

Formulaic Style and Intertextuality: Archaic and Modern Paradigms of Poetical Composition in Old Hungarian Epic Songs

1. Introduction

In a recent paper (Seláf et al. 2024) we have analyzed the style of epic formula in Early Hungarian narrative poetry. We have focused on a line-to-line comparison based on frequencies of character bigrams, which we considered to be just “a good starting point for the further discussion about intertextuality, simulated orality and the epic formulas in the Hungarian poetry of early modernity”.

In this paper we aim to build on these findings and to analyze the differences between line-sharing across various poems and the repetition of identical or nearly identical lines within the same poem. By doing so, we hope to gain deeper insights into the role that orality may have played in 16th-century Hungarian poetry.

The central question is whether we can reasonably propose a strong connection between the epic poetry of the period and oral tradition—not only in terms of performance but also in the techniques of composition. It is worth noting that István Vadai, one of the foremost scholars of the period, argued that the epic song known as the “*históriás ének*” was a newly emerging genre of Hungarian poetry during or just before the 16th century. He pointed out that even its earliest examples exhibited clear signs of dependence on writing and humanist culture, and he firmly rejected the notion of oral composition in this tradition (Vadai 2007). Here we would like to challenge this view.

The Formula and the Formulaic Style

On the basis of our search for almost identical or very similar lines, we were driven to propose a new definition of the epic formula. While the previous scholarship defined the formula as based on short expressions in 16th century Hungarian poetry (Di Francesco 2005; Varjas 1982), we established that more is needed than the repeated collocations of just two lexical elements to talk about a formula.

A brief reminder of the main features of the epic formula according to our definition:

- it stays in the frames of a single line (only with very-very few exceptions)
- it contains at least three core elements, and some optional or accidental, not obligatory ones
- lexical variability may also affect *some of* the core elements, but the variations are always *synonyms* or do *belong to the same semantic field* (so the number of variations is rather limited in case of these few core elements).

The formulaic style reflects a special compositional technique. It shall be identified in only a small part of our corpus, when the main poetic device of the text is the reuse and variation of some expressions or lines of the same composition. The *Cantio de militibus pulchra* and the *History of emperor Rusztán* are the most evident surviving examples of that technique.

In the formulaic style

- the syntactic structures of a group of lines (in the same or in consecutive stanzas) are *parallel*, either *identical* or *very similar*
- the parallelism of the syntactic structures of the lines is often counterbalanced by the morphological variation (number, flexion, verbal tense, verbal prefixes) of the same lexical elements. The function words and other optional elements might change.
- the rhyme position affects our perception of the formula: if the rhyme-word or just the rhyme vowel is the same in case of two similar lines, their formulaic character seems to be stronger. In the same way, the identical beginning of the verses strengthens the formulas.

The use of formulas presupposes the variation and variability. The limits of the variation are the most intriguing to discover and to define for us.

2. Further results of the analysis

In what follows, we aim at determining the relationship between orality and the formulaic compositional techniques of different authors, subgenres, and time periods. Using the method elaborated in a study dedicated to the analysis of Finnic oral folk poetry (Janicki, Kallio, and Sarv 2022), we represent each line as a vector defined by the frequencies of character bigrams and measure the cosine distance between each possible pair of vectors (A, B) in the corpus:

$$D(A, B) = 1 - \frac{\sum_{i=1}^n A_i B_i}{\sqrt{\sum_{i=1}^n A_i^2} \cdot \sqrt{\sum_{i=1}^n B_i^2}}$$

We distinguish five levels of similarity ($D(A, B) < 0.1$; $D(A, B) < 0.15$; $D(A, B) < 0.2$; $D(A, B) < 0.25$; $D(A, B) < 0.3$). This way we were able to identify a significant number of similar or even identical lines across different poems within the same corpus (external repetition) as well as within individual poems (inner repetition). Following lines show line pairs, similarity of which is found near the two preselected thresholds (0.15 and 0.25).

$D(A, B) < 0.15$:

0,147426413

Az országot hajtá birodalmában, (RPHA-867) (He pushed the country into his empire)

Sok országot hajtá birodalmában, (RPHA-743) (He pushed many countries into his empire)

0,14816458

Gyönyörködnek Istenben mindön szentök, (RPHA-840) (All the saints are enjoying God)

Gyönyörködnek Istenben az szentek, RPHA-500 (The saints are enjoying God)

0,148935504

Ellenség jövését semminek nem vélé, (RPHA-683) (He took for nothing the coming of the enemy)

Ellenség erejét semminek nem vélé, (RPHA-356) (He took for nothing the strength of the enemy)

$$D(A,B) < 0.25:$$

0,246689716

Kik hamar egymással végeztek vala. (RPHA-692) (Who suddenly ended with each other.)

Egymással azért ők végeztek vala. (RPHA-1493) (That's why they ended with each other.)

0,247006711

Mind egy akarattal Erdélyre indulnak. (RPHA-356) (They all with a common will went on Transilvania.)

Mind egy akarattal ketten indulának, (RPHA-1053) (They all, both, went with a common will)

0,247382191

Azután az Istennek nagy hálákat ad vala, (RPHA-1020) (After they gave great gratitudes to God)

Az Istennek nagy hálákat adának, (RPHA-101) (They gave great gratitudes to God)

Where are the repeated lines in the poems?

In our previous study, we examined the recurrence of repeated lines and explored their various topics, expressions, and functions. These lines often exhibit a formulaic nature, especially when associated with specific themes such as war or thanksgiving, regardless of whether they represent inner or external repetitions. Here we focus on whether there is a distinction in their placement and whether a relationship exists between their position and function.

Fig. 1 and 2 show the distribution of *shared lines* of the poems in the corpus, at two different levels of similarity ($D(A,B) < 0.15$; $D(A,B) < 0.25$) when each poem is divided into 10 equal sections. Fig. 3 shows the *inner repetitions*, at level $D(A,B) < 0.2$. Despite the variation in poem lengths, ranging from a few dozen to several thousand lines, there are some general trends.

(fragmentary poems? are they included in the stats? - PETR - please help us with that! We have some very short fragments, like 2 lines: are they represented in this? How could we check?)

Fig. 1: cos.dist. < 0.15 (external repetition)

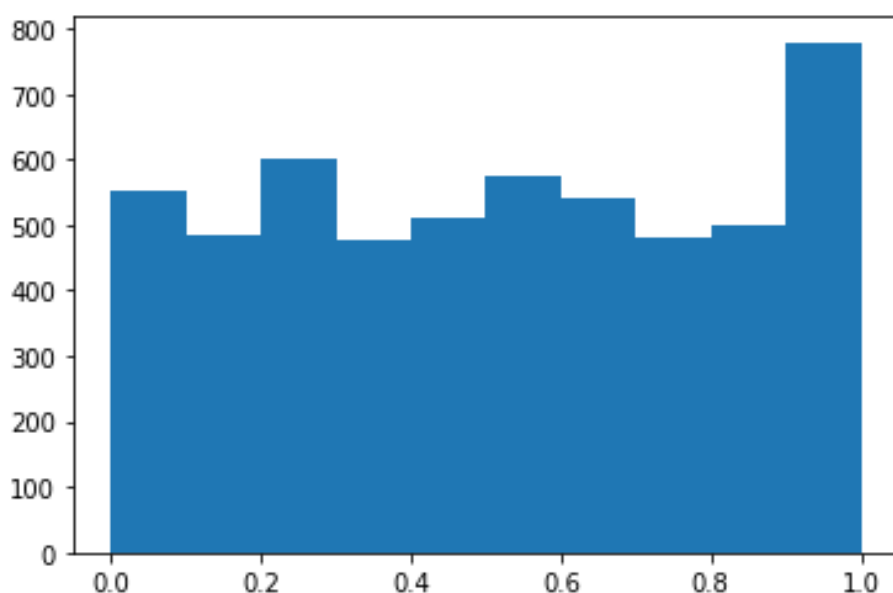


Fig. 2: cos.dist. < 0.25 (external repetition)

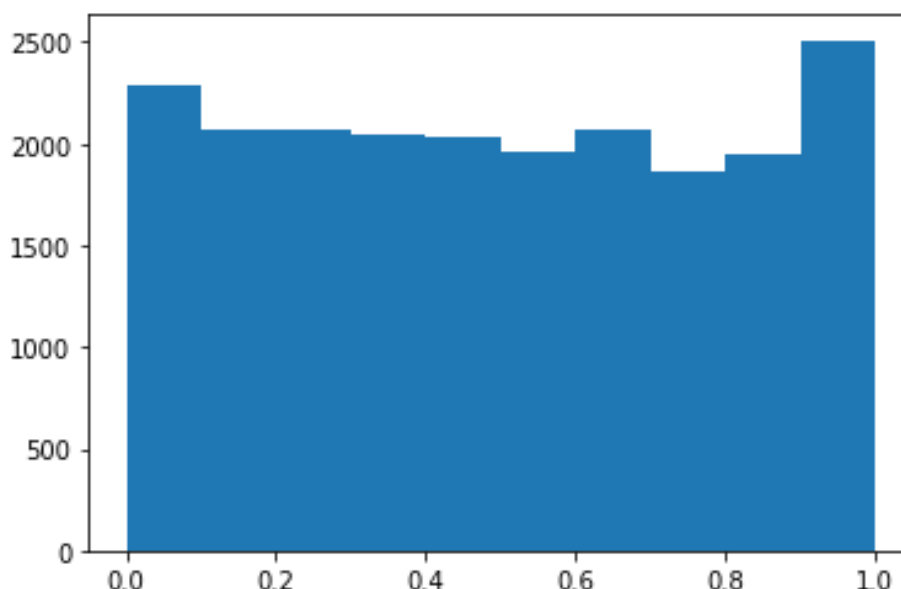


Fig. 1 and Fig. 2 display similar patterns: higher density of repeated lines at the beginnings and endings of the poems. This is not surprising, given what we know about the structure and function of the opening and closing stanzas in epic poetry (Vadai 2008). The opening often includes the identification of the topic and stereotypical introductory remarks, while the ending frequently features a colophon strophe, typically including the date of the poem, the author's name, and details about its origin. These patterns are well-known and commonly observed across the corpus, they are almost obligatory, and the analysis confirms that they are expressed in a highly similar way across the corpus. The particularly high frequency of repetitions in the final sections at the $D(A,B) < 0.15$ level is likely due to lines containing dating. Since all of the poems are from the 16th century, the dates are quite similar and are identified as close parallels.

The following examples are three colophon strophes from different authors, all employing similar, stereotypical expressions. After each line, we indicate the number of parallels identified in the corpus at $D(A,B) < 0.3$.

RPHA-1493

Azki ez éneket szerzé versekben,	9
Elmúlt üdők java vala eszében,	0
Karácson havának végső hetiben,	1
Ezeröttszáz és kilencvenegyben.	10

(“The one who composed this song in verses / Was thinking on most of the past times / During the last week of December / in 1591.”)

RPHA-1013

Azki ez dolgokat szerzé bé versekben,	1
Az régi dolgokról lőn emlékezetben,	1
Neve versszerzőnek vagyon versfejekben,	1

Az ezerötszázban hetvennégy esztendőben. 12

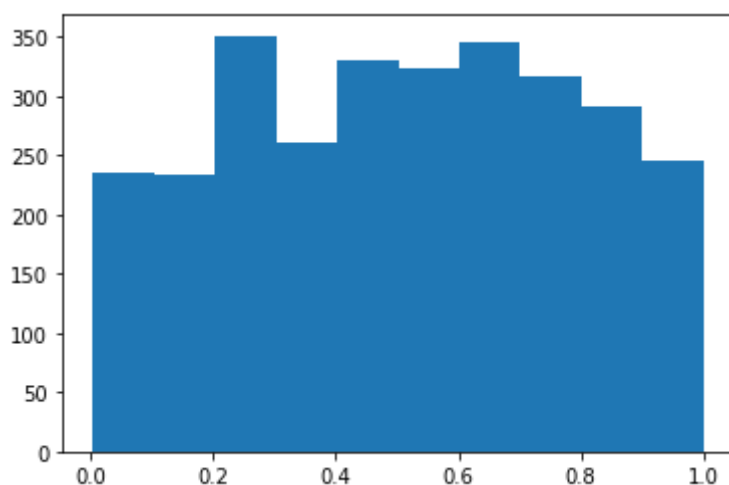
(“The one who wrote these things in verses / Remembering the ancient things, / The name of the author is in the acrostic, / In the year 1574.”)

RPHA-124

A mi urunk Jézus születése után, 1
Az ezerötszázban és az negyvennégyben, 13
Az Batízi András ezt szerzé versekben, 2
Kiből dícsírtessék az úr Krisztus Amen. 1

(“After the birth of Our Lord Jesus, / in 1544 / András Batízi composed this in verses / In praise of the Lord Christ, Amen.”)

Fig. 3: cos.dist. < 0.2 - (inner repetitions)



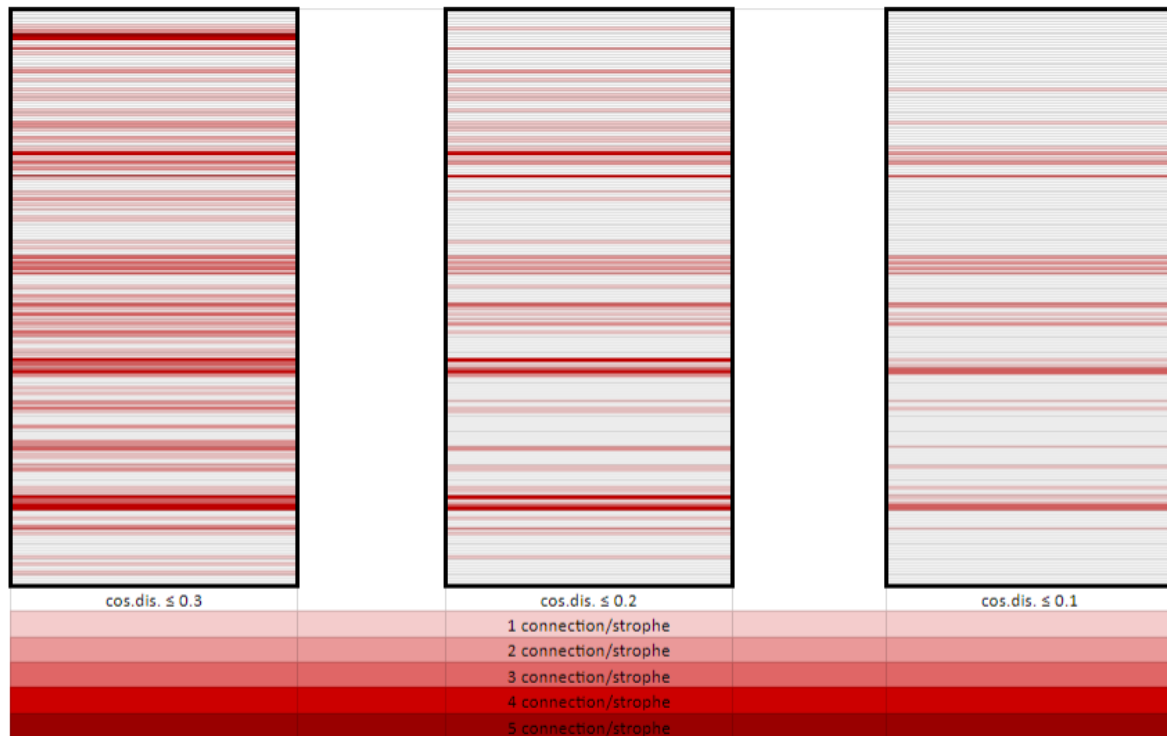
It is not surprising that the third chart (cos.dist. < 0.2, inner repetitions) shows a totally different picture, with a peak at the 3rd and 7th portion of the poems' 10 parts. The same (or a very similar) line might occur at any place inside a poem, and most likely in its main textual body. It is less frequent that the stereotypical opening and closing sentences are the same, or their expressions reoccur elsewhere in the poem (if the colophon is missing, of course the stereotypical expressions are missing there too). Anyhow, this difference confirms the overall judgment we can obtain from these charts: similar lines shall occur in the corpus at any point of a given composition: their area is not restricted to the introduction or to the closure, or anywhere else, and it is important to keep it in mind.

Fig. 4 visualizes the inner repetitions in a single poem (*History of emperor Rustan* by the Anonymous of Drávamellék, RPHA-373), which has a very high ratio of repeated lines. Each line represents a single stanza. The darker the line, the higher the number of line parallels within that strophe. A cosine distance of < 0.1 indicates such a high degree of similarity that it almost always reflects identical lines, perhaps with minor graphical or grammatical variations.

In this poem, inner repetitions occur throughout the text, except in the introductory and final segments. The highest density of inner repetitions (up to four identical lines within a strophe)

is found across the poem at the < 0.3 level, though more concentrated repetitions appear between the first and last tenth of the text at lower levels. The < 0.3 level reveals that formulas are woven throughout the poem, shaping its language and structure. This fine network of repeated lines, with slight variations, gives the poem its unique character.

Fig. 4: inner repetitions in *History of emperor Rustan* by the Anonymous of Drávamellék, RPHA-373



The distribution of repeated lines exhibits differences between external and inner repetitions, strongly suggesting that they serve different functions. External repetitions are most concentrated in the opening and closing stanzas, where formulaic expressions related to poetic metadiscourse are common. In contrast, inner repetitions serve a different purpose: they help to create cohesion within the poem itself.

3. The external and the inner repetitions: two measures, how many paradigms?

The identification of repeated and similar lines has highlighted an important distinction often overlooked in studies of epic formulas. While the reuse of (almost) identical lines within a single poem and their occurrence across different poems are closely related, they are not produced with the same poetic technique. There is a significant difference between poems that employ one or both of these methods and those that avoid them altogether.

The following tables give the lists of the top 15 poems with the highest relative number of external (Tab 1) or inner (Tab 2) repetitions, and that of the proportion of inner/external repetitions (Tab 3).¹

Highest number of external repetitions

Tab. 1.: external_rel

	poem_id	external_abs	external_rel	inner/external
1	Huszti, <i>Aeneis (extract)</i> , RPHA-3002	40	1	0
2	Tinódi, <i>Eger summája</i> , RPHA-1292	131	0,2848	0,0229
3	Majssai, <i>Ádám</i> , RPHA-1481	2	0,1667	0
4	Tinódi, <i>Verbőczy</i> , RPHA-1382	29	0,1611	0,0345
5	Tinódi, <i>Judit asszony</i> , RPHA-1285	64	0,1538	0,1719
6	Dézsai, <i>Mózes és Józsué</i> , RPHA-432	33	0,1447	0,0606
7	Anon., <i>Három istenfélő</i> , RPHA-570	24	0,1356	0,5833
8	Tinódi, <i>Zsigmond király</i> , RPHA-867	159	0,1334	0,1950
9	Bornemisza, <i>Eledár</i> , RPHA-852	61	0,1315	0,2951
10	Anon., <i>Szigetvárnak veszéséről</i> , RPHA-375	44	0,1279	0,25
11	Kákonyi, <i>Asvérus</i> , RPHA-1189	50	0,1276	0,18
12	Alistáli, <i>Túri György haláláról</i> , RPHA-1335	52	0,125	0,2308
13	Tinódi, <i>Buda veszéséről</i> , RPHA-1237	25	0,125	0,08

¹ Here we have taken into consideration the number of lines that have any parallels, doesn't matter how much, unlike in our previous article, where we have calculated with all existing contacts between lines (and of course, one line might have much more than one parallel line in the corpus.)

14	Dézsí, <i>História a levitáról</i> , RPHA-1041	30	0,125	0,0667
15	Anon. of Sarlóközi, <i>Extremo iudicio</i> , RPHA-840	44	0,1236	0,4545

Top 15 of inner repetitions

Tab. 2.: inner_rel

	poem_id	inner_abs	inner_rel	inner/external
1	Anon., <i>Cantio</i> , RPHA-369	20	0,1149	0,9524
2	Anon., <i>Bel</i> , RPHA-1190	12	0,1143	1
3	Zombori, <i>Historia sacra</i> , RPHA-1255	226	0,1102	1,1832
4	Hunyadi, <i>Trója</i> , RPHA-538	253	0,11	0,9267
5	Anon. of Drávamelléki, <i>Rusztán</i> , RPHA-373	96	0,1062	2,087
6	Anon., <i>Három istenfélő</i> , RPHA-570	14	0,0791	0,5833
7	Batizi, <i>Gedeon</i> , RPHA-1192	14	0,0648	0,7
8	Sztárai Mihály, <i>Akháb és Illés</i> , RPHA-1015	37	0,0564	0,8409
9	Anon. of Sarlóközi, <i>Extremo iudicio</i> , RPHA-840	20	0,0562	0,4545
10	Batizi, <i>Meglett és megleendő dolgok</i> , RPHA-124	31	0,055	0,62
11	Fekete, <i>Sámson</i> , RPHA-1284	21	0,053	0,6563
12	Valkai, <i>Genealogia historica</i> , RPHA-1328	164	0,0506	0,5485
13	Batizi, <i>Zsuzsanna asszony</i> , RPHA-238	11	0,0451	0,55

14	Csáti, <i>Pannonia</i> , RPHA-376	7	0,0446	0,5833
15	Anon., <i>Telamon</i> , RPHA-357	16	0,0444	0,4

Top 15 of proportion of inner/external repetitions

Tab. 3.: inner/external

	poem_id	inner_ abs	inner_rel	external_ abs	external_rel	inner/ext ernal
1	Melius, <i>Szentírásból kiszedetett ének</i> , RPHA-29	27	0,0409	5	0,0076	5,4
2	Anon. of Drávamelléki, <i>Rusztán</i> , RPHA-373	96	0,1062	46	0,0509	2,0866
3	Zombori, <i>Historia sacra</i> , RPHA-1255	226	0,1102	191	0,0931	1,1832
4	Bogáti, <i>Énekek éneke</i> , RPHA-47	5	0,0091	5	0,0091	1
5	Anon., <i>Bel</i> , RPHA- 1190	12	0,1143	12	0,1143	1
6	Anon., <i>Deákné</i> , XXX- 4018	4	0,0348	4	0,0348	1
7	Anon., <i>Cantio</i> , RPHA- 369	20	0,1149	21	0,1207	0,9524
8	Hunyadi, <i>Trója</i> , RPHA-538	253	0,11	273	0,1187	0,9267
9	Sztárai Mihály, <i>Akháb és Illés</i> , RPHA-1015	37	0,0564	44	0,0671	0,8409
10	Nagybáncsai, <i>Jákob</i> , RPHA-707	24	0,0345	29	0,0417	0,8276
11	Fekete, <i>Királyoknak könyvei</i> , RPHA-358	5	0,0189	7	0,0265	0,7143

12	Batizi, <i>Gedeon</i> , RPHA-1192	14	0,0648	20	0,0926	0,7
13	Gergei, <i>Árgirus</i> , RPHA-53	34	0,035	49	0,0504	0,6939
14	Gyulai, <i>Epinicia</i> , RPHA-1029	19	0,03	28	0,0436	0,6786
15	Fekete, <i>Sámson</i> , RPHA-1284	21	0,053	32	0,0808	0,6563

A comparison of the tables showing the highest rankings in the overall proportion of inner or external repetitions in a given poem reveals that they are completely different. Additionally, both differ from the table that displays the proportion of the two types of repetitions (inner/external) within the same poem.

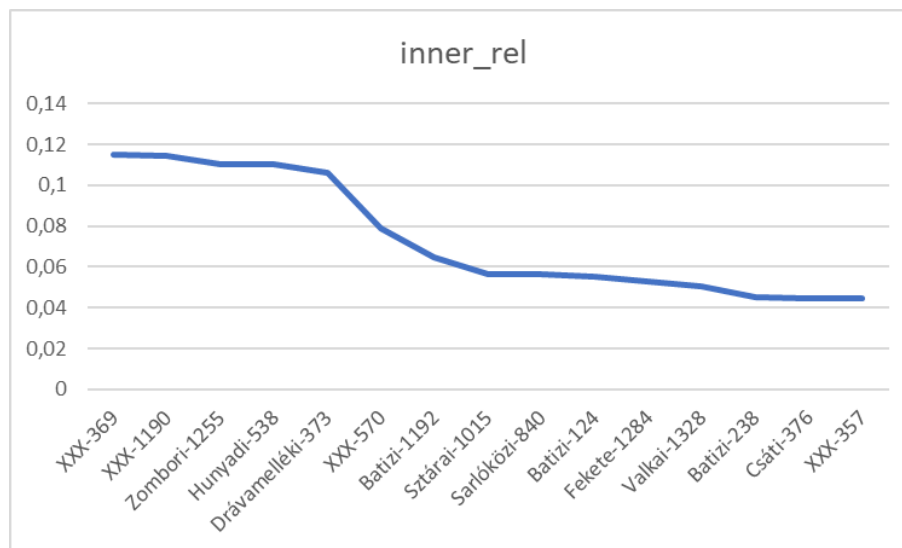
The top 15 list of poems with the highest number of external line-sharing presents an interesting case, though the first three entries are somewhat misleading. Huszti's text (RPHA-3002) is merely an excerpt from his *History of Troy* (RPHA-332), so all of its lines are shared with the original poem from which it was taken. Similarly, Tinódi's *Egri históriájának summája* (RPHA-1292) is a shortened summary of his larger work, *The Siege of Eger* (RPHA-1381), so it's unsurprising that many lines overlap between the two. Majssai's poem is only preserved in a very short fragment, making it impossible to accurately assess the true proportion of shared lines. However, the remaining poems in the list are quite intriguing and reveal just how widespread the phenomenon of line-sharing was across the corpus. Notably, five of the next twelve poems are songs by Tinódi, indicating his deep involvement in the intertextual network of the genre. This is evident not only from the 400 lines he shares with his own works but also from the 1,046 parallels (72.3%) he shares with other authors. It is also worth noting that András Dézsi, who has six poems in the corpus, stands out for consistently sharing lines with other compositions. In each case, between 7.75% and 14.47% of his lines overlap with those of other poets. While the algorithm identified a few similar lines within his own works, the frequency is much lower than the overlap with other authors. Specifically, Dézsi shares 15 parallels with his own poems, but more with others: 16 lines with Batizi, 22 with Sztárai, 24 with Valkai, 31 with Tinódi, and 13 each with single poems by Göröcsöni and Zombori.² Of course, the

² 306 parallels are identified with some lines of Dézsi, and only 4,9% of those parallels are between his own poems.

similarity or identity of these lines doesn't necessarily imply copying, imitation, or a common source. However, it does suggest that certain phrases and expressions were widely shared among poets at the time, and there was no hesitation in reusing them.

The poetic technique of sharing identical or very similar lines with other poems in the corpus is fundamentally different from repeating the same lines (with variations) within a single text. This latter method, as demonstrated in the *History of Emperor Rustan*, is a strong indicator of orality-based composition. We believe that poems with the highest ratio of inner repetitions are the strongest candidates for being linked to oral compositional techniques. In the top five poems in Tab. 2, over 10% of the lines are repeated, indicating a very high ratio of inner repetition (Fig. 5). A significant drop occurs with the anonymous biblical song *RPHA-570* (ranked 6th), where fewer than 8% of the lines are repeated (0.0791). This is followed by András Batizi's biblical history *RPHA-1192* (7th), which has about 6.5% repeated lines (0.0648). After this point, the decline in repetition ratio becomes much more gradual. Interestingly, the gap between the 6th (*RPHA-570*) and 7th (*RPHA-1192*) poems is almost as large as the gap between the 7th and 12th (*RPHA-1328*).

Fig. 5: inner_rel



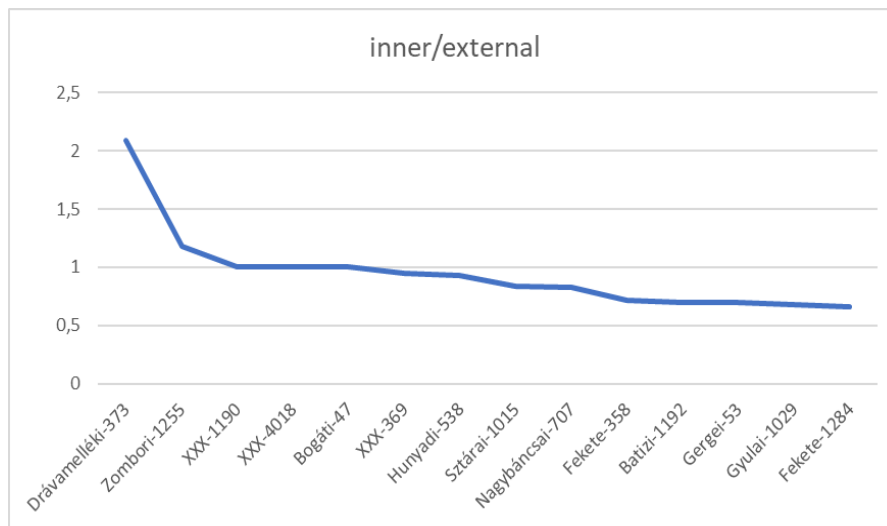
Among the top 15 poems ranked by their inner/external repetition ratio, eight appear in both lists, though not in the same order. Notably, only three poems exhibit more inner than external repetitions. One of these is *RPHA-29* by Péter Melius Juhász, a didactic poem critiquing Protestant 'heretical' views. With its topic, it stands apart from epic compositions and historical

songs, as it lacks many characteristics typical of those genres. Given its topic, it is unsurprising that it shares relatively few lines with other poems.

As for the next two poems, the inclusion of *The History of Emperor Rustan* (RPHA-373) is unsurprising. However, the high ranking of Antal Zombori's RPHA-1255 is more intriguing. This may be due to the way we prepared the text for analysis. Instead of dividing the strophes into quatrains following the pattern a14(7,7), a14(7,7), a21(7,7,7), a21(7,7,7), we submitted the poem in the form: a14(7,7), a14(7,7), x14(7,7), a(7), x14(7,7), a(7). The algorithm was thus able to detect more repetitions between the shorter lines than it might have with the longer ones. Otherwise, in many respects, this poem shows fewer signs of orality, as it also contains a complex acrostic in Latin. The following poem on the list, *Deákné vászna* (*The Tissue of the Student's Wife*, RPHA-4018), also has a very low number of line repetitions (4 inner and 4 external), with their proportion in the text being just over 3% (0.03478). Although this anonymous poem features a humorous, folkloristic anecdote, it is more aligned with written culture, given that its protagonist is a 'deák' (student). Interestingly, while the RPHA does not indicate an acrostic, the first letters of four consecutive stanzas (16–19) spell out 'DEAK,' suggesting there may have been an acrostic that was nearly lost due to the vicissitudes of textual transmission.

The inclusion of a poem by István Bogáti Fazakas in this list may seem surprising, but it can likely be explained by the very low number of both inner and external repetitions—5 of each, which account for less than 1% of the poem's lines. This seems more a matter of chance than a result of any deliberate poetic technique. Fig. 6 illustrates the overall trend, showing how the proportion of repeated lines diminishes over time (Melius's atypical poem was excluded for a clearer representation of the changes).

Fig. 6: inner/external



The most notable difference is that *Cantio de militibus pulchra* (RPHA-369), which tops the other list, ranks only 7th here, while *The History of Emperor Rustan* (RPHA-373) stands out with a significantly higher number of inner repetitions compared to its intertextual network. This highlights that the two rankings reflect different aspects of orality, both of which are crucial for identifying oral compositional techniques. Once again, we see clear evidence that *The History of Emperor Rustan* is no less connected to orality than *Cantio de militibus*, which has traditionally been regarded as a unique example of 16th-century oral poetry, preserved by chance (Jankovits 2006).

An intriguing entry on the list is Ferenc Hunyadi's *History of Troy* (RPHA-538), which stands out for its high proportion of both inner repetitions and external parallels. In terms of rhyme, it is one of the weakest poems in the corpus, relying heavily on identity rhymes and overusing 'vala' as a rhyme word. While the poem features an acrostic in its first 20 stanzas, which spells out the author's Latinized name, this device is absent in the remaining 555 stanzas. This suggests that the acrostic is more of a superficial attempt to project scholarly credibility than a result of meticulous craftsmanship. It is known that a Hungarian version of the *Romance of Troy*, likely based on Guido da Columna's *Historia Destructionis Troiae*, existed in the Middle Ages. Previous scholarship has speculated that Hunyadi may have borrowed lines from this lost source, a theory we find highly probable. Our analysis indicates that Hunyadi's compositional technique was archaic in many respects, as seen in both his use of rhyme and inner repetitions. The large number of lines shared with other poems in the corpus may result from the use of stereotypical expressions, either inherited from his models or introduced by Hunyadi himself. Further investigation will be required to substantiate this hypothesis.

As we noted in our previous study, some poets are notably reluctant to use repetitions in their works. In fact, there are 20 poems in the corpus that do not contain a single line repeated with any variation ($D(A,B) < 0.3$). While some of these are fragmentary—such as Aeneas’s aforementioned complaint, a lyrical section from Huszti’s *Aeneis* paraphrase (RPHA-3002), or Benedek Majssai’s poem (RPHA-1481)—others are complete, relatively lengthy, and attributed to specific authors. Notably, István Bogáti Fazakas, who authored 15 poems in the corpus, has 8 poems among these 20, while Tinódi, with 23 poems, has 3. In Tinódi’s case, the proportion of inner repetitions remains very low, with the highest value being 0.0365 in *RPHA-1381*. One additional observation is worth mentioning. Hunyadi’s *History of Troy* (575 stanzas) and Tinódi’s *Siege of Eger* (RPHA-1381, 449 stanzas) are among the longest compositions in the corpus. The fact that Tinódi’s longest work has the highest number of repeated or similar lines in his body of work suggests that he did not consistently employ repetition as a conscious poetic technique. Rather, it appears that he repeated and varied some lines only when lacking the inspiration to avoid repetition in certain cases. Hunyadi, on the other hand, was a poor poet by all standards, but his shortcomings are even more pronounced in such a long poem. Had he written a shorter composition, his weaknesses might have been less noticeable.

4. The three major paradigms of composing in Early Modern Hungarian epic poetry.

The analysis of the repetitions has revealed three distinct and radically different poetic paradigms:

1. A very small corpus of texts has been preserved that were composed using an oral-based, archaic compositional technique. In our corpus, the following poems belong to this category: *RPHA-369*, *RPHA-373*, *RPHA-1190*, and *RPHA-570*. However, even within this limited subcorpus, only two texts—*Cantio de militibus* and *The History of Emperor Rustan*—are demonstrably composed in the same way (Seláf et al. 2023). Statistical analysis reveals two additional poems, Zombori’s *RPHA-1255* and Hunyadi’s *History of Troy* (RPHA-538), that share some features with these four texts.

Characteristics: These poems feature numerous inner repetitions with slight variations, which serve as a key structural element, perhaps even more important than the stanzaic structure. These repetitions also aid in recitation and memorization. The poems are relatively short, typically around 50 stanzas, with simple yet precise rhyme schemes that often include morphemic rhymes (Seláf–Plecháč 2023). They lack acrostics (though Zombori’s and Hunyadi’s poems are exceptions in this regard). The number of external repetitions (shared topoi

and formulas) is relatively low. Another notable feature is the anonymity of the authors, whether intentional or accidental. The percentage of formulaic line repetition varies, averaging around 10%.

Remark: A character-bigram analysis based on half-lines might reveal that this compositional technique is more widespread and variable than our current data suggest (cf. Zombori's poem).

2. The second and by far the largest category of historical songs is much more reliant on written tradition. The poems in this group show the highest proportion of lines with parallels in other poems, forming a vast intertextual network. This reflects a strong textual community, with poets demonstrating an awareness of each other's works. This shared knowledge is likely not only the result of reading each other's poems but also stems from a common thematic focus: most of these poems are dedicated to historical subjects, particularly Hungarian and biblical history. Similar themes often require similar expressions, and many shared or similar lines can be attributed to the repetition of conventional ways of depicting battle scenes, meetings, ceremonial acts, expressions of worship, and dating.

Characteristics: Most of these poems contain an acrostic, with authors often using the colophon or acrostic to proudly identify themselves as "litterati," or learned individuals. Inner repetition is less frequent, and the quality of rhyming varies according to the individual author's skill, though the effort to produce good rhyme is evident in all cases (Seláf-Plecháč 2023).

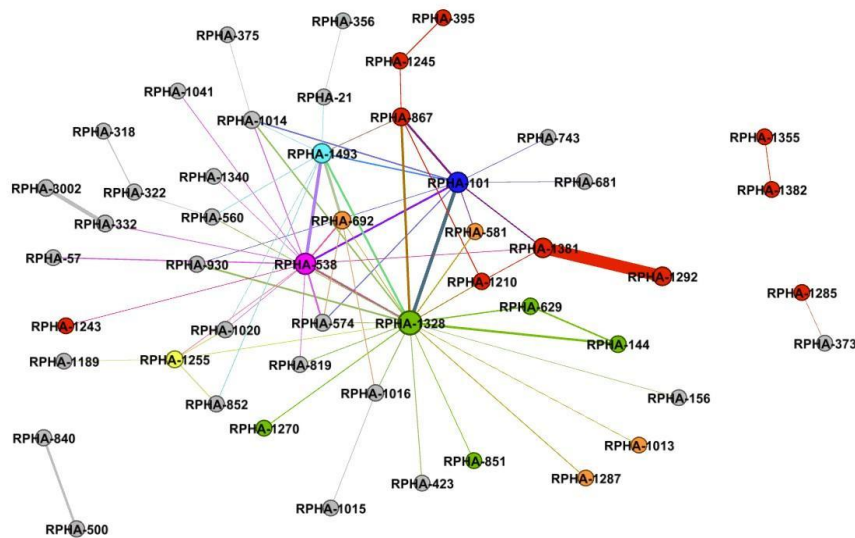
When we look at the absolute number of shared lines, the most prominent poets are Tinódi, Valkai, Sztárai, Ilosvai, Göröcsöni, Bogáti, Hunyadi, Cserényi, Dézsi, and Zombori. However, these poets contributed different numbers of poems to the corpus, so comparing them by the total number of shared lines is not the most accurate approach. If we divide the number of shared lines by the number of poems each poet contributed, the ranking changes. Some longer poems have a much higher number of shared lines, which raises their average and pushes back poets who wrote several poems, some with many shared lines, others with fewer. This is particularly evident in the case of Tinódi.

When adjusting for the number of poems, the top poets in terms of shared lines per poem become Göröcsöni, Hunyadi, Cserényi, Zombori, Szegedi, Gosárvári, the Anonymous of Szeben, Ráskai, Valkai, and Sztárai. Notably, the first eight on this list are represented in the corpus by only one poem. Another way to assess the importance of these poems in the intertextual network is by looking at the number of other texts to which they are connected. While Göröcsöni, Hunyadi, and Zombori are linked to almost the same number of texts (106, 104, and 105, respectively), this number drops for Cserényi (90), and even further for Szegedi (79), Anonymous of Szeben (75), Gosárvári (74), and Ráskai (66).

These results can be interpreted in several ways. A lower number of connected poems (such as for Ráskai or Gosárvári) may suggest a stronger relationship between these poems, perhaps indicating direct inspiration or imitation. On the other hand, a higher number of connections (as seen with Göröcsöni and others) implies that these poets were using the 'standard language' of historical songs, writing with the most common vocabulary and poetic conventions of the genre. Their language either shaped or reflected contemporary expectations for a genuine historical song.

To better illustrate these connections, Fig. 7 shows the most important poems as nodes, along with their authors. This clearly demonstrates that the unique historical songs preserved from Göröcsöni, Hunyadi, and Zombori are just as central in this intertextual network as the works of Tinódi or Valkai, despite Valkai's position as the most significant interlinking figure in the genre."

Fig. 7: $\text{cos.dis.} \leq 0.3$ _min. 8_author_weighted_degree



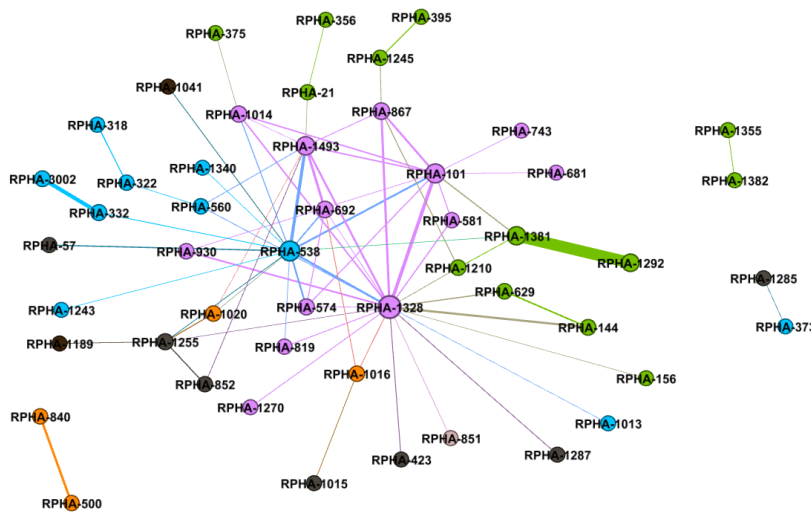
(Colour codes: Tinódi: red, Valkai: green, Göröcsöni: blue, Ilosvai: orange, Hunyadi: pink, Zombori: yellow, Cserényi: turquoise)

This graph highlights the significance of several poems by Valkai, as well as the single works by Göröcsöni, Hunyadi, and Cserényi within the intertextual network. Among them, András Valkai's long verse chronicle of Hungarian kings, *Genealogia historica regum* (RPHA-1328), stands out as the most central node, based on the number of its connections. This is characteristic of the second poetic paradigm of the genre. With its historical focus and broad overview of Hungarian history, it serves as a prime example of the type of songs that, according to Antonio Bonfini and Sir Philip Sidney, may have been sung by

Hungarian minstrels in court, recounting the deeds of their ancestors (Seláf 2020).

Fig. 8 shows the core elements of the intertextual network, organized by subgenres.

Fig. 8: (cos.dis. ≤ 0.3 min. 8_author_weighted_degree) Historical (overview): violet, Report songs or Political poems (contemporary event): green, Fictitious: blue, Religious narrative: brown, Religious catechetic: orange



This graph confirms that historical poems, with their stereotypical expressions, intertextual references, and shared poetic style, were generally the most important and representative works in the entire network. While Tinódi's report songs are also part of this network, they play a less central role, being more interconnected with each other and only loosely connected to a few historical poems. Fictitious poems are somewhat separated as well, with the exception of Hunyadi's *History of Troy*, which contains many archaic features and straddles the boundary between the first and second paradigms.

3. The third paradigm, represented most notably by István Bogáti Fazakas, is the latest in time and is characterized by a deliberate rejection of both inner and external repetitions, as well as any form of line borrowing. When such parallels do appear in his work, they are likely accidental or influenced by his models, as in his psalm paraphrases. Unsurprisingly, the highest number of external parallels (127 with a cosine distance < 0.3) is found in his poem *RPHA-930*, written as the conclusion to Ambrus Göröcsöni's unfinished *History of King Matthias*. Here, he was likely influenced by Göröcsöni's typical expressions and lines, which were shared by many contemporaries. However, even in this large

poem—2036 lines in total—the proportion of shared or parallel lines is very low (around 16).

Characteristics: The absence of shared lines or 'external repetitions' can be interpreted as a clear sign of originality. In their effort to create something new, Bogáti and other proponents of this paradigm intentionally avoided traditional expressions, common intertextual references, and genre markers that were prevalent around 1570. This was also accompanied by a distinct move toward more sophisticated, written poetry, influenced by Western or Classical models. In other studies, we have demonstrated Bogáti's skill in rhyme—not so much in phonetic matches, but in his conscious avoidance of identity rhymes and overused 'vala' rhymes (Seláf–Plecháč 2023). Additionally, intertextuality in his work is not based on quoting lines or relying on stereotypical expressions, but rather on the practice of musical contrafactum: Bogáti meticulously indicated the tune for each of his songs (Markó et al. 2024). Lastly, all of his poems feature complex Latin acrostics, sometimes even in verse.

Bogáti represents a new wave in Hungarian poetry, coinciding with the rise of Bálint Balassi, whose lyrical work overshadowed the previously dominant epic tradition. He embodies a new poetic standard, and Bogáti's approach to poetry aligns closely with this shift. The 'lyrical turn' in Hungarian poetry, marked by the emergence of Balassi and his followers, is inseparable from the development of a new model for epic poetry, with Bogáti as its leading figure.

5. Conclusion

In this article, we aimed to provide an overview of Hungarian epic songs using a character bigram search to identify shared or closely similar lines within the corpus. By distinguishing between inner and external imitations, and analyzing their number and proportion, we identified three distinct paradigms of poetic creation. The most groundbreaking result of our research is the recognition of these three fundamentally different poetic systems within a corpus that previous scholarship had regarded as homogeneous. We hope to apply this methodology to other poetic corpora in the future, whether it be later Hungarian epic poems or narrative poems with oral compositional elements in other European languages.

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