

# Word order of enclitic pronouns in finite verb phrases in the first edition of the Old Czech Bible translation

Pavel Kosek, Radek Čech,  
Olga Navrátilová



# Notes

Research project (2017–2019)

- analysis of Czech pronominal (en)clitics
- supported by GAČR GA17-02545S, 2017–2019

Aims

- analysis of word order of pronominal (en)clitics in a finite verbal phrase
  - ✓ historical development
  - ✓ influence of style
  - ✓ influence of rhythmic rules
  - ✓ influence od Latine pretext Vulgata

# Object of research

- pronominal “stable” (en)clitics (“stále příklonky”)

*mi* ‘me’

*ti* ‘to you’

*si* ‘to myself’ / ‘to yourself’ etc.

*sě* (> *se*) ‘myself’ / ‘yourself’ etc.

*tě* ‘you’

*ho* ‘him’

*mu* ‘to him’

- heterogeneous class
  - different origin
  - different functional morphology

# Older Czech enclitics

A. "sentence" enclitics, e. g. archaic enclitic forms:

*li, si / s, tě / ti / t', že / ž*

B. "word" enclitics

1. pronominal forms

*mi, si, ti; ho, mu, sě (> se), tě,*

2. preterite auxiliary forms

Sg 1Ps <i>nesl <u>jsem</u></i>	2Ps <i>nesl <u>jsi</u> / <u>s</u></i>
'I carried'	'you carried'

3. conditional auxiliary forms

Sg 1Ps <i>nesl <u>bych</u></i>	2Ps <i>nesl <u>by</u></i>
'I would carry'	'he would carry'

# Word-ordering of "word" (en)clitics in historical Czech (Ertl 1924, Kosek 2011)

I. postinitial position (2P)

II. contact or verbal adjacent (VA) position

III. position of an (en)clitic in the middle of a clause without contact with its syntactically superordinate item – medial isolated position

Demonstrated by Ertl's (1924) examples (or by their particular variants) containing four following constituents:

*starý strom* = 'old tree'  
(*old*<sub>NOM.M.SG</sub> *tree*<sub>NOM.M.SG</sub>)

*skácel se* = 'fell'  
(*fall*<sub>PART.PRET.ACT.M.SG</sub> + REFL<sub>ACC</sub>)

*rázem* = 'suddenly'

*v zahradě* = 'in the garden'  
(*in garden*<sub>LOC.F.SG</sub>)

# Ad I. post-initial position(s) (2P)

1. This position is common in clauses whose first phrase consists of one word:

- (1) a. [rázem] se [starý strom] [v zahradě] [skácel]  
b. [v zahradě] se [starý strom] [skácel] [rázem]

2. If a matrix clause is preceded by a transgressive phrase (ex. (1c.)) or an embedded clause (ex. (1d.)), then the (en)clitic is placed after the first accented word / phrase in the matrix clause:

- (1) c. [[Byv podťat,] [rázem] se [starý strom] [v zahradě] [skácel]]  
'The tree having being cut, ... '  
be<sub>TRANSGRESSIVE.NOM.SG.M.</sub> cut<sub>PART.PAS.PRAET. NOM.SG.M.</sub>

- d. [[Když byl podťat,] [rázem] se [starý strom] [v zahradě] [skácel]]  
'When the tree was cut, ... '  
COMPL be<sub>PART.PRAET.NOM.SG.M.</sub> cut<sub>PART.PAS.PRAET. NOM.SG.M.</sub>

## Ad I. post-initial position(s) (2P)

3. If the first phrase of a clause is modified, then the (en)clitic can appear:

a) after the first stressed word (so-called 2W position – Halpern 1995) shown in ex. (1e.)

(1) e. [*starý*]<sub>1</sub> *se*<sub>2</sub> [*strom*]<sub>1</sub> [*rázem*]<sub>3</sub> [*skácel*]<sub>2</sub> [*v zahradě*]<sub>4</sub>

b) after the first modified phrase (so-called 2D position – Halpern 1995) shown in ex. (1f.)

(1) f. [*starý strom*]<sub>1</sub> *se*<sub>2</sub> [*rázem*]<sub>3</sub> [*skácel*]<sub>2</sub> [*v zahradě*]<sub>4</sub>

## Ad II. contact position:

- a) postposition (postverbal position) of an (en)clitic after its syntactically superordinate item (= regent of the clitic):

- (2) a. [*starý strom*]<sub>1</sub> [*skácel se*]<sub>2</sub> [*v zahradě*]<sub>3</sub> [*rázem*]<sub>4</sub> – medial postverbal p.  
b. [*starý strom*]<sub>1</sub> [*v zahradě*]<sub>2</sub> [*rázem*]<sub>3</sub> [*skácel se*]<sub>4</sub> – final p.

- b) anteposition (preverbal position) of an (en)clitic after his regent:

- (2) c. [*starý strom*]<sub>1</sub> [*rázem*]<sub>2</sub> [*se skácel*]<sub>3</sub> [*v zahradě*]<sub>4</sub> – medial preverbal p.  
d. [*starý strom*]<sub>1</sub> [*v zahradě*]<sub>2</sub> [*rázem*]<sub>3</sub> [*se skácel*]<sub>4</sub> – prefinal p.

## Ad III. medial isolated position

- Position in the middle of a clause without contact with its regent.
- Scholars analyzing Modern Czech clitics usually claim that this position depends on discourse factors (Franks – King 2000: 112–114).

(3) [*starý strom*]<sub>1</sub> [*rázem*]<sub>2</sub> se [*v zahradě*]<sub>3</sub> [*skácel*]<sub>4</sub>



# Hypotheses

- dominance of the **postinitial position** in general
- the **longer** the phrase, the lower probability of occurrence of the enclitic after this phrase
- **non-postinitial positions** related to contact word-ordering
- occurrence of **non-postinitial positions** influenced by style
- occurrence of **non-postinitial positions** influenced by Latin pretext

# Language material

- first edition of the Old Czech Bible translation (from the half of 14th c)
- preserved in younger copies
  - *Olomouc Bible (Bible olomoucká, 1417)*
  - *Litoměřice-Třeboň Bible (Bible litoměřicko-třeboňská, 1411–1414)*
- edited by V. Kvas and his colleagues or followers (Kvas, ed. 1981, 1985, 1988; Kvas, Kvasová, Pečírková, eds. 1996; Pečírková et al., eds. 2009)
- analyzed books
  - New Testament: Gospels of Matthew (Mt) and Luke (Lk), Acts of the Apostles (Acts), Book of Revelation (Rev),
  - Old Testament: Book of Genesis (Gen, chapters 1–28), Book of Job (Job), Wisdom of Sirach or Book of Ecclesiasticus (Sir, only chapters 1–29), Book of Isaiah (Isa, chapters 14–40).
- Czech translation compared with the Latin pretext (Vulgata – BiblVulClem / BiblVul)

# Results

	initial pos.	postinitial p.	medial p.	prefinal p.	final p.	$\Sigma$
<i>mi</i>	0	240	11	0	13	<b>264</b>
<i>si</i>	0	0	0	0	0	<b>0</b>
<i>ti</i>	0	0	0	0	0	<b>0</b>
<i>t'</i>	0	29	1	0	0	<b>30</b>
<i>ho</i>	0	6	0	0	0	<b>6</b>
<i>mu</i>	0	7	0	0	0	<b>7</b>
<i>sě</i>	0	1680	262	63	63	<b>2068</b>
<i>tě</i>	1	155	18	6	21	<b>201</b>
$\Sigma$	<b>1</b>	<b>2117</b>	<b>292</b>	<b>69</b>	<b>97</b>	<b>2576</b>

**Table 1** Clausal positions of (en)clitics – significant differences in the distribution of the investigated forms

	contact – preverbal	cont. – postverbal	cont. – interverbal	isolated	Σ
<i>mi</i>	1	22	0	1	<b>24</b>
<i>si</i>	0	0	0	0	<b>0</b>
<i>ti</i>	0	0	0	0	<b>0</b>
<i>t'</i>	0	1	0	0	<b>1</b>
<i>ho</i>	0	0	0	0	<b>0</b>
<i>mu</i>	4	2	0	1	<b>7</b>
<i>sě</i>	74	283	21	10	<b>388</b>
<i>tě</i>	9	33	0	3	<b>45</b>
Σ	<b>88</b>	<b>341</b>	<b>21</b>	<b>15</b>	<b>465</b>

**Table 2** The position of the investigated forms and their superordinate verb in the "non-postinitial" positions

## The originally enclitic forms *mi*, *si*, *ti*

- only the form *mi* detected – no evidence of the forms *si*, *ti*
- the absence of *si* corresponds with its loss in the Old Czech mentioned in secondary sources (Gebauer 1896: 527; Havránek 1928: 100; Vážný 1964: 121)
- the complete absence of the form *ti* is surprising
- instead of the full form *ti*, the reduced form *ť* is used
- not every documented form *ť* is a pronominal form
- most collected examples of *ť* represent the archaic enclitic particle *ti / tě / ť*
- It is not easy to distinguish both words - the best guideline is the comparison with the Latin version. This comparison shows that the Czech pronoun *ť* corresponded to Latin forms *tibi*, *te*.

# The reduced *t'*

## 1. Pronominal *t'*

(4) a. *Jměj utrpenie ke mně, **a všecko-t' navrátím**;...* BiblOI Mt 18,29

b. *Patiéntiam habe in me, et ómnia reddam tibi* BiblClemVul

(5) a. ***Nekázal-t' sem** slúžiti obětováním ani dělati sem dal tobě v kadidle* BiblOI Iz 43,23

b. *non te servíre feci in oblatióne, nec labórem tibi præbui in thure.*

## 2. Particle *t'*

(6) a. *Jměj ufánie, synu, otpuštěny-t' jsú tobě tvoji hřeši* BiblOI Mt 9,2

b. *Confide fili, remittúntur tibi peccáta tua* BiblVulClem

(7) a. *Já-t' hospodin, jenž sem tě vyvedl z Hur chaldejských, ať bych dal tobě zemi tuto, aby jměl ji* BiblOI Gen 15,7

*Ego Dóminus qui edúxi te de Ur Chaldæórum ut darem tibi terram istam, et possidéres eam* BiblVul Clem

## Detected forms *mi*, *t'*

1. are characterized by their enclitic properties

2. but in 1 example, the enclitic *mi* is positioned in the middle of a clause isolated from its verb – a symptom of degrammaticalization?

(8) a. *Zúfal sem, neb viece neoživu, [otpušť, [pane hospodine,] mi, [nebo dnové moji za nice jsú]]* BiblOl  
Jb 7,16

b. *Desperávi: nequáquam ultra jam vivam: parce mihi, nihil enim sunt dies mei* BiblVulClem

3. appear in clauses with zero copula

(9) a. *Líto mi zástupa, nebo již tři dni ustavičně jsú se mnú, a nemají, co by jedli,...*“ BiblOl Mt 15,32

b. *Misereor turbae, quia triduo iam perseverant mecum et non habent, quod manducent;...*“  
BiblVulClem



## The new enclitic forms *ho*, *mu*

- occur in a small number of examples
- manifestation of the initial phase of the change?

*je'ho > jho > ho*

*je'mu > jmu > mu*

- influence of the historical change from the free word accent to obligatory word accent on the first syllable?

*je'ho > 'jeho > jeho > jho > ho*

*je'mu > 'jemu > jemu > jmu > mu*

## The originally accented forms *sě*, *tě*

- during the historical development of Czech changed into constant enclitics (enclitica tantum)
- keep some features of stressed words in analyzed texts
- the change was not completed in the period of the Old Czech

# Traces of the original stressed nature of *sě*, *tě* in the analyzed text I

- in prepositional phrases with the prepositions *na*, *mezi*, *před*, *v*, *za*

(10) a. *I vecě k některým, ješto sami v sě ufáchu jako spravedlní... BiblOl Lk 18,9*

b. *Dixit autem et ad quosdam qui in se confidebant tamquam iusti... BiblVul*

- can be modified by the pronoun *sám*

(11) a. *Nebo co jest člověku prospěšno, že zíště vešken svět, a sám sě ztratí... BiblOl Lk 9,25*

b. *... si lucretur universum mundum, se autem ipsum perdat... BiblVul*

- can be coordinated

(12) a. *Jsi-li ty syn boží, uzdrav sám sě i ny! BiblOl Lk 23,39*

b. *Si tu es Christus, salvum fac temet ipsum et nos BiblVul*

## Traces of the original stressed nature of *sě*, *tě* in the analyzed text II

- position immediately after the conjunction *a* 'and' (only some examples)

(13) a. ... *aby jim otmlúvaje, sobě pomoci mohl a sě očistil z těch vin...* BibLitTřeb Acts 25,16

b. ... *locumque defendendi accipiat ad abluenda crimina* BibVul

(14) a. *kto tě uzříe, k tobě sě přichýlé a tě ohlédají* řkúc:... BibOI Isa 14,16

b. *Qui te viderint, ad te inclinabúntur, teque prospicient...* BibVulClem

- only in 1 example, *tě* occurs in clause-initial position (see Table 1 above)

(15) a. *Juda, tě budú chváliti* bratřie tvoji... BibOI Gen 49,8

b. *Juda, te laudábunt* fratres tui... BibVulClem

# (En)clitic properties of *sě*, *tě* I

- *sě* never occurs in clause-initial position (see Table 1 above) and *tě* only in 1 example
- they do not follow an interjection

(16) a. A *aj*, ***učinila mi sě*** *stezka hojná...* BiblOl Sir 24,43  
b. Et ecce *factus est* *mihi tramis abundans...* BiblVul

- they do not follow a vocative (with some exceptions of *tě* – cf. ex. (15))

(17) a. *Pane*, ***stalo sě jest***, *jakož si rozkázal...* BiblOl Lk 14,22  
b. *Domine*, *factum est* *ut imperasti...* BiblVul

- they do not follow an apposition

(18) a. [*Hospodinu*, [*bohu tvému*,]] ***budeš sě modliti***... BiblOl Mt 4,10  
b. ... *dominum Deum tuum* *adorabis*... BiblVul

# (En)clitic properties of *sě*, *tě* II

- they are not located on the left periphery of a complementizer

(19) a. [[Vládařem ***když tě ustavie***,] *nerod' sě púřiti...*] BiblOl Ecc 32,1

b. *Rectórem te posuérunt? noli extólli:...* BiblVulClem

- with some exceptions, they do not follow the conjunctions *a* ,and', *ale* ,but', *i* ,and'

(20) a. ... *viechu větrové a [na ten dóm] sě obořichu, i pade,...* BiblOl Mt 7,27

b. ... *et flaverunt venti et inruerunt in domum illam...* BiblVul

(21) a. ***A vyženu tě*** z stánie z tvého ***a*** [z přísluhování tvého ***tě ssadím***] BiblOl 22,19

b. *Et expéllam te de statióne tua, et de ministério tuo depónam te* BiblVulClem

- elision (haplology) of one out of two occurrences of *sě* (*neslušie sě + ženiti sě*):

(22) a. [*Když jest taká věc mezi mužem a mezi ženú,*] ***neslušie sě ženiti...*** BiblOl Mt 19,10

b. *Si ita est causa homini cum muliere, non expedit nubere...* BiblVulClem

# Interpretation of the observed word-order positions

Tables 1 and 2 manifest the developmental competition of 2P and VA word-ordering of Czech (en)clitics.

2P is the basic (neutral) word order position of the Old Czech (en)clitics, whereas VA is a less frequent position motivated:

1. by style,
2. by rhythmic rules,
3. by pragmatic or textual factors, esp. by informational structure,
4. by Latine pretext (?).

Impact of these factors is examined in the distribution of the forms *mi* and *sě*.

# Influence of style

The frequency of *sě* in analyzed Bible books show differences in frequency of individual clausal positions which could be motivated by style.

In particular, there are noticeable differences in the frequency of contact position variants.

These differences are presented in tables 3–6.



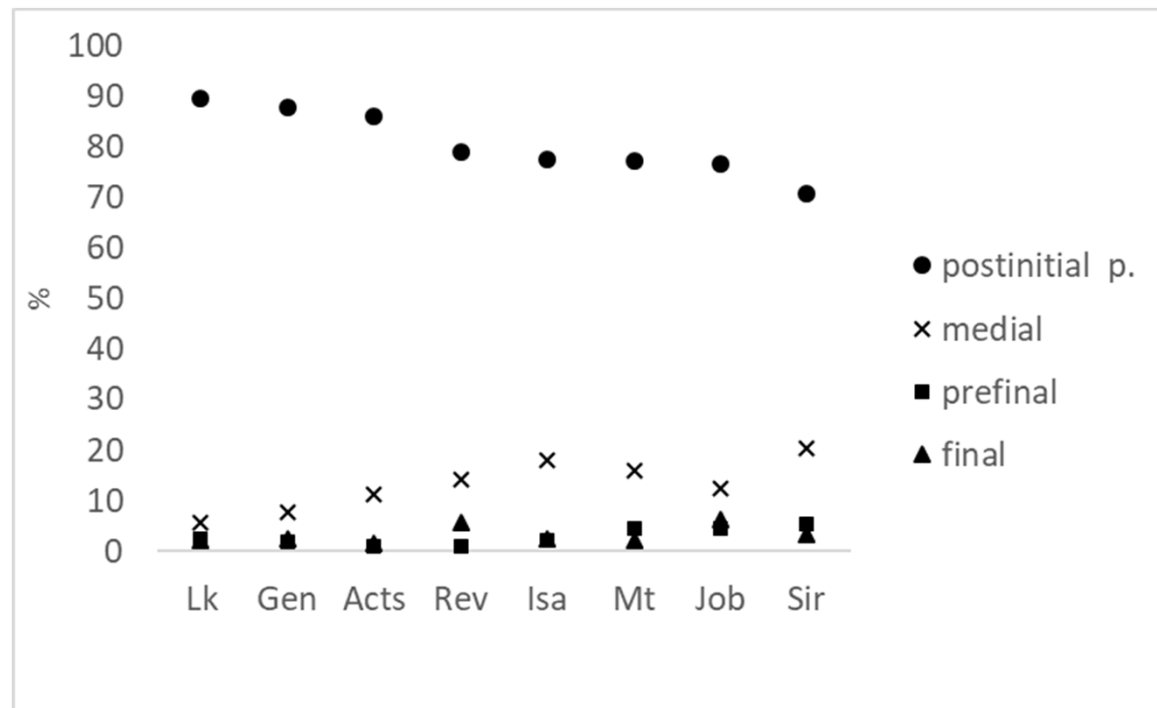
	initial pos.	postinitial p.	medial p.	prefinal p.	final p.	Σ
<b>Gen</b>	0	180	16	4	5	205
<b>%</b>	<b>0</b>	<b>87.80</b>	<b>7.80</b>	<b>1.95</b>	<b>2.44</b>	
<b>Job</b>	0	215	35	13	18	281
<b>%</b>	<b>0</b>	<b>76.51</b>	<b>12.46</b>	<b>4.63</b>	<b>6.41</b>	
<b>Sir</b>	0	197	57	15	9	278
<b>%</b>	<b>0</b>	<b>70.86</b>	<b>20.50</b>	<b>5.40</b>	<b>3.24</b>	
<b>Isa</b>	0	151	35	4	5	195
<b>%</b>	<b>0</b>	<b>77.44</b>	<b>17.95</b>	<b>2.05</b>	<b>2.56</b>	
<b>Mt</b>	0	205	42	12	6	265
<b>%</b>	<b>0</b>	<b>77.36</b>	<b>15.85</b>	<b>4.53</b>	<b>2.26</b>	
<b>Lk</b>	0	345	22	10	8	385
<b>%</b>	<b>0</b>	<b>89.61</b>	<b>5.71</b>	<b>2.60</b>	<b>2.08</b>	
<b>Acts</b>	0	304	40	4	6	354
<b>%</b>	<b>0</b>	<b>85.88</b>	<b>11.30</b>	<b>1.13</b>	<b>1.69</b>	
<b>Rev</b>	0	83	15	1	6	105
<b>%</b>	<b>0</b>	<b>79.05</b>	<b>14.29</b>	<b>0.95</b>	<b>5.71</b>	
<b>Σ</b>	0	1680	262	63	63	2068

Table 3 Frequency of the clausal positions of *sě*

# Influence of the style – only *sě*

Tested by the  $\chi^2$ -test

Results:  $\chi^2 = 83.712$  , p-value < 0.001



**Figure 1** Proportions of positions of *sě* in selected books of the first Czech Bible translation. The books are ranked in descending order of post-initial position.

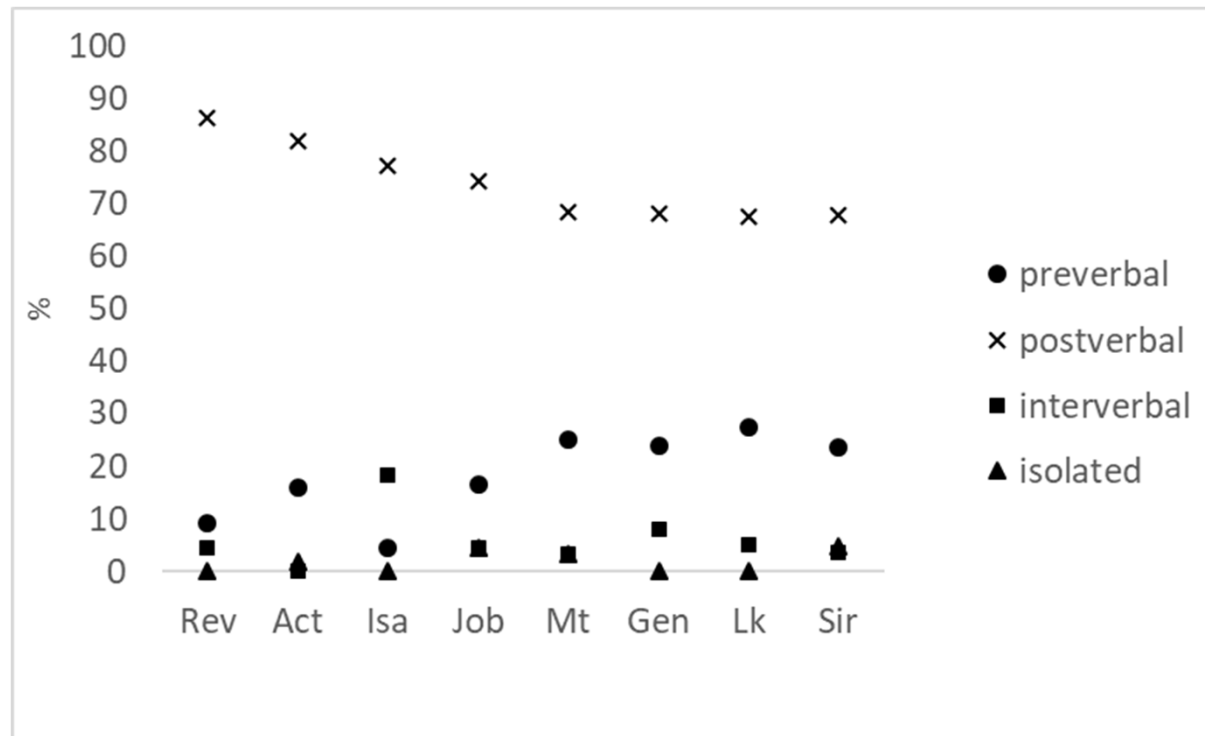
	contact – preverbal	cont. – postverbal	cont. – interverbal	isolated	Σ
<b>Gen</b>	6	17	2	0	25
<b>%</b>	<b>24.00</b>	<b>68</b>	<b>8.00</b>	<b>0</b>	
<b>Job</b>	11	49	3	3	66
<b>%</b>	<b>16.67</b>	<b>74.24</b>	<b>4.55</b>	<b>4.55</b>	
<b>Sir</b>	19	55	3	4	81
<b>%</b>	<b>23.46</b>	<b>67.90</b>	<b>3.70</b>	<b>4.94</b>	
<b>Isa</b>	2	34	8	0	44
<b>%</b>	<b>4.55</b>	<b>77.27</b>	<b>18.18</b>	<b>0</b>	
<b>Mt</b>	15	41	2	2	60
<b>%</b>	<b>25.00</b>	<b>68.33</b>	<b>3.33</b>	<b>3.33</b>	
<b>Lk</b>	11	27	2	0	40
<b>%</b>	<b>27.50</b>	<b>67.50</b>	<b>5.00</b>	<b>0</b>	
<b>Acts</b>	8	41	0	1	50
<b>%</b>	<b>16.00</b>	<b>82.00</b>	<b>0</b>	<b>2.00</b>	
<b>Rev</b>	2	19	1	0	22
<b>%</b>	<b>9.09</b>	<b>86.36</b>	<b>4.55</b>	<b>0</b>	
<b>Σ</b>	74	283	21	10	388

**Table 4** The position of *sě* and its superordinate verb in the "non-postinitial" positions

# Influence of the style – only *sě*

Tested by the  $\chi^2$ -test

Results:  $\chi^2 = 33.772$  , p-value < 0.023



**Figure 2** Proportions of positions of *sě* in selected books of the first Czech Bible translation. The books are ranked in descending order of postverbal position.

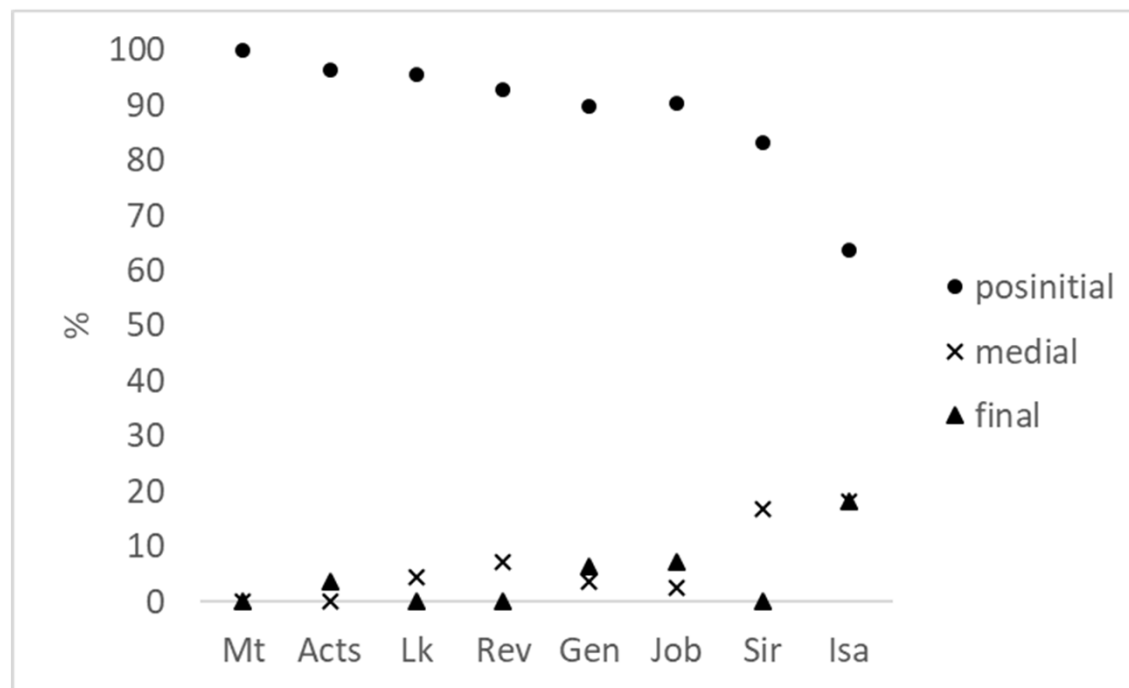
	initial pos.	postinitial p.	medial p.	prefinal p.	final p.	$\Sigma$
<b>Gen</b>	0	97	4	0	7	108
%						
<b>Job</b>	0	37	1	0	3	41
%						
<b>Sir</b>	0	10	2	0	0	12
%						
<b>Isa</b>	0	7	2	0	2	11
%						
<b>Mt</b>	0	28	0	0	0	28
%						
<b>Lk</b>	0	21	1	0	0	22
%						
<b>Acts</b>	0	27	0	0	1	28
%						
<b>Rev</b>	0	13	1	0	0	14
%						
$\Sigma$	<b>0</b>	<b>240</b>	<b>11</b>	<b>0</b>	<b>13</b>	<b>264</b>

Table 5 Frequency of the clausal positions of *mi*

# Influence of the style – only *mi*

Tested by the  $\chi^2$ -test

Results:  $\chi^2 = 22.851$  , p-value < 0.067



**Figure 3** Proportions of positions of *mi* in selected books of the first Czech Bible translation. The books are ranked in descending order of post-initial position.

	contact – preverbal	cont. – postverbal	cont. – interverbal	isolated	Σ
<b>Gen</b>	1	10	0	0	11
%					
<b>Job</b>	0	3	0	1	4
%					
<b>Sir</b>	0	2	0	0	2
%					
<b>Isa</b>	0	4	0	0	4
%					
<b>Mt</b>	0	0	0	0	0
%					
<b>Lk</b>	0	1	0	0	1
%					
<b>Acts</b>	0	1	0	0	1
%					
<b>Rev</b>	0	1	0	0	1
%					
<b>Σ</b>	1	22	0	1	24

**Table 6** The position of *mi* and its superordinate verb in the “non-postinitial” positions

# Influence of rhythmic rule I

Among the cases of “non-postinitial” presented in Table 2, the postverbal position dominates.

This observation seems to be related to the fact that there are very few documented 2D and 2W positions of *sě*.

Both 2D and 2W positions represent two strategies for placing the (en)clitic in the postinitial position when the first phrase consists of two and more words.



# Influence of rhythmic rule II

	<b>Gen</b>	<b>Job</b>	<b>Sir</b>	<b>Isa</b>	<b>Mt</b>	<b>Lk</b>	<b>Acts</b>	<b>Rev</b>	$\Sigma$
<b>2W</b>	1	4	0	0	0	1	4	0	<b>10</b>
<b>2D</b>	1 (3)	3 (6)	0 (4)	1 (1)	0 (1)	0 (1)	2 (3)	2	<b>9 (19)</b>

**Table 7** Examples of 2W a 2D position of *sě*

(The data quoted in brackets are ambiguous, e. g. (20a.) a [*na ten dóm*] *sě obořichu* which can be classified both as a postinitial and as a prefinal position.)

	<b>Gen</b>	<b>Job</b>	<b>Sir</b>	<b>Isa</b>	<b>Mt</b>	<b>Lk</b>	<b>Acts</b>	<b>Rev</b>	$\Sigma$
<b>2W</b>	1	0	0	0	0	0	1	0	<b>2</b>
<b>2D</b>	0	0	0	0	0	0	0	0	<b>0</b>

**Table 8** Examples of 2W a 2D position of *mi*

	<b>Gen</b>	<b>Job</b>	<b>Sir</b>	<b>Isa</b>	<b>Mt</b>	<b>Lk</b>	<b>Acts</b>	<b>Rev</b>	$\Sigma$
<b>2W</b>	3	4	0	0	1	1	5	0	<b>14</b>
<b>2D</b>	1 (3)	3 (7)	0 (4)	1 (2)	0 (1)	2 (2)	4 (3)	2	<b>13 (22)</b>

**Table 9** Examples of 2W a 2D position of all pronominal forms

# Influence of rhythmic rule III

- if a phrase is long, then it is followed by a pause,
- an enclitic cannot be placed after a pause,
- therefore it has to be placed after a shorter word / phrase in the middle or at the end of a clause
- (this mechanism is sometimes characterized as a *heavy constituent constraint* (Radanović Kocić 1996: 435) or as a *clitic third* rule (Franks, King, 2000: 229); a similar prosodic rule has been already formulated by Ertl 1924).

- (2) a. # 'starý 'strom # 'skácese # 'vzahradě (#) 'rázem # – medial postverbal p.  
b. # 'starý strom # 'vzahradě (#) 'rázem # 'skácese # – final p.  
c. # 'starý strom # 'rázemse 'skácel (#) 'vzahradě # – medial preverbal p.  
d. # 'starý 'strom (#) 'vzahradě # 'rázemse 'skácel # – prefinal p.

# a pause

' a word stress

The distribution of prosodic units in the Old Czech is hypothetical!

# Influence of rhythmic rule IV

We have examined three parameters:

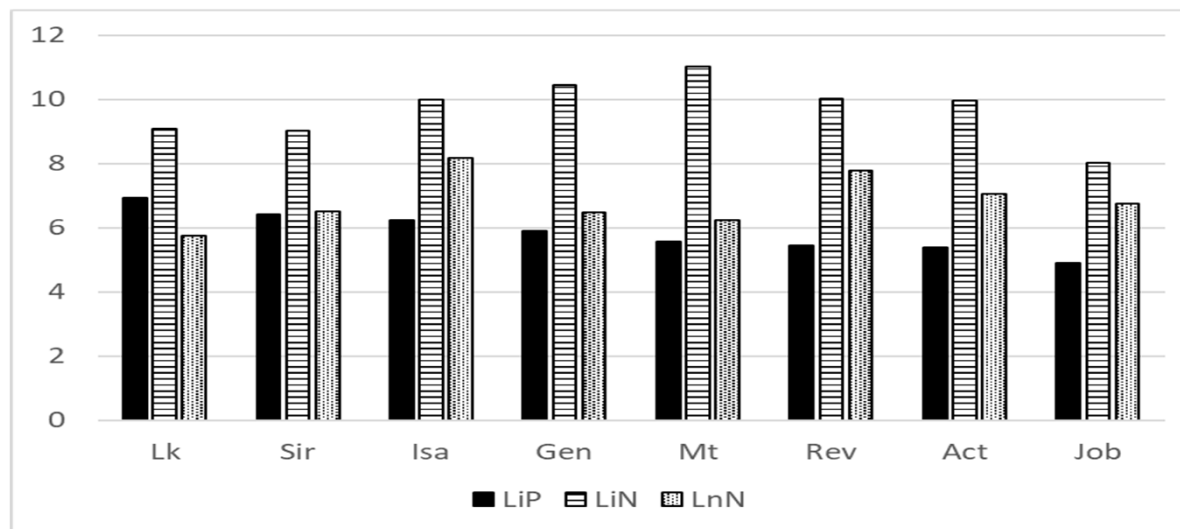
- the average length of the initial phrase in the postinitial positions of *sě*, *mi* ( $L_iP$ )
- the average length of the initial phrase in the “non-postinitial” positions of *sě*, *mi* ( $L_iN$ )
- the average length of the phrase that immediately precedes *sě*, *mi* in the clauses with “non-postinitial” positions of *sě* ( $L_nN$ ).

The length of the phrase has been measured by the number of letters.

# Influence of rhythmic rule – results, *sě*

	<b>Lk</b>	<b>Sir</b>	<b>Isa</b>	<b>Gen</b>	<b>Mt</b>	<b>Rev</b>	<b>Act</b>	<b>Job</b>	<b>mean</b>	<b>sd</b>
<b>L<sub>i</sub>P</b>	6.94	6.41	6.23	5.91	5.58	5.45	5.4	4.9	<b>5.9</b>	2.6
<b>L<sub>i</sub>N</b>	9.1	9.02	10	10.45	11.01	10.01	9.96	8.02	<b>10</b>	6.7
<b>L<sub>n</sub>N</b>	5.75	6.52	8.18	6.48	6.23	7.77	7.06	6.74	<b>6.9</b>	3.1

**Table 10** Average length of analyzed phrases of *sě*

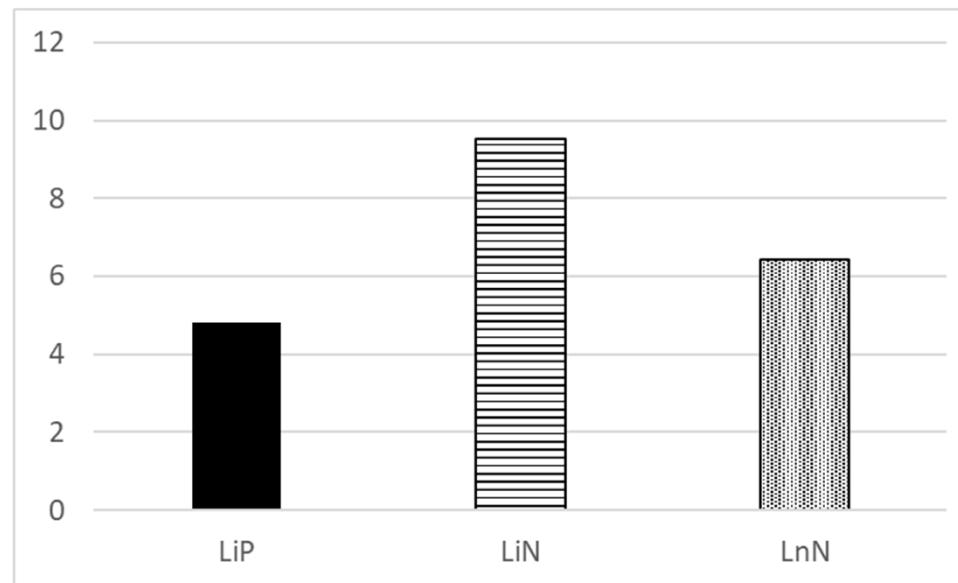


**Figure 2** Average length of phrases of *sě* presented in Table 4.

# Influence of rhythmic rule – results, *mi*

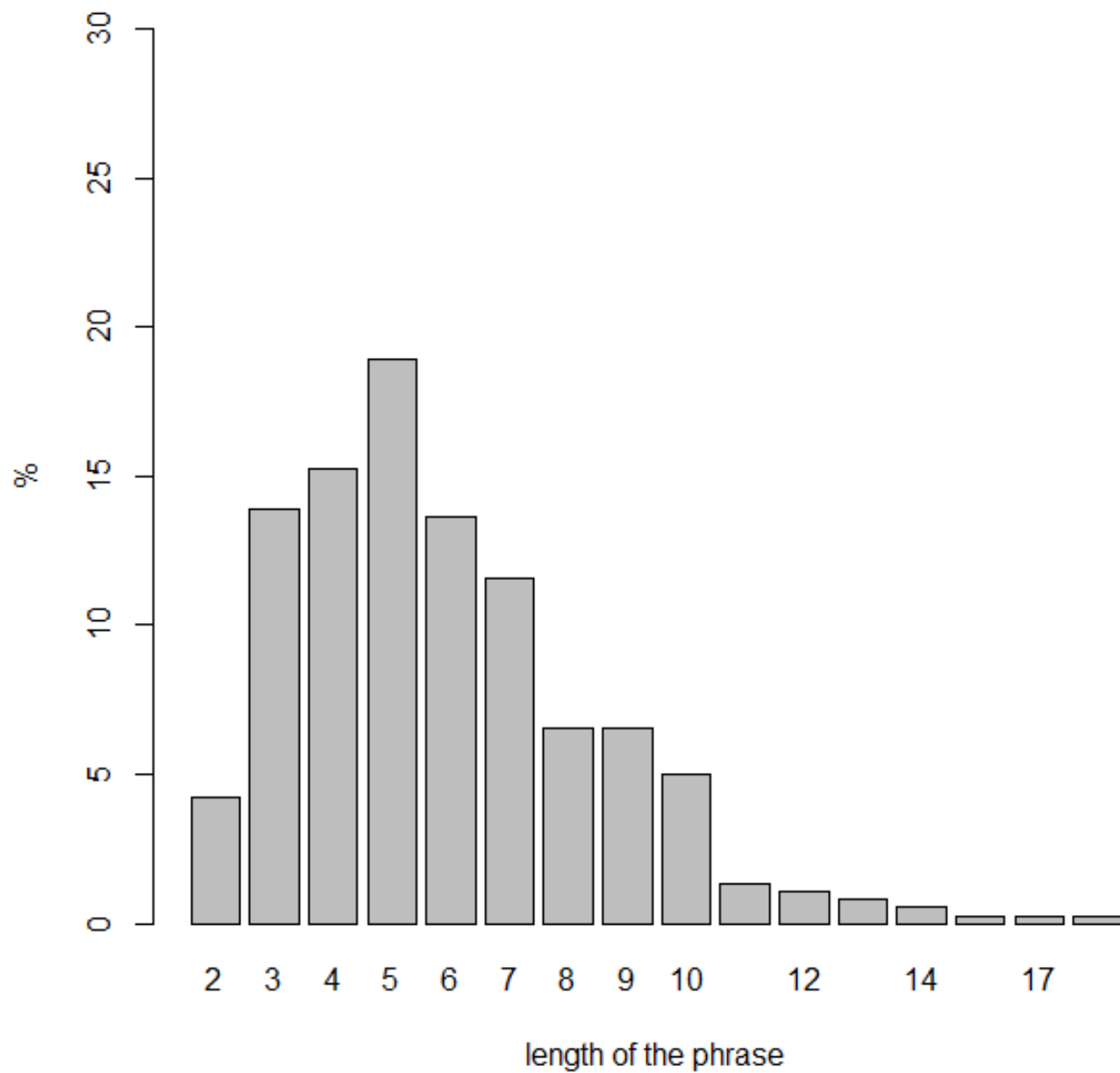
<b>Lk+Sir+Isa+Gen+Mt+Rev+Act+Job</b>		
	<b>mean</b>	<b>sd</b>
<b>L<sub>i</sub>P</b>	4.82	2.43
<b>L<sub>i</sub>N</b>	9.54	6.23
<b>L<sub>n</sub>N</b>	6.42	2.04

**Table 11** Average length of analyzed phrases of *mi*

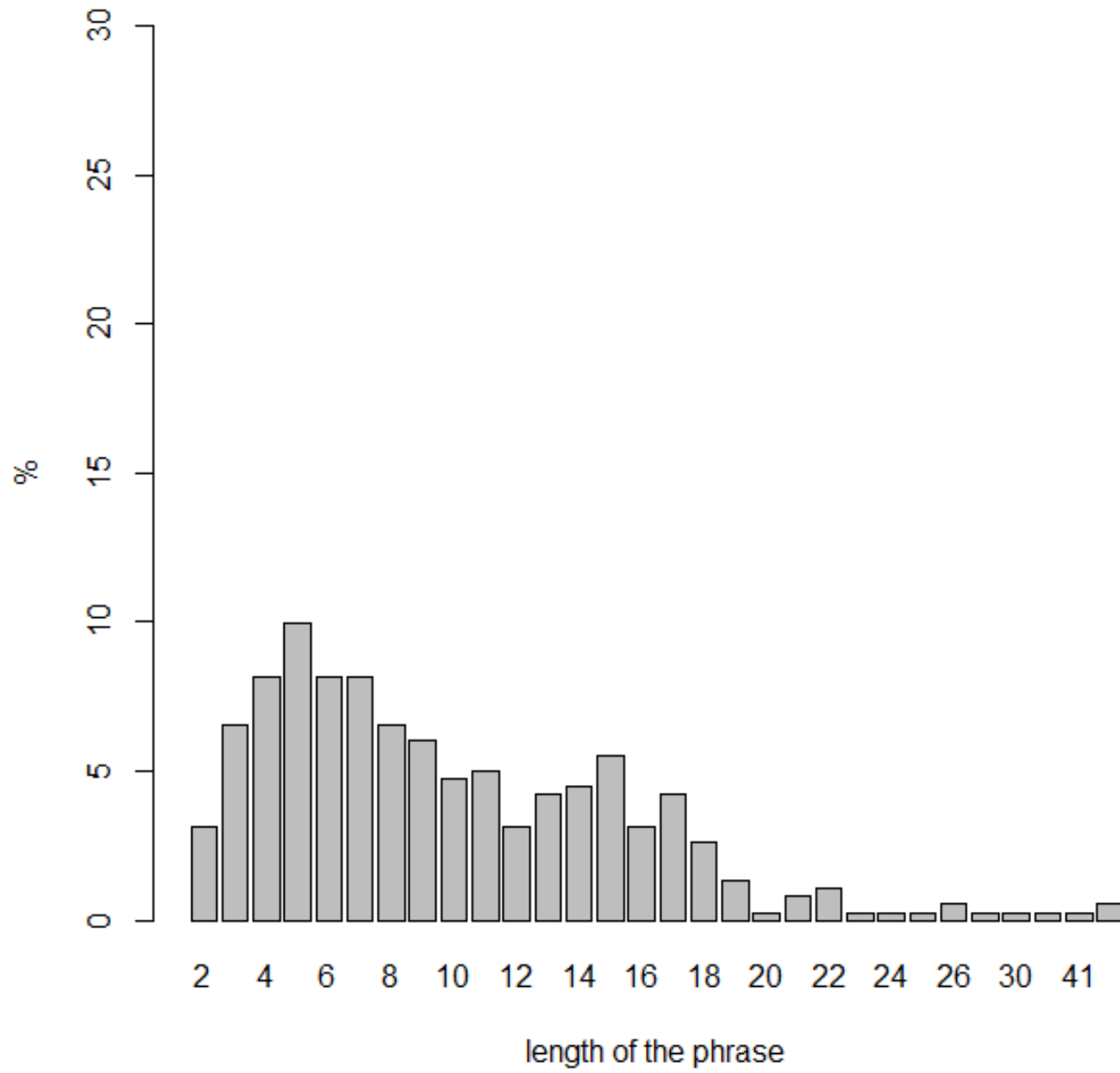


**Figure 3** Average length of phrases of *mi* presented in Table 11

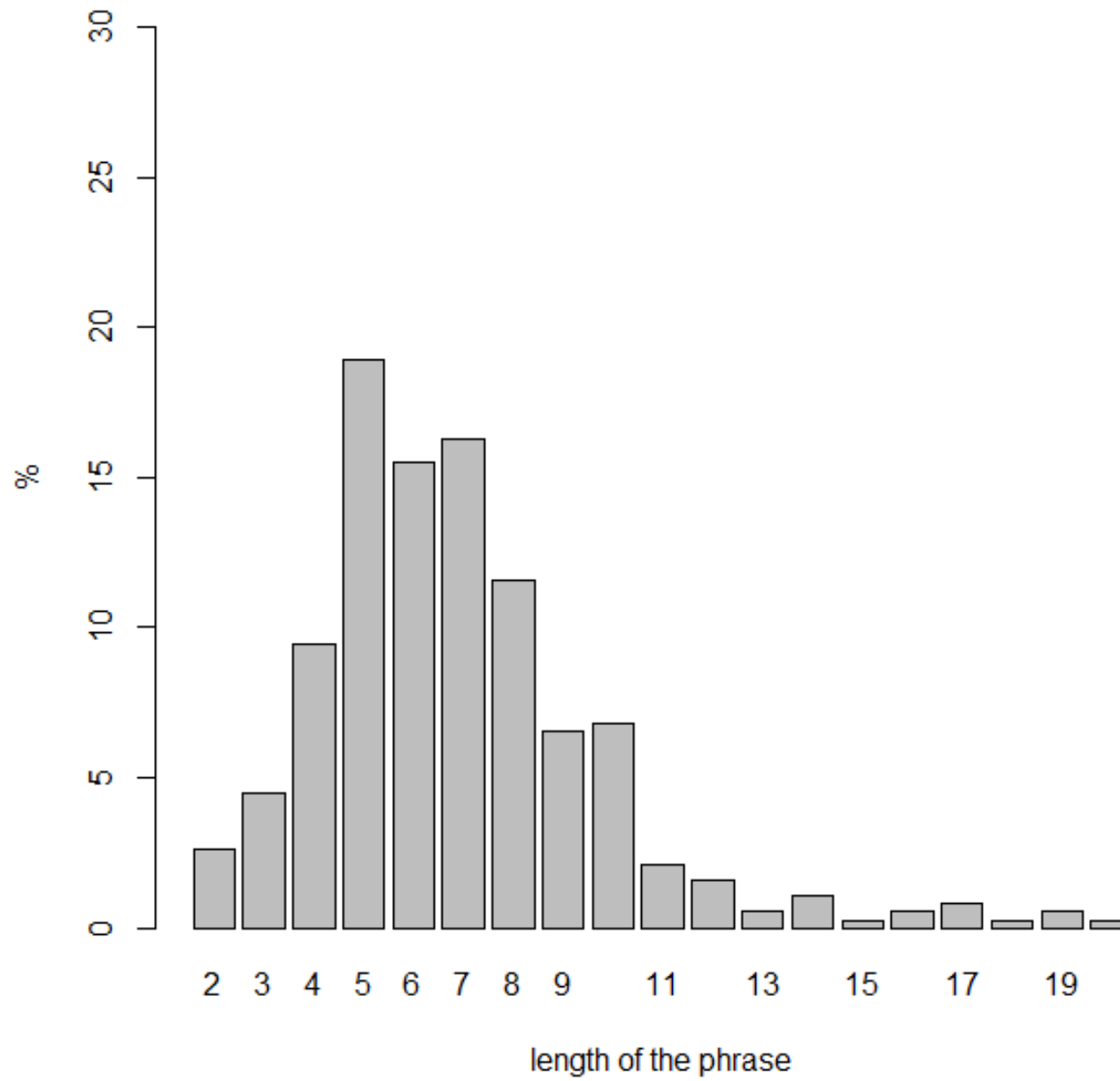
## LiP sě



# LiN sě

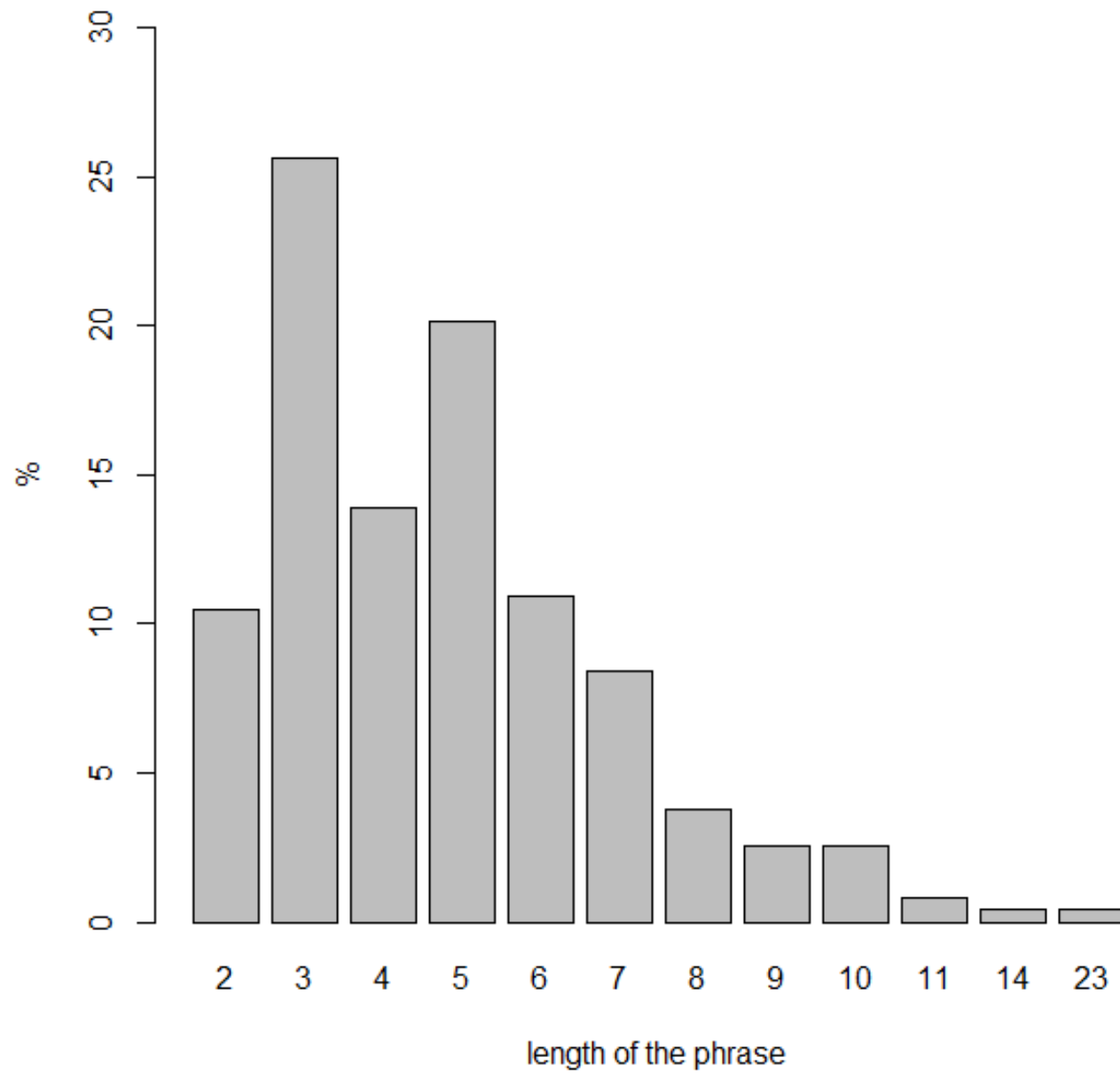


## LnN sě

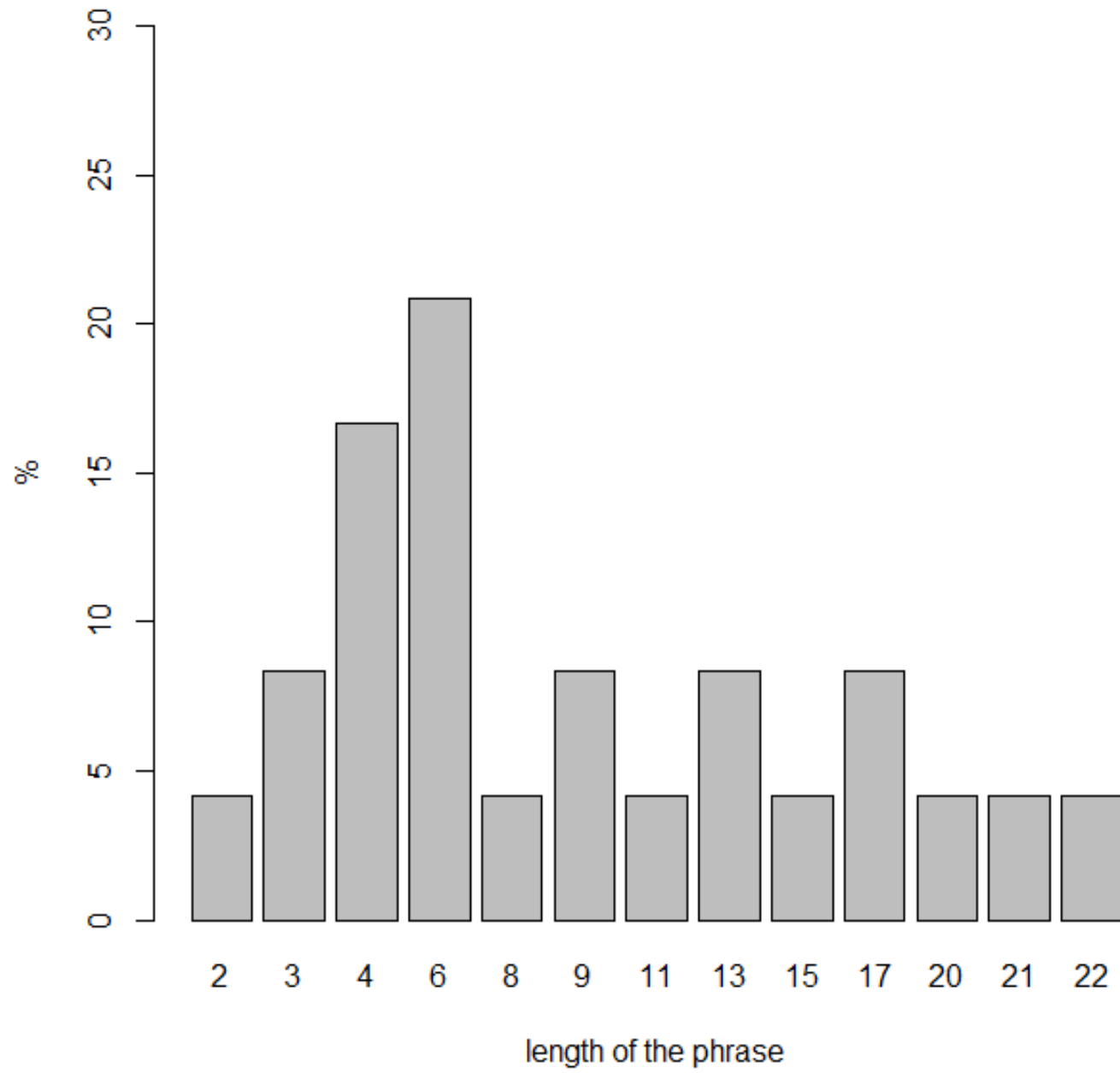




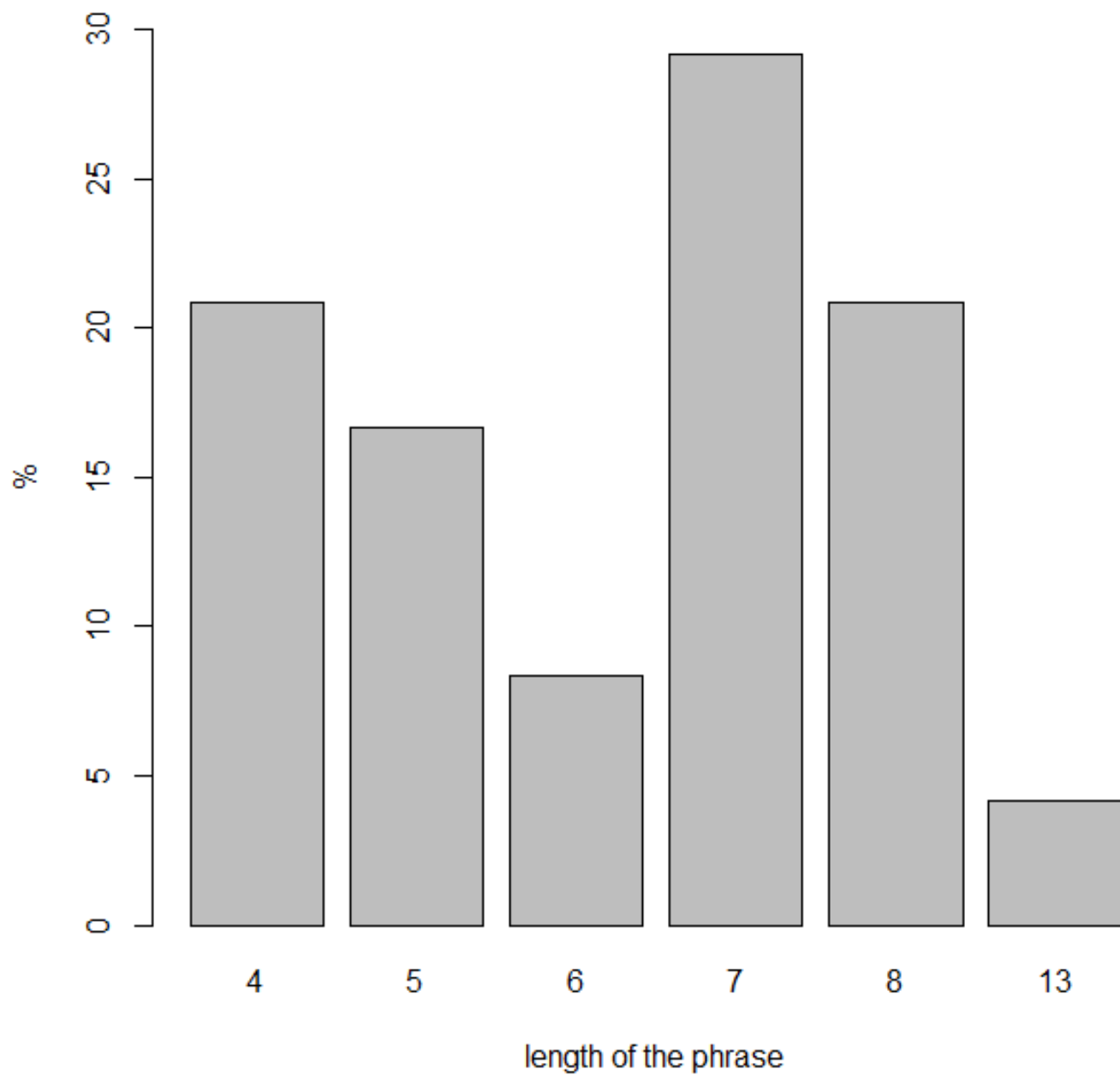
# LIP mi



# LiN mi



### LnN mi



# Violation of rhythmic rule

The rhythmic rule should be understood as a tendency rather than as a law.

There are several examples that violate this rule:

1. Clauses that contain a short word in the first position (motivated by information structure):

(23) a. .... *a vstana beřiř sě k Labanovi, bratru mému, do Aram a tu přebudeř několik časův s ním,*  
[ažt̚][zatiem] sě **uspokojí** hněv bratra tvého BiblOl Gen 27,43–44

b. ... *donec requiescat furor fratris tui...* BiblVul

(24) a. *Vše, cožkoli die Sára, poslušen bud' jie, [nebo][po Izákovi][tvé siemě] sě **rozplodí*** BiblOl Gen 21,12

b. ... *quia in Isaac vocabitur tibi semen...* BiblVulClem

2. Clauses with an (en)clitic after a long phrase (to avoid the final position) demonstrated by ex. (24a) [tvé siemě] sě or (8a):

(20) a. ... **a** [na ten dóm] sě **obořichu**,... BiblOl Mt 7,27

# Influence of Latin pretext – *sě* I

Only in several cases, the position of the reflexive corresponds with the clausal positions of the following Latin items:

## A. Latin personal pronouns *se, te*

(25) a. ... věrně pravi vám, že **opáše** sě káže jim za stuol siesti... BiblOl Lk 12,37

b. ... *quod praecinget se*... BiblVul

(26) a. Viz, aby nikomému nepravil, ale jdi **a ukaž** sě kněží a ofěruj dar,... BiblOl Mt 8,4

b. *uide nemini dixeris sed uade ostende te sacerdoti et offer munus*... BiblVul

## B. Latin auxiliary verb?

(27) a. A aj, **učinila** mi sě stezka hojná... BiblOl Sir 24,43

b. *Et ecce factus est mihi tramis abundans*,... BiblVul

(28) a. A [v ten čas] **narodil** sě jest Mojžieš, jenžto byl vzácen bohu... BiblLitTřeb Acts 7,20

b. *Eodem tempore natus est Moses, et fuit gratus Deo*:... BiblVulClem

# Influence of Latin pretext – *sě* II

But in most cases, the positions of the Old Czech *sě* is not influenced by the Latin Vulgata:

a) The Latin pronoun / auxiliary and *sě* are placed in different clausal positions:

(29) a. ... a dáno jest jemu, aby *sě* ***přikryl*** čamlat stkvúcí biely BiblOl Rev 19,8

b. *et datum est illi ut cooperiat se býssinum splendens et candidum* BiblVul

(30) a. A to *sě* vše ***stalo*** proto, aby *sě* naplnilo slova proroka Izaiáše v sedmé kapitole, jenž praví a řka takto: BiblOl Mt 1,22

b. *hoc autem totum factum est ut adimpleretur id quod dictum est a domino per prophetam dicentem...* BiblVul

b) There is not a Latin pronoun / auxiliary in Vulgata that would be translated by *sě* or by a reflexive verb, e. g. *budeš sě modliti* – *adorábis* in ex. (18a.,b.), *sě uspokojí* – *requiescat* in (23a.,b.) or *sě rozplodí* – *vocabitur* (24a.,b.)

Latin pretext	Old Czech <i>sě</i>	Gen	Sir	Mt	Zj	Σ
<b>pronoun</b>	identical clausal position	4	7	8	7	26
	%					6,5
	different clausal position	0	5	11	3	19
	%					4,8
<b>periphrastic verb forms</b>	identical clausal position	21	1	0	17	39
	%					9,8
	different clausal position	10	3	2	11	26
	%					6,5
<b>synthetic verb forms</b>		64	83	77	61	285
	%					71,2
<b>no Latin form</b>		1	1	2	1	5
	%					1,2
Σ		100	100	100	100	400

**Table 12** Latin pretext translated by the reflexive pronoun *sě* or by the reflexive verbal form – first 100 examples

Latin pretext	Old Czech <i>sě</i>	Gen	Sir	Mt	Zj	Σ
<b>pronoun</b>	identical clausal position	<b>1</b>	<b>8</b>	<b>0</b>	<b>5</b>	<b>14</b>
	%					<b>7,5</b>
	different clausal position	1	0	0	0	1
						0,5
<b>periphrastic verb forms</b>	identical clausal position	<b>6</b>	<b>3</b>	<b>12</b>	<b>1</b>	<b>22</b>
	%					<b>11,7</b>
	different clausal position	0	3	5	3	11
	%					5,9
<b>synthetic verb forms</b>		17	66	42	13	138
	%					73,4
<b>no Latin form</b>		0	1	1	0	2
	%					1,5
<b>Σ</b>		25	81	60	22	188

**Table 13** Latin pretext translated by the reflexive pronoun *sě* or by the reflexive verbal form – "non-postinitial positions"



# Influence of Latin pretext – *mi* I

In most cases, the form *mi* is translation the Latin pronoun *mihi* or *me*:

(31) a. *I povola pak farao Abrama a řka jemu: „Co jest, jeřto-s mi učinil? Proč-s mi nezjevil, že jest tvá žena? BiblOl Gen 12,18*

b. *Vocavitque Phárao Abram, et dixit ei: Quidnam est hoc quod fecisti mihi ? quare non indicásti quod uxor tua esset? BiblVulClem*

(32) a. [*Hospodin böh*] *otevřěl mi jest ucho a já proti tomu nemluvím,... BiblOl Isa 50,5*

b. *Dóminus Deus apéruit mihi aurem, ego autem non contradíco... BiblVulClem*

(33) a. *Ale však slúžiti si mi kázal v hřešiech v tvých, dal si mi dielo v nepravostech tvých BiblOl Is 43,24*

b. *verúmtamen servíre me fecisti in peccátis tuis; præbuísti mihi labórem in iniquitátibus tuis BiblVulClem*

(34) a. *Smiech böh učinil mi; ktožkoli to uslyší, bude mi sě přismievati BiblOl Gen 21,6*

b. *Risum fecit mihi Deus: quicúmque audíerit, corridébit mihi BiblVulClem* latinské zájmeno – rozdíl

Only in a few examples, the Vulgata does not contain a Latin pronoun, i.e. ex. *Proč-s mi nezjevil* in ex. (31) or *nepodals mi* in ex. (35)

(35) a. *Všel sem v tvój dóm; nepodal-s mi vody mým nohám,... BiblOl Lk 7,44*

b. *Intrávi in domum tuam, aquam pédibus meis non dedísti... BiblVulClem*

Old Czech <i>mi</i>	Gen	Sir	Isa	Job	Mt	Lk	Acts	Rev	Σ
identical clausal position	46	6	10	16	16	17	14	11	<b>136</b>
%									
different clausal position	41	5	1	15	10	3	13	1	<b>89</b>
%									
no Latin form	21	1	0	10	2	2	1	2	<b>39</b>
%									
Σ	<b>108</b>	<b>12</b>	<b>11</b>	<b>31</b>	<b>28</b>	<b>22</b>	<b>28</b>	<b>22</b>	<b>264</b>

**Table 14** Latin pretext translated by the pronoun *mi*

Old Czech <i>mi</i>	Gen	Sir	Isa	Job	Mt	Lk	Acts	Rev	Σ
identical clausal position	9	2	4	4	0	1	1	1	<b>22</b>
%									
different clausal position	2	0	0	0	0	0	0	0	<b>2</b>
%									
no Latin form	0	0	0	0	0	0	0	0	<b>0</b>
%									
Σ	<b>11</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>24</b>

**Table 15** Latin pretext translated by the pronoun *mi* – "non-postinitial positions"

# Conclusions

- *sě* and *tě* keeps some relic of an original stressed word
- overwhelming majority of examples shows their (en)clitic status
- the pronominal enclitic forms appear in both postinitial and contact positions (and their variants)
- 2P position is the basic position
- VA position is motivated by
  - rhythmic rule
  - style
- the word order position of pronominal forms corresponds with Latin pretext

Thank you!

# References

- Agresti, A. 2013. *Categorical Data Analysis*. Hoboken (NJ).
- Avgustinova, T., Oliva, K. 1997. On the nature of the Wackernagel position in Czech. In Junghanns, U., Zybatow, G. (eds.). *Formale Slavistik*. Frankfurt a. M: 25–47.
- BiblVul = Wordsworth, White, (eds.). 1889–1898, 1954. *Nouum testamentum domini nostri Iesu Christi Latine I–III*. Oxford.  
= *Biblia sacra iuxta vulgatam versionem ad codicum fidem iussu Pii PP. XI. Librum Genesis I–XI*. 1926–1957. Rome.
- BiblVulClem = *Clementine Vulgate* [available at <http://vulsearch.sourceforge.net>]
- Benjamini, Y., Yekutieli, D. 2001. *The control of the false discovery rate in multiple testing under dependency*. The Annals of Statistic 29: 1165–1188.
- Ertl, V. 1924. Příspěvek k pravidlu o postavení příklonek. *Naše řeč* 8(9) 257–268; 8(10) 293–309.
- Franks, S., King, T.H. 2000. *A Handbook of Slavic Clitics*. Oxford.
- Gebauer, J. 1896. *Historická mluvnice jazyka českého III/1. Tvarosloví – skloňování*. Praha.
- Gebauer, J. 1929. *Historická mluvnice jazyka českého IV. Skladba* (Trávníček, F., ed.). Praha.
- Gebauer, J. 1906. *Historická mluvnice jazyka českého III/1. Tvarosloví – časování*. Praha.
- Halpern, A. 1995. *On the Placement and Morphology of Clitics*. Stanford.
- Havránek, B. 1928. *Genera verbi v slovanských jazycích 1*. Praha.
- Hochberg, Y., Tamhane, A.C. 1987. *Multiple Comparison Procedures*. New York.
- Junghanns, U. 2002. Klitische Elemente im Tschechischen: eine kritische Bestandaunahme. In Daiber, T. (ed.), *Linguistische Beiträge zur Slavistik IX*. München. Sagner: 117–150.
- Karlík, P., Nekula, M., Pleskalová, J. (eds.). 2016. *Nový encyklopedický slovník češtiny*. Praha.
- Kosek, P. 2011. *Enklitika v češtině barokní doby*. Brno.
- Kosek, P. 2017. Wortstellung des Präteritum-Auxiliars in der alttschechischen Olmützer Bibel. *Die Welt der Slaven* 62(1) 22–41.
- Kosek, P., Čech, R., Navrátilová, O., Mačutek, J. 2018. [forthcoming] *Glottometrics*.
- Kyas, V. 1997. *Česká Bible v dějinách národního písemnictví*. Praha.
- Kyas, V. (ed.). 1981. *Staročeská bible drážďanská a olomoucká: kritické vydání nejstaršího českého překladu bible ze 14. století. I. Evangelia*. Praha.

- Kyas, V. (ed.). 1985. *Staročeská bible drážďanská a olomoucká: kritické vydání nejstaršího českého překladu bible ze 14. století s částmi Bible litoměřicko-třeboňské. II. Epištoly. Skutky apoštolů. Apokalypsa*. Praha.
- Kyas, V. (ed.). 1985. *Staročeská bible drážďanská a olomoucká: kritické vydání nejstaršího českého překladu bible ze 14. století s částmi Bible litoměřicko-třeboňské. II. Epištoly. Skutky apoštolů. Apokalypsa*. Praha.
- Kyas, V. (ed.). 1988. *Staročeská bible drážďanská a olomoucká: kritické vydání nejstaršího českého překladu bible ze 14. století. III. Genesis–Esdráš*. Praha.
- Kyas, V., Kvasová, V., Pečírková, J. (eds.). 1996. *Staročeská bible drážďanská a olomoucká: kritické vydání nejstaršího českého překladu bible ze 14. století. IV. Tobiáš–Sirachovec*. Paderborn.
- Lešnerová, Š. 2002. Postavení příklonky „se“ v textu Kryštofa Haranta „Cesta z Království českého... do Země svatě...“. In Hladká, Z., Karlík, P. (eds.) *Čeština – univerzália a specifika 4*. Brno, 325–327.
- Lenertová, D. 2004. Czech pronominal clitics. *Journal of Slavic Linguistics* 12 (1–2), 135–171.
- New English Translation (NET Bible)* [available at <http://www.bible.org/netbible/index.htm>].
- Pancheva, R. 2005. The rise and fall of second-position clitics. *Natural Language and Linguistic Theory* 23(1), 103–167.
- Pečírková, J. et al. (eds.) 2009. *Staročeská Bible drážďanská a olomoucká s částmi Proroků rožmberských a Bible litoměřicko-třeboňské. V/1 Izaiáš–Daniel, V/2 Ozeáš–2. kniha Makabejská*. Praha.
- Pergler, J. 2016. K otázce tzv. akuzativního se v češtině: pohled (nejen) diachronní. *Slovo a slovesnost* 77(2), 102–122.
- Radanović-Kocić, V. 1996. The placement of Serbo-Croatian clitics: A prosodic Approach. In Halpern, A., Zwicky, A. (eds.), *Approaching second: second position clitics and related phenomena*. Stanford, 429–445.
- Ross, S.M. 2006. *Simulation*. Burlington (MA).
- Snedecor, G.W., Cochran, W.G. (1989). *Statistical Methods*. Ames (IA).
- Šlosar, D. 1967. Poloha enklitik jako kritérium k hodnocení staročeské interpunkce. *Listy filologické* 91(3), 251–258.
- Šlosar, D. 1981. *Slovotvorný vývoj českého slovesa*. Brno.
- Toman, J. 2004. Ertlova diskuse českých klitik. – Hladká, Z., Karlík, P. (eds.) *Čeština – univerzália a specifika 5*, 73–79. Brno.
- Trávníček, F. 1956. *Historická mluvnice česká 3. Skladba*. Praha.
- Vážný, V. 1964. *Historická mluvnice česká II. Tvarosloví 1. Skloňování*. Praha.
- Vintr, J. 2008. Bible (staroslověnský překlad, české překlady). In Merhaut, L. et al. (eds.) *Lexikon české literatury, 4/II U–Ž, Dodatky A–Ř*. Praha, 1882–1887.