

# The Gospel of Matthew (1847-1848): Vowel Harmony Restriction

Natalia Koshelyuk

EasyChair preprints are intended for rapid dissemination of research results and are integrated with the rest of EasyChair.

November 5, 2022

### The Gospel of Matthew (1847-1848): vowel harmony restriction<sup>1</sup>

Kosheliuk Natalia ORCID 0000-0002-5833-7971 Ivannikov Institute for System Programming of the RAS, Moscow (Russia) NKoshelyuk@yandex.ru

**Abstract.** The article discusses the synharmonic features of the Gospel of Matthew (1847-1848) discovered in the course of research, which distinguish the dialect of this source from all known Mansi dialects.

**Keywords.** the Mansi language, archival data, vowel harmony, the Gospel of Matthew.

#### **1 INTRODUCTION**

In the translation of the two Gospels, cases similar to synharmonism were found. Most researchers agree that this phenomenon is not typical for the Mansi language. Thus, in the "Uralic Languages" P. Haidu notes that vowel harmony is not found in the Ob-Ugric languages [Haidu 1985: 19]. Rombandeeva E. I. considers it relict for the Mansi language [Rombandeeva 2017: 285]. According to B. Munkacsi, synharmonism is not characteristic of Eastern dialects [Munkacsi 1984]. According to L. Honti, "vowel harmony inherited from the Fin-

<sup>&</sup>lt;sup>1</sup> Supported by Russian Science Foundation, project no. 20-18-00403 'Digital Description of Uralic Languages on the Basis of Big Data'.

no-Ugric era was preserved in the recently extinct south Mansi (Tavda) dialect" [Languages of the World 1993: 280].

#### 2 VOCAL HARMONY RESTRICTION

Below are the results of the examination of the texts of the Gospels of Matthew from the point of view of the statistics of the ratio of the vowels of the first and second syllables in them. The analysis was carried out on the following most frequent types of word forms:

in the first syllable *o*; in the second syllable *bi*;
 in the first syllable *o*; in the second syllable *e*;
 in the first syllable *o*; in the second syllable *u*;
 in the first syllable *o*; in the second syllable *y*;
 in the first syllable *o*; in the second syllable *y*;

in the first syllable y; in the second syllable ы;
 in the first syllable y; in the second syllable e;
 in the first syllable y; in the second syllable u;
 in the first syllable y; in the second syllable y;
 in the first syllable y; in the second syllable y;

in the first syllable *u*; in the second syllable *bi*;
 in the first syllable *u*; in the second syllable *e*;
 in the first syllable *u*; in the second syllable *u*;
 in the first syllable *u*; in the second syllable *y*;
 in the first syllable *u*; in the second syllable *y*;

in the first syllable *e*; in the second syllable *bi*;
 in the first syllable *e*; in the second syllable *e*;
 in the first syllable *e*; in the second syllable *u*;
 in the first syllable *e*; in the second syllable *y*;
 in the first syllable *e*; in the second syllable *y*;

Cases for the Mansi vowel *a* were also examined:
1) in the first syllable *a*; in the second syllable *a*;
2) in the first syllable *a*; in the second syllable *e*;
3) in the first syllable *a*; in the second syllable *u*;
4) in the first syllable *a*; in the second syllable *y*;
5) in the first syllable *a*; in the second syllable *o*;

The analysis and quantitative calculation of these types showed that after o, i, e in the first syllable in the translations of the Gospels there are restrictions on the use of vowels of the second syllable, while they do not coincide in the translations under consideration. Statistical calculations of the total number of examples of certain word forms were carried out on the entire volume of these translations of the Gospel (17.133 words).

#### Word forms with *a* in the first syllable in the sources<sup>2</sup>:

The number of word forms with a in the first syllable is 787 examples. In the second syllable in both texts a, e are most often repre-

<sup>&</sup>lt;sup>2</sup> Here and further, to save space, 5 examples from both sources are given, in the case of atypical phenomena – all the detected examples.

sented, in the second text isolated cases with ы are recorded (for example, *кашыль* 'servant'):

- 1) Gospel of Matthew 1868 *kat-at* 'hand-LOC' Gospel of Matthew 1847-1848 – *кат-атъ*
- 2) Gospel of Matthew 1868 *lach-el* 'news-ABL' Gospel of Matthew 1847-1848 – лах-ылъ
- 3) Gospel of Matthew 1868 *vatm-es* 'getting closer-PST3SG' Gospel of Matthew 1847-1848 – ватьм-есъ
- 4) Gospel of Matthew 1868 *aul-nel* 'sky-ABL' Gospel of Matthew 1847-1848 – *аул-нылъ*
- 5) Gospel of Matthew 1868 *var-uchv* 'make-INF' Gospel of Matthew 1847-1848 – *вар-ухъ*

#### Word forms with *y* in the first syllable in the sources:

The number of word forms with u in the first syllable in both texts is 198 examples, most often in the second syllable they represent e and u, but there are other vowels. Here are a few examples of them:

- 1) Gospel of Matthew 1868 *pun-uchv* 'lay-INF' Gospel of Matthew 1847-1848 – *nyн-yxъ*
- 2) Gospel of Matthew 1868 *uš-et* 'town-PL' Gospel of Matthew 1847-1848 – *уш-ыт*
- 3) Gospel of Matthew 1868 *ńult-an* 'down to repent-IMP3PL' Gospel of Matthew 1847-1848 – нюлт-ынъ
- 4) Gospel of Matthew 1868 ulmiacht-es 'to dream-PST3SG'
   Gospel of Matthew 1847-1848 улміяхт-есъ
- 5) Gospel of Matthew 1868 pupi-ne 'pagan-LOC'

Gospel of Matthew 1847-1848 – *пупи-не* 

#### Word forms with *o* in the first syllable in the sources:

The number of word forms with o in the first syllable is 192 examples. It was revealed that in the Gospel of Matthew (1868), only the words with e in the second syllable are represented in the Latin alphabet, they also prevail in the Cyrillic text:

- Gospel of Matthew 1868 moše 'few'
   Gospel of Matthew 1847-1848 moue
- 2) Gospel of Matthew 1868 *ol-es* 'to be-PST3SG' Gospel of Matthew 1847-1848 – *ол-есъ*
- 3) Gospel of Matthew 1868 *ontš-es* 'have-PST3SG' Gospel of Matthew 1847-1848 – *оньч-есъ*
- 4) Gospel of Matthew 1868 *ton-me* 'that-ACC' Gospel of Matthew 1847-1848 – *moн-мe*
- 5) Gospel of Matthew 1868 *sov-me* 'star-ACC' Gospel of Matthew 1847-1848 – *сов-ме*

At the same time, the second text – the Gospel of Matthew (1847-1848) – is also characterized by the presence of word forms with *bi* in the second syllable:

- 1) Gospel of Matthew 1868 *l'onch-nel* 'way-ABL' Gospel of Matthew 1847-1848 – лонх-ылъ
- 2) Gospel of Matthew 1868 volchv-et-ne 'magus-PL-LAT'<sup>3</sup> Gospel of Matthew 1847-1848 – волхв-ыт-не

<sup>&</sup>lt;sup>3</sup> This example demonstrates a single preservation of the harmony of the vowel e in the series in the Gospel of Matthew (1868).

- 3) Gospel of Matthew 1868 *chortep* 'shovel' Gospel of Matthew 1847-1848 – *хортыпъ*
- 4) Gospel of Matthew 1868 *mos-en* 'before-LAT' Gospel of Matthew 1847-1848 – *мос-ынъ*
- 5) Gospel of Matthew 1868 *oslem* 'fruit' Gospel of Matthew 1847-1848 – *ослымъ*

#### Word forms with *i* in the first syllable in the sources:

The number of word forms with i in the first syllable is 106 examples. Most often they contain a in the second syllable:

- 1) Gospel of Matthew 1868 *mira-me* 'folks-ACC' Gospel of Matthew 1847-1848 – *мира-ме*
- 2) Gospel of Matthew 1868 *tina-ne* 'they-LAT' Gospel of Matthew 1847-1848 – *muна-не*
- 3) Gospel of Matthew 1868 *kit-ag* 'two-TRL' Gospel of Matthew 1847-1848 – *кит-агъ*
- 4) Gospel of Matthew 1868 *vis-anel* 'take-OBJ3PL' Gospel of Matthew 1847-1848 – выс-анылъ
- 5) Gospel of Matthew 1868 *šim-an* 'heart-?' Gospel of Matthew 1847-1848 – *шим-ан*

Interestingly, the predominance of this type for word forms on i in the first syllable and a in the second is not characteristic of the Mansi dialects described in [Vakhrusheva 1963], [Kannisto 2013], [MK 1986]. In particular, the eastern group, according to the conducted study, is characterized by the prevalence of type *i-e*, while this group is also not widely represented.

Consider the vowels of the second syllable in word forms with *i* in the first syllable according to [Kuzakova 1963], [Kannisto 2013] and [MK1986].

**[Kuzakova 1963]:** the cases of the appearance of *i* in the first syllable in this dictionary are scarce, we give all the fixed lexemes.

1) висхар 'kid, baby' [Кузакова 1963: 440];

2) кивттал 'not sharpened' [Кузакова 1963: 453];

3) кūт (китәй), кūтәт '1) two, 2) second' [Кузакова 1963: 453];

4) *лихтэт* 'plunge into' [Кузакова 1963: 457];

5) нилсәп 'bone knife' [Кузакова 1963: 469];

**[Kannisto 2013] in the konda dialects:** mainly after i in the first syllable occurs  $\partial$ , less often *u* and *a*.

verkhnekond. *iu*sy-, srednekond. *iūsy-* 'cause pain' [Kannisto 2013: 110];

2) verkhnekond.  $\beta_1 \dot{s} \chi ar$ , srednekond., nizhnekond.  $\beta_1 \dot{s} kar$  'kid, baby' [Kannisto 2013: 174];

3) verkhnekond.  $i \Im \chi_{\epsilon} t$ -,  $i \Im \chi_{\epsilon} t$ -, srednekond.  $i \Im \chi_{\epsilon} t$ -, nizhnekond.  $i \Im \chi_{\epsilon} u t$ - 'to come' [Kannisto 2013: 203];

4) verkhnekond. kistäy, srednekond. kistäy 'two' [Kannisto 2013: 397];

5) verkhnekond. *ńilam*, srednekond. *ńalam*, nizhnekond. *ńilam*'tongue' [Kannisto 2013: 537].

[MK 1986] in the konda dialects: basically, the author has recorded cases for examples with *i*-*e*.

- 1) kond. *īŋkėm* 'secret' [MK 1986: 136];
- 2) kond. kīnėl 'from' [MK 1986: 205];
- 3) kond. kitiläx 'ask' [MK 1986: 216];
- 4) kond. ńiyeli 'breaking, hacking' [MK 1986: 361];
- 5) kond. *ńilān* 'four' [MK 1986: 361].

We believe that the predominance of a in the second syllable in word forms with i in the first syllable, characteristic of both monosyllabic bases and subsequent affixes, and for two-syllabic ones, is a unique feature of the Gospels of Matthew (1847-1848) and (1868).

#### Word forms with *e* in the first syllable in the sources:

A quantitative calculation of word forms with the vowel e in the first syllable in two texts of the Gospels showed the following: a total of 209 examples were recorded, while word forms with e in the second syllable predominate in both sources – 137 examples, and in the Gospel of Matthew (1847-1848) – e-bi – 56 cases, see examples:

- 1) Gospel of Matthew 1868 *tel-es* 'born-PST3SG' Gospel of Matthew 1847-1848 – *meл-ecъ*
- Gospel of Matthew 1868 ket-es 'send-PST3SG'
   Gospel of Matthew 1847-1848 кетесъ
- 3) Gospel of Matthew 1868 *entep-el* 'belt-INSTR' Gospel of Matthew 1847-1848 – энетеп-ылъ
- 4) Gospel of Matthew 1868 *men-es* 'go-PST3SG' Gospel of Matthew 1847-1848 – *мен-есъ*
- 5) Gospel of Matthew 1868 *jeg-me* 'father-ACC' Gospel of Matthew 1847-1848 – *ег-ме*

According to the examples given and the recorded number of cases of word forms in e-e, we can talk about the presence of synharmonism in a number in the Gospel of Matthew (1868). At the same time, we conducted additional research on the implementation of this type of correspondences in similar words in the Eastern dialect on the Mansi material by E. A. Kuzakova [Kuzakova 1963], B. Munkachi [MK 1986] and A. Kannisto [Kannisto 2013].

#### [Kuzakova 1963] $e - \partial$ the reflexes of the same word forms:

1) ентәп (әнтәп) 'belt' [Kuzakova 1963: 445];

2) κeməx 'send' [Kuzakova 1963: 452];

3) мәнх, мәнәм, мәнимән 'go, walk' [Kuzakova 1963: 462];

4) *не́пх (непэх)*, *непэкэнгха́р* '1) paper, 2) paper-bazed' [Kuzakova 1963: 465];

5) *пернә* 'cross' [Kuzakova 1963: 479];

In other lexemes:

1) вәйән 'shoulder' [Kuzakova 1963: 440];

2) емәнг 'hollow' [Kuzakova 1963: 445];

3) кеншәх 'wake up' [Kuzakova 1963: 451];

4) кәсәмтäxməx 'catch yourself, start looking' [Kuzakova 1963: 452];

5) лэ́лэ́нгәй хултәх 'to survive, to stay alive' [Kuzakova 1963: 459];

According to the Eastern dialect [Kuzakova 1963], word forms with e in the first syllable are characterized by the use of a neutral vowel a in the second syllable, examples of e in the first syllable are much less common. In **[Kannisto 2013]** in Eastern dialects, we also see that in the vast majority of cases, the word forms with e in the first syllable are represented by a in the second syllable:

1) nizhnekond. nè, pχ, nēp<sup>3</sup>χ 'paper' [Kannisto 2013: 506];

2) nizhnekond. košno 'hunting lodge' [Kannisto 2013: 320];

3) srednekond. kēršət 'thunder' [Kannisto 2013: 359];

4) srednekond. leeplan 'covered' [Kannisto 2013: 426];

5) nizhnekond. mestelaχt, srednekond. mètəlaχt 'to rent out' [Kannisto 2013: 491];

In [MK 1986], on the contrary, just as in the considered monuments in Eastern dialects, in the vast majority of cases, word forms with e in the first syllable are represented by e in the second syllable:

1) kond. *ēntėx-kwåli* 'thin long belt' [MK 1986: 65];

2) kond. nēpėx 'paper' [MK 1986: 337];

3) kond. el'ěm 'glue' [MK 1986: 65];

4) kond. ērkėli 'between' [MK 1986: 67];

5) kond. *ēsėrmä (ēsərma)* 'shame' [MK 1986: 68];

The appearance of the vowel of the front row i in the second syllable after e in the first syllable is quite rare.

As mentioned above, we have also recorded a significant number of cases of the presence of bi in the second syllable in words with ein the first syllable in the Gospel (1847-1848), which, apparently, is a unique feature of this source, since it is not recorded in other dialects in any of the available dictionaries:

## In the first syllable e, in the second $\omega$ for the Gospel of Matthew (1847-1848):

- 1) Gospel of Matthew 1868 *elemholes* 'human' Gospel of Matthew 1847-1848 – элымхолесъ
- 2) Gospel of Matthew 1868 *erept-an* 'love-IMP2SG' Gospel of Matthew 1847-1848 – эрыптанъ
- 3) Gospel of Matthew 1868 *erk-en* 'will-LAT' Gospel of Matthew 1847-1848 эрк-ынъ
- 4) Gospel of Matthew 1868 *eln-en* 'ancient-LAT'
   Gospel of Matthew 1847-1848 эльн-ынъ
- 5) Gospel of Matthew 1868 *kelp-et* 'area-PL' Gospel of Matthew 1847-1848 – *кеплытъ*

Similar cases have been encountered in the data of the northern Mansi in the Mansi-Russian dictionary by A. N. Balandin and M. P. Vakhrusheva [Balandin, Vakhrusheva 1958]. We give examples of the types of word forms *e-bi* for the Konda (eastern) and Sosva (northern) dialects:

 kond. келәй 'swamp' / sosv. келыг 'swamp' [Balandin, Vakhrusheva 1958: 36];

2) kond. *месәй* 'gyrus, bend' / sosv. *месыг* 'gyrus, bend' [Balandin, Vakhrusheva 1958: 54];

3) kond. нег<sup>э</sup>л'тахт<sup>э</sup>х, негл'әйтахт<sup>э</sup>х 'look out, lean out'/ sosv.
нэгылттахтункве 'look out, lean out' [Balandin, Vakhrusheva 1958:
66];

4) kond. *пел'пәщ, пел'пән'щ* 'quickly' / sosv. *пелпысь* 'quickly' [Balandin, Vakhrusheva 1958: 80];

5) kond. *рәгтәйл'äx, рәгтил'äx* 'warm up, sweat'/ sosv. *регтыгланкве* 'warm up, sweat' [Balandin, Vakhrusheva 1958: 92].

Other types of word forms for the front vowel *e* are rare in the texts of the Gospels, cf.:

#### In the first syllable *e*, in the second *o*:

- 1) Gospel of Matthew 1868 *elol* 'first' Gospel of Matthew 1847-1848 – элолхаръ
- Gospel of Matthew 1868 *jeg-ov* 'father-POSS2PL'
   Gospel of Matthew 1847-1848 *ег-ов*

#### In the first syllable *e*, in the second *y*:

- 1) Gospel of Matthew 1868 *tel-uchv* 'give birth-INF' Gospel of Matthew 1847-1848 – *meл-ухъ*
- 2) Gospel of Matthew 1868 *men-uchv* 'go-INF' Gospel of Matthew 1847-1848 – *мен-ухъ*
- Gospel of Matthew 1868 keur-t 'inside-LOC'
   Gospel of Matthew 1847-1848 кеур-тъ

It should be noted that an additional statistical analysis of the implementation of the type of correspondences in e (e-e, e-o, e-u, e-i, e-bi) in the eastern dialects of other researchers showed that along with the data of the two Gospels, according to B. Munkachi, the type of *e-e* also significantly prevails in the Konda dialect, there are fewer cases on *e-i* (in our monuments this is the most rare type of correspondences), then there is a type with a neutral vowel *e-a*: kond. *ēri* (*ēry*) 'song' [MK 1986: 65], *ērpti* 'love' [MK 1986: 66], *tētal* [*=tētal*] 'hand to mouth' [MK 1986: 639], *tēp-kän* 'arable' [MK 1986: 191], *kėnsi* 'bitter' [MK 1986: 213], *mēsi* 'gyroscope' [MK 1986: 306], *pēltaxti* 'become crazy' [MK 1986: 430].

In [Kuzakova 1963], different types of correspondences are presented, but the most frequent are cases with a neutral vowel *ə*, vowel of the back row *a*, as well as *ä* and *a*<sup>°</sup>, similarly with the data of the texts of Holy Scripture, cases on *e-o*, *e-u*, *e-y* are less often recorded: kond. *enňaňm* 'before' [Kuzakova 1963: 445], *κenu* 'swamp' [Kuzakova 1963: 450], *мәнпха*<sup>°</sup> 'walking' [Kuzakova 1963: 461], *неuíauí* 'wolf' [Kuzakova 1963: 465], *нәи́ув* 'how many' [Kuzakova 1963: 466], *перита́хтәх* 'curl' [Kuzakova 1963: 478], *персәх* 'bind' [Kuzakova 1963: 479], *ретта́х* 'lure out, change' [Kuzakova 1963: 485], *семәлňа́х* 'blacken, smoke' [Kuzakova 1963: 489], *и́еркан* 'sprout' [Kuzakova 1963: 4].

A. Kannisto's materials also present different types of correspondences, but there is no clearly predominant one: nizhnekond.  $t\dot{e}pk\bar{a}n$  'arable land' [Kannisto 2013: 864], srednekond.  $\dot{e}l\chi k_c an$  'day after tomorrow' [Kannisto 2013: 44], nizhnekond. elol, srednekond. e.lol, verkhnekond. elo.l 'first' [Kannisto 2013: 44], nizhnekond.  $elal'l'a\chi$ , srednekond.  $\partial lal'l'ak$ , verkhnekond.  $\partial lal'l'ak$  'ahead' [Kannisto 2013: 45], nizhnekond., verkhnekond.  $\dot{e}ln\partial\eta$  'earlier' [Kannisto 2013:

45], nizhnekond. ermil, srednekond. ermil 'necessary' [Kannisto 2013: 75], nizhnekond. eri,  $er\gamma a t_{Pl}$  'song' [Kannisto 2013: 87], nizhnekond.  $n\bar{e}y\ddot{a}nt$ - 'tie' [Kannisto 2013: 496], verkhnekond.  $ser\chi tul$  ' caviar (fish)' [Kannisto 2013: 781].

#### CONCLUSION

As can be seen from the presented analysis of synharmonism in the monuments of Holy Scripture, the East Mansi dialects of the mid-XIX – early XX centuries were characterized by syngramonism in a series of a pair of correspondences of the front vowel e-e. At the same time, the absence of this phenomenon in other types of correspondences confirms the opinion of L. Honti and E. I. Rombandeeva about this phenomenon in the Mansi language as a relic.

#### REFERENCES

 Honti 1988 — Honti Laszlo. Die wogulischeSprache // Sinor Denis (ed.), The Uralic Languages. Description, History and Foreign Influences. Handbuch der Orientalistik. E. J. Brill, Leiden — New York — København — Köln, 1988. P. 147—171.

 2) MK 1986 — Munkácsi B., Kálmán B. WogulischesWörterbuch / Gesammelt von Munkácsi B. Geordnet, bearb. und hrsg. von Kálmán B. Budapest, 1986.

*Kannisto 2013* — Wogulische Volksdichtung. Bd. VII. Wörterverzeichnuss / Gesammelt und übersetzt von Kannisto A. Bearb. von Liimola M., Eiras V. Hrsg. EirasV. Helsinki, 1982. (= Mémoires dela Société Finno-Ougrienne, 180.) 4) *Kuzakova 1963* – Kuzakova E. A. Southern Mansi (Kondin) dialect (compared to the Northern Mansi dialect). L., 1963.

5) *Rombandeeva 2017* – Rombandeeva E. I. Modern Mansi: Vocabulary, Phonetics, Graphics, Orthography, Morphology, Word Formation. Monograph. 2nd ed. Tyumen: Format, 2017. 318 p.

*Hajdu 1985* – Hajdú P. Uralic Languages and Peoples. Moscow: Progress, 1985. 430 p.

7) *Rombandeeva 1991* – Rombandeeva E. I. Mansi language // Languages of the World. The Uralic languages. Moscow, 1991. 398 p.

8) *Honti 1991* – Honti L. Finno-Ugric group of languages // Languages of the World. The Uralic languages. Moscow, 1991. 398 p.

9) *Gospel of Matthew* 1868 – Concordance of glossed corpus of Evangel of Matthew 1868 in Konda dialect of Mansi language. URL: http://lingvodoc.ispras.ru/dictionary/3096/37674/perspective/3096/376 75/view (accessed: 25.10.2022).

10) *Gospel of Matthew 1847-1848* – The gospel of Matthew and Mark in the Vogul language (1847-1848). URL: http://lingvodoc.ispras.ru/dictionary/3475/92/perspective/3475/96/view ?page=1 (accessed: 25.10.2022).

 Balandin, Vakhrusheva 1958 – Balandin A. N., Vakhrusheva M. P.
 Mansi-Russian dictionary with lexical parallels from the South Mansi (Kondinsky) dialect. Ministry of Education of the RSFSR: Leningrad, 1958. 228 p.