

Rhyming in Sixteenth-Century Hungarian Historical Songs: A Pilot Study

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Abstract

This article presents the computer-based stichometric analysis of 26 Hungarian historical songs from the sixteenth century, exploring the validity of Albert Szenci Molnár's comment (1607) on the poorness and simplicity of stanza structures in the poetry of previous generations. The study shows how rhyming changed in this poetic genre between 1539 and 1598 and is the first study to explore these changes by a quantitative analysis. We found that during the examined period the frequency of rhymes based on a repetition of the very same word seriously diminished, while the tendency to spread a rhyme over multiple stanzas did not change significantly.

1 Introduction

During the summer of 2020, our team began a three-year research project dedicated to the computer-based analysis of the Hungarian poetry of the sixteenth century.¹ The main purpose of the investigation is to offer the first stylometric and stichometric analysis of the corpus.

The project focuses on the oral and written nature of literature, a question that has seen much debate. While most poems from the period are strongly related to written culture (or at least their acrostics and colophons suggest so), they contain equally strong rhetorical and stylistic components that connect them to oral performance. In addition, the literature and early theoretical reflection regards them as a type of community poetry (see Sir Philip Sidney's comments in his *Defence of Poesie*, also cited in [Seláf \(2020\)](#)). Our research takes account of the characteristics of this stylized oral literature. We believe that stylistic and digital metrical analysis makes it possible to explore the structure of multilayer editions, the interventions and modifications of the texts by the authors as well as the editors (see [Vadai \(2009\)](#) and [Schelhammer \(2019\)](#) on traces of the different redactions of the poems in the corpus). In this paper we will focus exclusively on the stichometric analysis.

¹The members of the team are senior researchers Margit Kiss, Szilvia Maróthy, Petr Plecháč, Levente Seláf, Artjoms Šeļa and students Mária Finta, Villő Vigyikán, and Zoé Zohó-Tóth. The authors warmly thank all participants for their contribution to this article.

One of the main focuses of stylometry and computerized metrical analysis is authorial attribution. In our corpus, however, instead of problems related to doubtful attributions, we focus on the question whether the stylistic and metrical features and practices of an author, editor, publisher, or genre could be regarded as homogeneous. In addition, by inspecting the unity of texts from the same genre or texts that were edited or copied in the same volumes or by the same persons, the project provides feedback on the validity of the stylometric method regarding authorship in the corpus.

This article is not the very first to employ the data-driven analysis of early modern Hungarian poems. Iván Horváth, while working on the Repertory of Early Modern Hungarian Verse (RPHA (Horváth, Font, H. Hubert, Herner, Szőnyi, and Vadai 1979–2020)) in the 1980s and early 1990s, statistically examined and summarized the core characteristics of Early Modern Hungarian verse as the so-called “iso rule” (Horváth 1991). This is based on the observation that the first verse and the first stanza formally determine all subsequent verses and stanzas. This primarily metrical examination helped researchers understand the homogeneity of the corpus, a certain formal simplicity and uniformity that was characteristic of Hungarian poetry up until the nineteenth century. In relation to that, groups of poems that significantly differed from the rest of the corpus were also analysed from different perspectives, for instance those starting with “ab” rhymes (Horváth 1991; Szigeti 2005), those in couplets (Bognár 2016), and those relevant to the use of the “+1 rule” for metrical boundaries and the regularities of oral and written poetry (Vadai 1991; Vadai 2012). Theories were proposed about the characteristic features balancing out formal homogeneity, for example phonetically (Horváth 1991; Horváth 2006) or by constructing complicated acrostics and anaphoric structures that compensate for monotonous rhyme schemes and syllabic structures (Seláf 2017). Hapaxes, poems that diverge from the homogeneous sample were also subject to thorough examination; their uniqueness in technique was partially explained by foreign, mostly Latin and German influence (Bognár 2016).

2 The Historical Song as Part of Sixteenth-Century Poetry

The project consists of two major phases, using two important subcorpora of the poetry of the period. The first phase of the research examines the most characteristic genre of Hungarian literature: the *historical* (narrative or epic) *song*. Mostly historical songs from the sixteenth century are examined, but some later texts from the seventeenth century that have not sparked much academic interest before will also be analysed in the project. The second phase of the project will analyse the *profane lyrical poems* of the second half of the sixteenth century. The present study, dedicated to rhyming patterns in a selected sample of historical songs, is the first effort to explore the domain.

It seems that historical song (in the narrow sense of poems dedicated to the past acts of Hungarians) was a traditional genre, probably emerging in the fifteenth century, if not before.² The first major poet whose literary production was essen-

²The poem *Szabács viadala*, the earliest Hungarian text dedicated to a historical fact is from the last quarter of the fifteenth century, and its versification bears traces of a German literary influence. We assume that there were other historical songs in that period, but we do not know what they were like.

tially dedicated to past and contemporary events of Hungarian history was Sebestyén Tinódi, active in the 1540s and 1550s. In 1554 an entire songbook of Tinódi's work entitled *Cronica* was published under his supervision. The popularity of Tinódi's book and his melodies suggests that his work was a long-lasting stylistic model for historical songs in Hungary. Although the stanzaic forms used by Tinódi were not of his own invention, his epic songs on historical subjects became the stylistic, musical, and metrical models for later narrative poems on a wide range of themes, from love stories to biblical plots. In a larger sense the "historical song" genre can be divided into different subgenres depending on the themes elaborated in the songs, but from a formal point of view they are all very similar. While there were several typical genres in the Hungarian poetic tradition that reflected the European trends of Renaissance poetry, and especially those of Protestant Reformation (e.g. psalm paraphrases), the historical song remained popular for a long time, from its first surviving specimens (from the late fifteenth century) to a gradual fall into oblivion during the seventeenth century.

3 Historical Criticism of Early Hungarian Versification

In a foreword to his paraphrases of the psalms published in 1607, Albert Szenci Molnár harshly criticized the versification technique of earlier Hungarian poets. This is the first serious critique on rhyming in Hungarian literature.

Az régi Magyar énekekben pedig avagy semmi egyenlő termináció nem voltac, avagy tiz versis egy másután mind egy igében ment ki, ahonnan az historias énekekben, számtalan az soc Vala vala vala. Kin az idegen nemzetec az kic ezt láttyác, nem győznec eleget rayta nevetni. De hálá Istenec, ez egynehány esztendőkkben az mi emberinkis ékesb verseket szoktac irni. (<http://magyar-irodalom.elte.hu/gepesk/eloszo/12/12.html>)

In old Hungarian songs either there were no rhyming line endings, or ten consecutive stanzas ended with the same rhyme, that's why we have countless "vala, vala, vala" [as a rhyme word] in historical songs. Foreign nations who see that cannot stop laughing about it. But thanks to God, in recent years some of our people are writing more ornate stanzas.

Szenci's critical remarks have often been cited and diversely interpreted in recent scholarship. Some scholars suggest that he essentially condemned identical rhyme endings in several consecutive (monorhymed) stanzas (Ötvös, Szilasi, and Vadai 2004). That might be true, but he also condemns the overly frequent use of the rhymes consisting of repeating the same word, mostly "vala" ('has been'), a typical pattern of historical songs composed by Tinódi and his imitators, which Szenci perceives as being of low artistic quality.

In this paper, we check the validity of Szenci's critique and examine the formal and stylistic characteristics of Hungarian epic verse in general.

4 Data and Annotation

For this first phase of the project we selected 26 poems coming from a period between 1539 and 1598, most of them precisely dated by the colophon stanzas of the texts.³ 19 poems are attributed to eleven different authors, while seven poems are anonymous. The two most represented authors are Sebestyén Tinódi, from the first part of the chronological frame (with three poems between 1550-1553), and István Bogáti Fazakas from the last period (with seven poems between 1576-1598). They are both major figures of the genre, and in a later phase of the project we intend to enlarge the corpus with the rest of Tinódi's historical songs. The texts used for the analysis were mostly taken from the digital anthology of Early Modern Hungarian Literature (Jankovics, Kőszeghy, and Szentmártoni Szabó 2000) and partly from the critical edition of Bogáti's works (Ács, Etlinger, Pap, Szatmári, Szentmártoni Szabó, and Zsupán 2018). The shortest text is the fragment of *Szilágyi és Hagymási históriája*, with 24 stanzas (the estimated total length is 50 stanzas), while the longest one is *Eurialus és Lucretia históriája* (504 stanzas).

Each poem in the corpus (except for one by Bogáti) is isostrophic, each stanza is isorhymed and isosyllabic.⁴ Six poems are written in tercets, twenty in quatrains. Different meters are used, from 10-syllabic lines to 19-syllabic ones, the most frequent structures being monorhymed quatrains with 12-syllabic and 11-syllabic lines, with eight occurrences each, and there is one poem by Bogáti constructed of a first part with 11-syllabic lines and the second part with 12-syllabic lines. This limited variety reflects the formal unity of sixteenth-century Hungarian poetry rather well.

The poems in raw TXT were tokenized, lemmatized, and morphologically analysed by means of the `emtsv` system (Indig, Sass, Simon, Mittelholcz, Vadász, and Makrai (2019), also known as `E-magyar`; Váradi, Simon, Sass, Mittelholcz, Novák, Indig, Farkas, and Vincze (2018)) and phonetically transcribed by means of the `eSpeak` synthesizer. Rhyme recognition was provided by a simple rule-based algorithm, which upon inspection turned out to be reliable enough for our needs. Given the fact that mere match of line-final vowels and/or line-final suffixes is considered sufficient to establish rhyme in this period, we mark two lines as rhyming each other if they (1) come from the same stanza and (2) their final vowels and/or their final morphemes are identical.⁵ The output was stored in JSON format. Initially, we have experienced serious difficulties in analysing the morphology of the rhyming words because the `emtsv` analyzer was not capable of correctly interpreting some old morphological paradigms with the default vocabulary file. For these reasons we have employed a specialized vocabulary for old and middle Hungarian, kindly provided to us by Attila Novák and Bálint Sass (Novák 2014; Novák, Siklósi, and Oravecz 2016). Based on a manual check of a random sample of 300 line-final words, we estimate its accuracy with our data as approx. 0.9.

³See the list of selected poems with some important data on GitHub, `listofpoems.csv`. Three of them are not precisely datable, but they also certainly belong to the same period: *Toldi Miklós históriája*; 2) *História egy Argirus nevű...;* 3) *Szép históriás ének az Telamon királyról*. As we wanted to trace the tendencies in changes of rhyming, the three non-datable poems were not included in the analysis.

⁴That is (1) all stanzas have the same syllabic and rhyme structure, (2) every line in a stanza rhymes with each other, (3) all lines in a stanza are of the same length.

⁵Following vowels were treated as being equivalent: [e] = [ɛ] and [a] = [ɒ]. Vowel length was not taken into account.

5 Results

5.1 Rhymes Between Stanzas and Identity Rhymes

Szenci Molnár’s critic on the multiplicity of the same rhyme endings was understood by most of the scholars as an observation concerning the use of the same rhyme endings in subsequent stanzas too frequently; this is the opinion expressed by Ötvös, Szilasi, and Vadai (2004) while Iván Horváth (2009) thinks that it is the monorhymed structure that Szenci Molnár criticizes. To test this, we have measured an average sequence length in each poem, where sequence was defined as a group of subsequent stanzas that share the same final vowel in majority of its lines. These values were compared to a theoretical model constructed by randomizing the order of stanzas in each poem 10,000 times. Figure 1 shows that the differences between observed and expected values are not statistically significant in most of the poems ($\alpha = 0.05$) and therefore we can not affirm the overall tendency to group stanzas based on their line-endings. The differences seem to decrease over time. However, given the lack of statistical significance, this has rather a limited relevance.

When considering the observed values on their own, the upper outliers occur both in the first and in the second half of the period. There are two poems by Tinódi where rhyme spans across more than 2.5 stanzas on average (*Zsigmond császárnak históriája*, 1552, RPHA 1495 (2.70) and the *Egri históriának summája*, 1553, RPHA 1292 (2.59)), and three other poems where it spans across more than 2 (Ráskai Gáspár: *Egy szép história az vitéz Franciskóról*, 1552, RPHA 0322 (2.07); Bogáti: *Ez világi nagysok zárzavarról*, 1586, RPHA 1158 (2.05); Bogáti: *Aspasia asszony*, 1587, RPHA 0693 (2.03)). In fact it suggests that there was not a real change in versification technique in this respect during the period preceding Szenci Molnár’s activity, at least in the field of the historical songs, as the sample’s analysis does not show it. So either it occurred in other genres, or it is Iván Horváth who was right to suppose that Szenci’s remark concerned the technique of building monorhymed stanzas, and not the same rhyme-endings in subsequent strophes.⁶

However, Szenci Molnár’s remark also concerns the situation where rhyme is achieved by a repetition of the very same word (henceforth identity rhymes, where the meaning, spelling, and phonetical forms are all the same), e.g.:

Nagy had vala régen Görögországban,
Két szomszéd tartomány özvevívásban,
Phocis és Thessalia nevek *vala*,
Ez két had immár szembeszállott *vala*.
(Bogáti: *Szép história az tökéletes asszonyállatokról*, v. 21-24.)

Sőt az veszedelmet ha ők értenék,
Az asszonynépeket mind ott égetnék,
Ez tanács az egész hadnak mind *tetszék*,
Egy ember lón, kinek jobb tanács *tetszék*.
(Bogáti: *Szép história az tökéletes asszonyállatokról*, v. 37-40.)

He expressly mentioned the rhyme word “*vala*” as typical of these poorly rhymed poems. It turned out that repetition of this word was indeed extremely popular in

⁶The appearance of the non-monorhymed Balassi-strophe (6aa7b6cc7b6dd7b) in the corpus of historical songs is limited to a single piece in the 16th century, it is Márton Gyulai’s *Epicinia* (RPHA-1029).

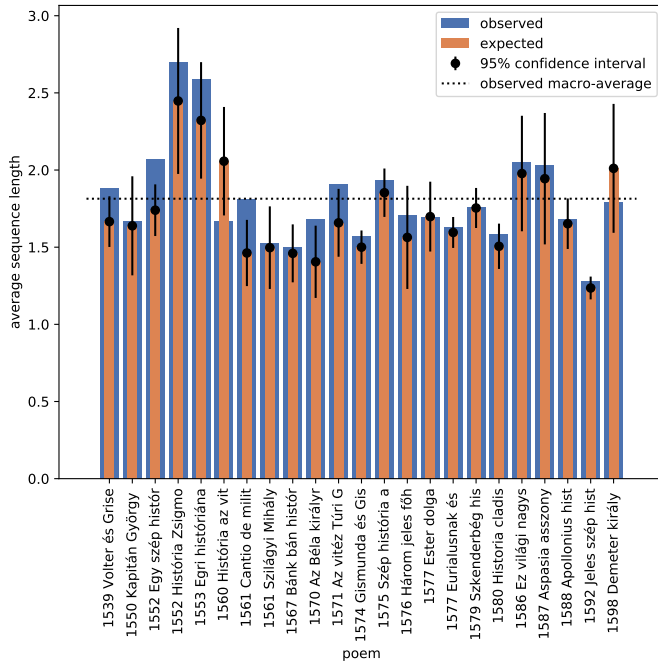


Figure 1: Average length of stanza sequences with the same rhyme endings (observed) compared to a situation if all stanzas were distributed at random (expected)

the rhyming of the period in question (1167 out of 1696 identity rhymes, i.e. almost 69% consist of repeating “vala”), and it was probably perceived by the authors as a specific stylistic pattern. Figure 2a shows the portion of identity rhymes among all the rhymes found in particular poems with regard to “vala”–“vala” rhymes, while Figure 2b shows the portion of lines ending with “vala”.

In fact, “vala” may be considered a special case of “suffix rhyme” (see subsection 5.2). The verb form “vala” is a third person singular form of “to be” in past perfect tense, but it also functions as a suffix, used to express the past perfect or the past imperfect tense of other verbs, written separately of and after the conjugated verb (Verb + PERF.3SG be-PAST or IMPERF.3SG be-PAST). Historical songs were linked by critics to the exaggerated use of “vala”: Probably because this genre generally focuses on an event of the past, these verb forms occur rather frequently, and they offer an easy solution for rhyming.

Figure 2 shows that the use of “vala” rhymes is a salient feature of Tinódi’s poems, but in some poems there are even more: for instance, this is the only identity rhyme that occurs in the anonymous *Szilágyi és Hagymási históriája*, which has the highest ratio of identity rhymes (41%).⁷

The tendency over time is clear: there is a constant decrease of identity rhymes, decrease that can even be quite well approximated by a linear function ($r^2 = 0.41$;

⁷We should not forget that this is a fragmentary text, only roughly half of the poem has been conserved.

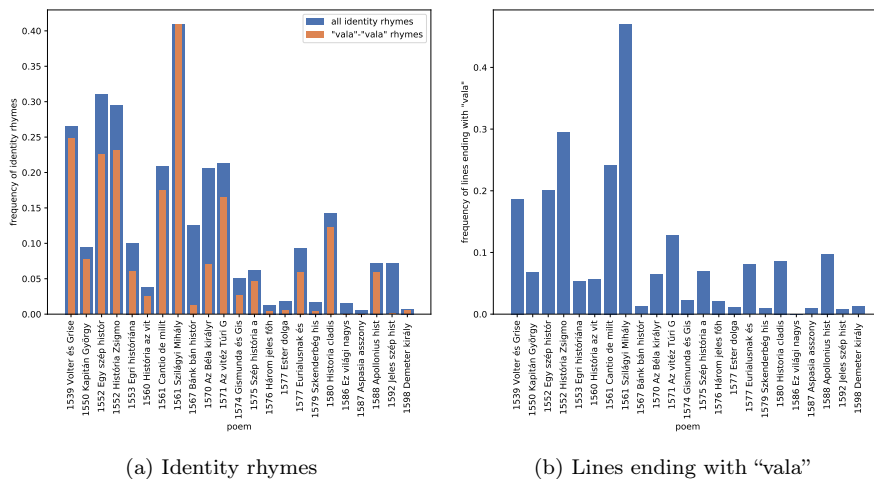


Figure 2: Identity rhymes and “vala” rhymes

Figure 3). This is even more striking if we compare the two most represented authors in the corpus: the earlier Tinódi employs them a lot, Bogáti at the end of the century has some in his earliest historical song *Szép história az tökéletes asszonyállatokról*, 1575), while he hardly has any in his later compositions.

It is quite interesting that Bogáti not only reduces the percentage of identity rhymes, but he apparently avoids the use of the “vala” rhyme as much as possible, and even that of the very similar “volna”, part of the conditional verb forms [Cond.NDef.3Sg]. There are no “vala” rhymes at all in *E világi nagy sok zúrzavarról való ének*, and just two occurrences of “vala” in a line-final position in *Aspasia asszony* (which has the lowest proportion (0.5%) of identity rhymes in the corpus), but these two occur in stanzas distant from each other and are thus not considered as rhyming together. We can conclude that Bogáti consciously and progressively tried to eradicate this kind of rhyme from his poetry.

5.2 Suffix rhymes

As a *suffix rhyme* we denote such pair where both rhyming words end with the same grammatical suffix.⁸ Figure 4 shows their frequency among all the rhymes excluding identity rhymes. As the Hungarian language is agglutinative, rhyming with an identical suffix is rather simple. Even too simple, so we hypothesized that good poets tried to avoid it. Two poems have a very high percentage of suffix rhymes: András Valkai’s *Bánk bán históriája* (0.65) and György Szepesi’s *Historia cladis Turcicae* (0.59), followed by Tinódi’s *Kapitány György bajviadala* (0.56). Further examinations are necessary to check the other characteristics of these poems, to see if they have other weaknesses or if they somehow compensate for this simplicity.

One more peculiarity might be observed in sixteenth-century Hungarian rhyming that is absent from later poems: some rhyming words have the same grammatical

⁸Some authors use the terms grammatical rhyme.

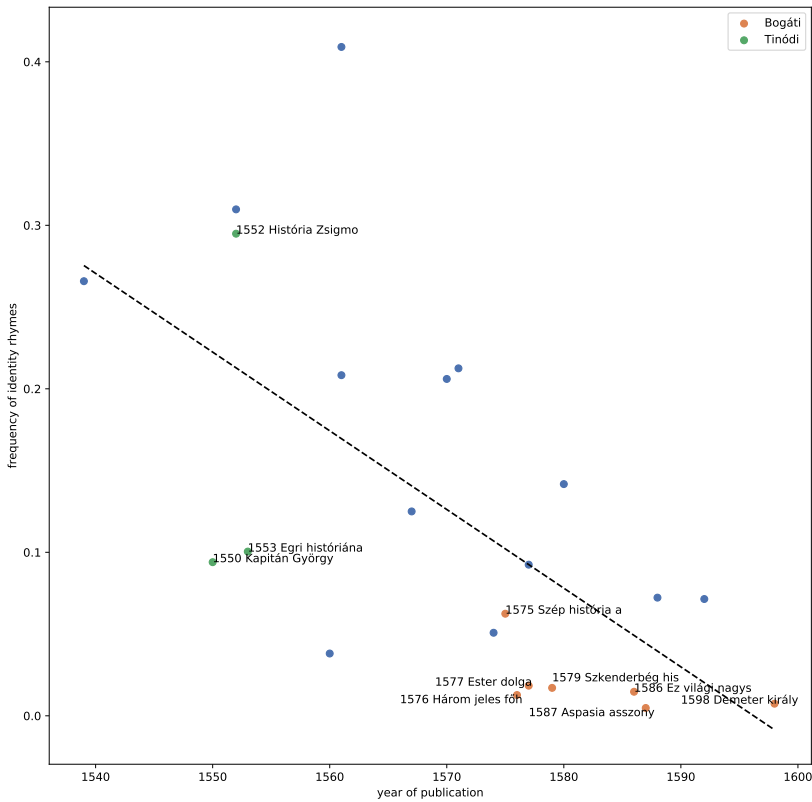


Figure 3: Identity rhymes; linear regression ($r^2 = 0.41$)

suffix although they differ phonetically, like -ról/-ről, -ban/-ben, -nak/-nek. The suffixes are phonetically multiform, and the form of the suffix that corresponds to the phonetical structure of the root is selected. As rhyming by definition necessitates for the last vowel (at least) of two lines to be identical, these lines do not rhyme unless we accept that for the authors the *identity of the grammatical function* of the last syllables was an *acceptable and sufficient criterion* for rhyming. Our statistics show that two poems have a surprisingly high number of non-matching suffix rhymes: the anonymous *Szilágyi és Hagymási históriája* (0.18) and *György Szepesi's Historia cladis Turcicae* (0.15), which had the second largest proportion of suffix rhymes (including matching ones). We believe this is an archaic feature in the versification of these poems, related to their oral character. It is important that these poems have no acrostics, contrary to the majority of the corpus, so they have a weaker relationship with writing and

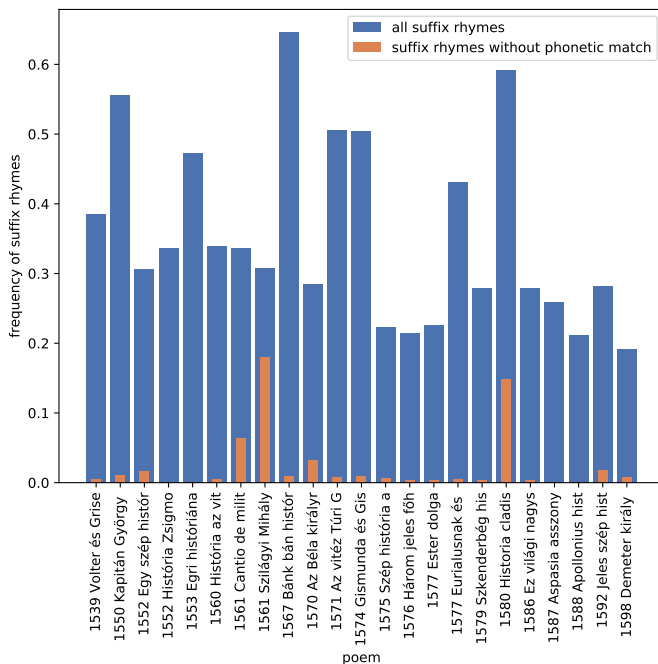


Figure 4: Suffix rhymes

written culture.⁹ As mentioned above, *Szilágyi és Hagymási históriája* also has the largest number of identity rhymes, and all these lines end with “vala”.

5.3 Unrhymed lines

We also examined the proportion of unrhymed lines in the poems. We defined these as the lines that have a different last vowel than any other line of the same stanza. Here again, we have two poems with a large number of them: *Cantio de militibus pulchra* (15.5%), and *Szilágyi és Hagymási históriája* (23%), both written in 1561.¹⁰ *Cantio* has long been connected to oral poetry (Horváth 1984, p. 125), and to a somewhat naive, unlearned poetic tradition. It does not have acrostics, either.

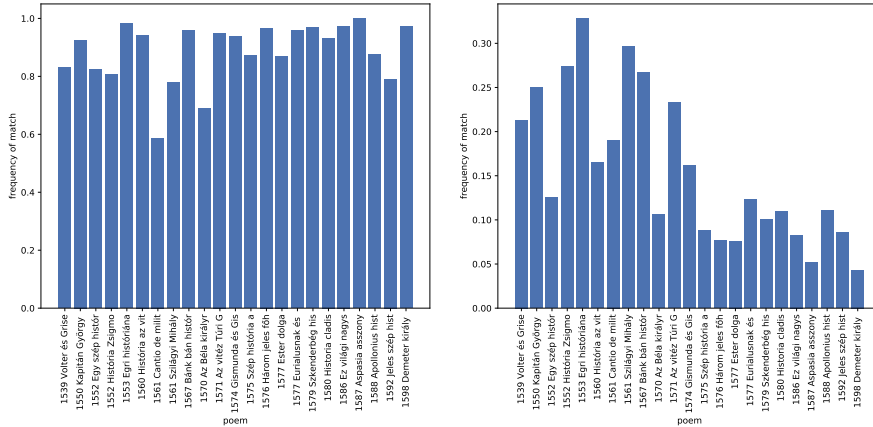
Again there is one poem by Bogáti which has no unrhymed line (*Három jeles főhadnagyoknak vetélkedése*), and his other poems all have a very limited number of them.

5.4 Consonants and vowels

We also compared the two last consonant clusters of the lines and the penultimate vowels in the rhyming words (Figure 5). We expected that with the evolution of rhyming the number of matching vowels and consonants would increase in time. We

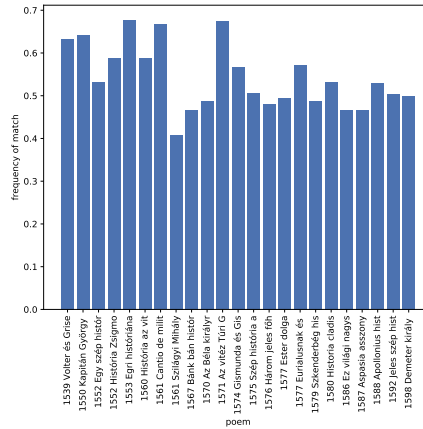
⁹In this tradition acrostics are almost exclusively constructed of the first letters of subsequent stanzas. Fifteen out of 26 poems contain acrostics, see listofpoems.csv.

¹⁰The kinship of these two poems has been observed by previous scholars, see Orlovsky (2009).



(a) Final consonant cluster

(b) Penultimate consonant cluster



(c) Penultimate vowel

Figure 5: Frequency of matching consonants and vowels. In all cases identity rhymes and suffix rhymes were excluded from the sample.

assumed that rhyming became more and more sophisticated, not just by avoiding the same rhyming words in the same stanza but also through the poets' efforts to find phonetically better rhyming words. However, the only tendency we could observe was the decreasing of matching penultimate consonant clusters. Tinódi's long poem dedicated to the siege of Eger has the largest number of matches by far (0.33), while in Bogáti's poetry the correspondence is really weak (0.04 to 0.1).

We can only formulate a preliminary hypothesis on the reasons why the rhymes did not get stronger, "richer" over time, also by the last and penultimate consonants and the penultimate vowels being identical. Bogáti with his seven poems is heavily represented at the end of the chronological scale, and that is a possible reason for this curious observation. It might be that Bogáti's efforts to use complicated acrostics, to diminish the number of identity rhymes and control the occurrence of suffix rhymes

obliged him to search for rhymes that were sometimes weak, only matching by the last vowel. Further investigations and the enlargement of the corpus is necessary to judge if this is a question of personal style or if it is related to some more general changes in Hungarian poetry.

6 Conclusion

As a result of our analysis, we could observe a strong change in rhyming technique on different levels, with the progressive avoidance of identity rhymes, unrhymed lines, and phonetically unmatched suffix rhymes. At the same time, on the basis of this corpus we could not really confirm that there was a change in using stanza sequences with the same rhyming syllable till the end of the sixteenth century. If this change occurred among Szenci Molnár's contemporaries, as he states, it must have been observed elsewhere. Maybe the enlargement of the corpus to lyrical poems could help us get a more precise opinion about this. We could also observe the specific, probably archaic versification patterns of some poems, less related to literacy than to oral performance and transmission.

This is only the first step in our three-year project. There are several ways to continue our research concerning historical songs. In the future we plan to enlarge the corpus (approx. up to 100-150 historical songs) to make it possible to compare subgenera such as songs with a biblical plot and those with a profane story, or to provide a better evaluation of personal styles. A more precise analysis of the grammatical structure of the poems is also necessary. At a later stage the syllabic structure of the verse will also have to be examined. We hope that a stylometric analysis combined with the stichometric approach will allow a better understanding of the stylized oral character of sixteenth-century historical songs described above.

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References

- Ács, Pál, Mihály Etlinger, Balázs Pap, Áron Szatmári, Géza Szentmártoni Szabó, and Edina Zsupán (2018). *Bogáti Fazakas Miklós históriás énekei és bibliai parafrázisai*. Ed. by Pál Ács, Mihály Etlinger, Balázs Pap, Áron Szatmári, Géza Szentmártoni Szabó, and Edina Zsupán. Régi Magyar Költők Tára, XVI. század 13/A. Budapest: Balassi Kiadó. ISBN: 978-963-456-024-1. URL: <http://real.mtak.hu/80295/> (visited on 11/27/2020).
- Bognár, Péter (2016). *A régi magyar párrímeköltészet német vonatkozásai*. Információ-történeti műhely. Budapest: Országos Széchényi Könyvtár.
- Horváth, Iván (1984). "Recenzió: Eötvös-füzetek". In: *Irodalomtörténeti Közlemények* 88.1, pp. 124–126. URL: <http://epa.oszk.hu/00000/00001/00334/pdf> (visited on 11/30/2020).

- Horváth, Iván (1991). *A vers: három megközelítés*. 2000 Könyvek. Budapest: Gondolat. ISBN: 978-963-7577-00-0.
- Horváth, Iván (2006). *Gépeskönyv*. Budapest: Balassi Kiadó. ISBN: 978-963-506-660-5.
- Horváth, Iván (2009). “A magyar vers a reneszánsz és reformáció korában. 1536: Megjelenik két verseskötet”. In: *A magyar irodalom története*. Ed. by László Jankovits, Géza Orlovsky, and Iván Horváth. Budapest: Országos Széchényi Könyvtár. URL: <https://irodalom.oszk.hu/villanyspenot/#!/fejezetek/XRbCJcQGqBuBTkyjssTWTa>.
- Horváth, Iván, Zsuzsa Font, Gabriella H. Hubert, János Herner, Etelka Szőnyi, and István Vadai (1979–2020). *Répertoire de la poésie hongroise ancienne, v. 7.0 Beta*. URL: <http://andorhorvath.com/> (visited on 11/27/2020).
- Indig, Balázs, Bálint Sass, Eszter Simon, Iván Mittelholcz, Noémi Vadász, and Márton Makrai (2019). “One format to rule them all – The emtsv pipeline for Hungarian”. In: *Proceedings of the 13th Linguistic Annotation Workshop*. Florence, Italy: Association for Computational Linguistics, pp. 155–165. DOI: 10.18653/v1/W19-4018. URL: <https://www.aclweb.org/anthology/W19-4018>.
- Jankovics, József, Péter Kőszeghy, and Géza Szentmártoni Szabó, eds. (2000). *Régi magyar irodalmi szöveggyűjtemény II*. Digitális Tankönyvtár. Balassi Kiadó. URL: <https://regi.tankonyvtar.hu/hu/tartalom/tkt/regi-magyar-irodalmi-2> (visited on 05/20/2020).
- Novák, Attila (2014). “A New Form of Humor – Mapping Constraint-Based Computational Morphologies to a Finite-State Representation”. In: *Proceedings of the Ninth International Conference on Language Resources and Evaluation (LREC’14)*. Ed. by Nicoletta Calzolari, Khalid Choukri, Thierry Declerck, Hrafn Loftsson, Bente Maegaard, Joseph Mariani, Asuncion Moreno, Jan Odijk, and Stelios Piperidis. Reykjavik, Iceland: European Language Resources Association (ELRA), pp. 26–31. ISBN: 978-2-9517408-8-4.
- Novák, Attila, Borbála Siklósi, and Csaba Oravecz (2016). “A New Integrated Open-source Morphological Analyzer for Hungarian”. In: *Proceedings of the Tenth International Conference on Language Resources and Evaluation (LREC 2016)*. Ed. by Nicoletta Calzolari, Khalid Choukri, Thierry Declerck, Sara Goggi, Marko Grobelnik, Bente Maegaard, Joseph Mariani, Helene Mazo, Asuncion Moreno, Jan Odijk, and Stelios Piperidis. event-place: Portorož, Slovenia. Paris, France: European Language Resources Association (ELRA), pp. 23–28. ISBN: 978-2-9517408-9-1.
- Orlovsky, Géza (2009). “A históriás ének: 1574: Megjelenik a Cancionale”. In: *A magyar irodalom története*. Ed. by László Jankovits, Géza Orlovsky, and Iván Horváth. Hálózati kiadás. Budapest: Országos Széchényi Könyvtár. URL: <https://irodalom.oszk.hu/villanyspenot/#!/fejezetek/yJ8pg7P3T4yTMgtHhMYEYA>.
- Ötvös, Péter, László Szilasi, and István Vadai (2004). “Balassi Bálint: Hymni tres ad Sacrosanctam Trinitatem”. In: *Tiszatáj* 58.10, pp. 25–43. URL: <http://epa.oszk.hu/00700/00713/00158/pdf> (visited on 11/27/2020).
- Schelhammer, Zsófia (2019). “Tinódi ismeretlen verseiről”. In: *Verso* 2.3, pp. 5–20.
- Seláf, Levente (2017). “Poétiques perpendiculaires: les acrostiches versifiés latins dans la poésie hongroise de la Renaissance”. In: *The Poetics of Multilingualism - La Poétique du plurilinguisme*. Ed. by Patrizia Noel and Levente Seláf. Newcastle upon Tyne, UK: Cambridge Scholars Publishing, pp. 103–120. (Visited on 02/13/2020).
- Seláf, Levente (May 2020). “Between Lyric and Epic: The Great Turkish War in German, Italian and Hungarian Ereignisliedern”. In: *Controversial Poetry 1400–1625*.

- Ed. by Judith Keßler, Ursula Kundert, and Johan Oosterman. *Radboud Studies in Humanities* 11. BRILL, pp. 61–86. ISBN: 978-90-04-29191-1. DOI: [10.1163/9789004291911_005](https://doi.org/10.1163/9789004291911_005). URL: <https://brill.com/view/book/edcoll/9789004291911/BP000006.xml> (visited on 11/29/2020).
- Szigeti, Csaba (2005). *Magyar versszak*. Budapest: Balassi Kiadó. ISBN: 978-963-506-623-0.
- Vadai, István (1991). “+1: Metrikai határjelölések a régi magyar versben”. In: *Irodalomtörténeti Közlemények* 95.4, pp. 351–369. ISSN: 0021-1486. (Visited on 05/28/2019).
- Vadai, István (2009). “A tudósító ének műfaja: 1554: Megjelenik Tinódi Sebestyén Cronicája”. In: *A magyar irodalom története*. Ed. by László Jankovits, Géza Orlovsky, and Iván Horváth. Hálózati kiadás. Budapest: Országos Széchényi Könyvtár. URL: <https://irodalom.oszk.hu/villanyспенot/#!/fejezetek/5DnTVpkQTmSi26HLM2eAUA>.
- Vadai, István (2012). “Szóban kettő - írásban négy: az oralitás metrikájáról”. In: *Doromb: Közköltészeti tanulmányok* 1, pp. 19–41. ISSN: 2063-8175. (Visited on 02/13/2020).
- Várad, Tamás, Eszter Simon, Bálint Sass, Iván Mittelholcz, Attila Novák, Balázs Indig, Richárd Farkas, and Veronika Vincze (May 2018). “E-magyar – A Digital Language Processing System”. In: *Proceedings of the Eleventh International Conference on Language Resources and Evaluation (LREC 2018)*. Ed. by Nicoletta Calzolari (Conference chair), Khalid Choukri, Christopher Cieri, Thierry Declerck, Sara Goggi, Koiti Hasida, Hitoshi Isahara, Bente Maegaard, Joseph Mariani, Hélène Mazo, Asuncion Moreno, Jan Odijk, Stelios Piperidis, and Takenobu Tokunaga. Miyazaki, Japan: European Language Resources Association (ELRA). ISBN: 979-10-95546-00-9.