upor. O.Yu. Shevchuk). Kyiv: Muzychna Ukrayina.
47. Kiparski, P. (1973). Inflectional accent in Indo-European. *Language*. 49 (4) 1973. 794-849.
48. Klymenko, I. (2021). *Obryadovi melodiyyi ukrajintsiv u konteksti slov 'yano-balts'koho rann'otradycijnoho spivu: typolohiya i heohrafiya*. Avtoref. ... doktora mystetstvoznavstva. Kyiv: Natsionalna muzychna akademiia Ukrainy imeni P.I. Chaikovskoho
49. Kolessa, F.M. (1970). Ritmika ukraïns'kikh narodnikh pisen'. In: *Kolessa, F.M. Muzikoznavchi pratsi*. Kyiv: Naukova dumka. 19-23.
50. Korchagin, K.M. (2011). Sovremennyye zarubezhnyye issledovaniya metriki. *Voprosy yazykoznaniiya*, №, 90-115.
51. Kushnarev, H.S. (1958). *Voprosy istorii i teorii armânskoj monodičeskoj muzyki*. Leningrad: Muzgiz.
52. Krasukhin, K. (2004). *Aspekty indoevropеjskoj rekonstrukcii: Akcentologiya. Morfologiya. Sintaksis*. Moskva: Yazyki slavyanskoj kultury.
53. Krohn, I. (1900). De la mesure à 5 temps dans la musique populaire finnoise. *Sammelbände der Internationalen Musikgesellschaft*, 1, 142-146.
54. Kvitka, K. (1923) Ritmichni paraleli v pisnyakh slov'yans'kikh narodiv. *Muzika*, № 1, 19-23.
55. Kvitka, K. (1926). Pervisni tonoryadi. *Pervisne gromadyanstvo*, № 3.
56. Kvitka, K. (1985). *Vibrani statti*. T.1. Kyiv: Muzychna Ukraina.
57. Lehman, V.P. (1991). Novoye v indoyevropeisticheskikh issledovaniyakh *Voprosy yazykoznaniiya*, № 4, 5-30; № 5, 5-26.
58. Ling, A. (1981). *Shvedskaya narodnaya muzyka*. Moskva: Muzyka.
59. Lloyd, A.L. (1968). Albanian folk song. *Folk music journal*, № 1(4), 205-222.
60. Lükö, G. (1964). Zur Frage der Musikkultur in der slawischen Urzeit. *Studia Slavica Academiae Scientiarum Hungaricae*, № 3-4, 237-289.
61. Maisuradze, N. (1983). *Problemy genezisa, stanovleniya i razvitiya gruzinskoi narodnoi muzyki. Dissertaciya ... doktora istoricheskikh nauk*. Tbilisi: Akademiya nauk Gruzinskoy SSR, Institut istorii, arheologii i etnografii im. I.A. Dzhevahishvili.
62. Mallory, J.P., Adams, D.Q. (2006). *Oxford Introduction to Proto-Indo-European and the Proto-Indo-European World*. Oxford University Press.
63. Meillet, A. (1923). *Les origines Indo-Européennes des mètres grecs*. Paris: Les presses universitaires de France.
64. Mironov, N. (1932). *Muzyka tadžikov*. Stalinabad.
65. Nagy, G. (1979). On the Origins of the Greek Hexameter: Synchronic and Diachronic Perspectives. In *Studies in Diachronic, Synchronic and Typological Linguistics: Festschrift for Oswald Szemerényi on the Occasion of his 65th Birthday*, ed. by Bela Brogyanyi. Amsterdam; Philadelphia: John Benjamins Publishing Company, 611–631.
66. Nakienė, A., Žarskienė, R. (ed.). (2005). *Žemaitijos dainos ir muzika 1935-1941 metų fonografo įrašai*. Vilnius: Institute of Lithuanian literature and folklore.
67. Nakienė, A., Žarskienė, R. (ed.). (2007). *Lietuvių etnografinės muzikos fonogramos (1908-1942) = The Phonograms of Lithuanian Ethnographic Music (1908-1942)*. Vilnius: Institute of Lithuanian literature and folklore.

68. Nazarov, N. 2015. Indoievropeiske pokhodzhennia formul ukrainskoho folkloru: Suchasna interpretatsiia sposterezhen O.O. Potebni. *Movoznavstvo*, № 6, 66-71.
69. Petr, V. (1899). *O melodicheskom sklade ariyskoy pesni. Istoriko-sravnitel'nyj opyt. Sankt-Peterburg.*
70. Picken, L. (1957). Twelve ritual melodies of the T'ang dynasty. In: *Studia memoriae Belae Bartók sacra. Budapestini: Aedes Academiae Scientiarum Hungaricae*, 147-173.
71. Pisni (2009). *Pisni Volyni j Podillja. Nash rode horoshij... Vyp. 1. Luc'k: VMA «Teren».*
72. Pisni Podillya. (1976). *Pisni Podillya. Zapysy Nasti Prysyazhnyuk v seli Pohrebyshche 1920-1970 rr.* Kyiv: Naukova dumka.
73. Pllana, Sh. (1979). Das albanische Volkslied in Kosovo. *International review of the Aesthetics and Sociology of Music*, Vol. 10, № 2, 215-236.
74. P'yankova, S. (1973). Nekotorye osobennosti napevov v russkoy svad'be. In: *Problemy muzykal'nogo fol'klora narodov SSSR.* Moskva, 17-36.
75. Schmitt, R. (1967). *Dichtung und Dichtersprache in indogermanischer Zeit.* Wiesbaden.
76. Shaw, Margaret Fay. (1957) Gaelic Folksongs from South Uist. In: *Studia memoriae Belae Bartók sacra. Budapestini: Aedes Academiae Scientiarum Hungaricae*, 417-434.
77. Sinyaver, L.S. (1958). *Muzyka Indii.* Moskva: Muzgiz.
78. Skvortsova, N. (2009). On evidence for the genetic relationship between Turkic and Mongol song traditions. In: *Jarkko Niemi (ed.). Perspectives on the Song of the indigenous peoples of northern Eurasia: Performance, genres, musical syntax, sound.* Tampere: Tampere University Press, 73-87.
79. So sangen. (1993). *So sangen sie in den dreissiger Jahren: Lieder und Sprüche, vorgetragen von Frauen aus Császártöltés und Katymár.* Wien.
80. Szegő, J.G. (1988). *Ismeretlen moldovan nótafák.* Budapest: Európa.
81. Tadzshikova, Z. (1972). Svadebnye pesni tadzshikov (po materialam Zeravshanskih ekspediciy). *Istoriya i sovremennost'. Problemy muzykal'noj kul'tury narodov Uzbekistana, Turkmenii i Tadzshikistana.* Moskva.
82. Tavlai, G.V. (1986). Belorusskoe kupal'e: obryad, pesnya. Minsk: Nauka i tekhnika.
83. Tsvetaev, M.A. (1956). O nekotoryh osobennostjakh tadzshikskih narodnyh melodij. *Trudy AN Tadzshikskoj SSR*, XLII, 107-123.
84. Tuck, A. (2006). Singing the Rug: Patterned Textiles and the Origins of Indo-European Metrical Poetry. *American Journal of Archeology*, 110 (4), 539-550.
85. Vitolin, E. (1973). Latyshskiye pastusheskiye pesni. V: *Problemy muzykal'nogo fol'klora narodov SSSR.* Moskva, 81-93.
86. Watkins, C. (1963). Indo-European Metrics and Archaic Irish Verse. *Celtica*, № 6, 194-249.
87. West M.L. (1992). *Ancient Greek Music.* Clarendon Press.
88. West, M.L. (1973). Indo-European Metre. *Glotta*, № 3/4, 161-187.
89. West, M.L. (1973a). Greek Poetry 2000-700 B.C. *The Classical Quarterly*, № 23(2), 179-192.
90. West, M.L. (2007). *Indo-European Poetry and Myth.* Oxford: Oxford University Press.
91. Wiora, W. (1957). Älter als die Pentatonik. In: *Studia memoriae Belae Bartók sacra.* Budapestini: Aedes Academiae Scientiarum Hungaricae. S. 185-208.
92. Yoshikazu, Nakamura. (1979). Some Greek folk songs of an Aegean Island Naxos. *Hitotsubashi journal of Social Studies*, № 1(11), 17-30.
93. Zaliznjak, L. (2016). Mezolitichni vytyky pershyh indoyevropejskyh kultur Yevrope za danymy arheologiyi. *Arheologija* 3.
94. Zaliznyak, L.L. (2019). Istoriya ukrayins'koy indoyevropeyistyky. *Arkheolohiya*, № 2, 5-18 <https://doi.org/10.15407/archaeologyua2019.02.005>
95. Zemtsovskiy, I. (1975). *Melodika kalendarnykh pesen.* Leningrad: Muzyka.
96. Zemtsovskiy, I.I. (1983). Iz bolgaro-litovskikh etnomuzykal'nykh paralleley (Balcano-Balto-Slavica kak predmet muzykovedeniya). *Balto-Slavyanskiye issledovaniya – 1982.* Moskva: Nauka, Vol. 3, 205-223.
97. Zhirmunskiy, V.M. (1964). Ritmiko-sintaksicheskiy parallelizm kak osnova drevnetyurkskogo narodnogo epicheskogo stikha. *Voprosy yazykoznavniya*, № 4, 3-24.
98. Zhordania Dzh. (1989) *Gruzinskaja tradicionnaja polifonija v mezhdunarodnom kontekste polifonicheskoy kul'tury (problema proishozhdenija polifonii).* Tbilisi: Izdatelstvo Tbilisskogo gosudarstvennogo universiteta.
99. Zhnivarski. (1990). *Zhnivarski pisni: Ukraïnski narodni pisni: Pisennik* (upor. O.O. Chebanyuk). Kyiv: Muzychna Ukraina.
100. Četkauskaitė, G. (2007). *Lietuvių liudies dainų antologija.* Vilnius: Lietuvos muzikos ir teatro akademija.
101. Čiurlionytė, J. (1999). *Lietuvių liaudies melodijos.* Vilnius: Lietuvos muzikos akademija.