# Wackernagel's Position and Contact Position of Pronominal Enclitics in Older Czech. Competition or Cooperation?

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**Abstract.** The paper focuses on analyzing the relationship among word order positions of pronominal enclitics in the history of Czech. Specifically, we look at the Wackernagel's position and the contact position and we try to decide whether these two positions compete, as usually taken for granted, or whether there is a certain kind of cooperation between them. The results show that the positions do not compete, at least not in the majority of cases. We used a corpus based on selected books of the first edition of the Old Czech Bible and Kralice Bible for the analysis.

### 1 Introduction

This article focuses on analyzing the word order of older Czech pronominal enclitics dependent on a finite verb in the corpus of selected books from a) the younger copies the first edition of the Old Czech Bible – Olomouc Bible (Bible olomoucká) and the Litoměřice-Třeboň Bible (Bible litoměřicko-třeboňská) – and b) from the Kralice Bible (Bible Kralická). Previous research [1, 2, 3] shows that the word order of the older Czech pronominal (and auxiliary) enclitics follows one of the two main patterns: 1. the pronominal enclitic is in the Wackernagel's position (also called the post-initial position), i.e. the second position in a clause, the example (1) demonstrates this pattern for the enclitic pronominal form *mi* "to me", 2. the pronominal enclitic is in the contact position, i.e. in the position that is in the immediate vicinity of its superordinate verb, its governor (hence, also called verbadjacent position). This pattern is demonstrated in the example (2):<sup>1</sup>

(1) a[ | Kto mi toho pojičí, | [aby byly popsány řěči mé?]]

Both word-order patterns occur in texts of various stages in the historical development of Czech in several variants: 1. the second position differs between the position of the pronominal enclitic after the first phrase of a clause and the position after the first word of the first phrase of a clause, 2. the contact position differs between the position of the pronominal enclitic after its governor (postverbal position) and the position of the pronominal enclitic before its governor (preverbal position). For more details, see [1, 2, 3]

# b. Who<sub>NOM.SG</sub> me<sub>DAT.SG</sub> this<sub>ACC.N.SG</sub> lend<sub>3.SG.FUT</sub><sup>2</sup>

BiblOl Jb 19,23

(2) a. Hospodin bóh otevřěl mi jest ucho...

b. Lord<br/>NOM.M.SG $^{\mbox{God}}$ NOM.M.SG $^{\mbox{open}}$ PTCP.PST.M.SG $^{\mbox{me}}$ DAT.SG $^{\mbox{be}}$ AUX.PRS.3.SG $^{\mbox{ear}}$ ACC.N.SG

BiblOl Isa 50,5

Both word-order patterns (positions) exist in modern Slavic languages [4], so that the situation of older Czech – showing the same variation – is relevant for research of contemporary Slavic languages as well.

Although enclitics are considered to be a group of heterogeneous language units [5, 6], they share some common characteristics (at least stochastic ones) manifested in their phonological and syntactic behavior. First, they are prosodically deficit, i.e. they bear no word stress, and, consequently, they are prosodically joined with the preceding word. Moreover, they have a strong tendency to appear in the second position in a clause and that is true for various languages. This is the well-known Wackernagel's position (also marked 2P in the following text) [7]. In the second position pattern, enclitic's syntactic governor does not have to be the same word that the enclitic is prosodically joined with. Thus, both prosodic and syntactic properties (and their interplay) influence enclitics' word order.

According to the well-accepted assumption, the Wackernagel's position is the original position of enclitics in Indo-European languages and, hence, also a common linguistic pattern in Proto-Slavic. The emergence of the contact position in the historical development of the Slavic languages has been interpreted as a manifestation of the grammaticalization process that transformed enclitics to inflectional affixes [8], cf. Russian *oh cmeraca*, where the original enclitic *ca* is a non-separable part (morpheme) of the word.

To translate the Old Czech examples completely would lengthen this paper unacceptably; hence, we only cite one example for each phenomenon and a gloss is given just for the relevant part of the example (the glossed parts of the example are indicated by a vertical line | ).

Pancheva [9] suggests that the word order of these language units and the development of their positions is more complex. First, she shows that we need a more detailed classification of particular positions in order to understand this phenomenon properly. Second, her analysis of the Old Bulgarian examples challenges the general view on the grammaticalization process substantially. Similarly, [2, 10] discussed other factors that influence the word order of enclitics (especially the possible variations in both the second and contact positions) in older Czech systematically (concerning style, length of the initial phrase, etc.). To sum up, these studies show that the problem requires further discussion.

However, there is an essential problem of the word order of enclitics, and that is the relationship between the Wackernagel's and contact patterns. As alluded to above, the relationship has not been analyzed fully yet, in neither of the above-mentioned works. From recent studies, one might get an impression that the 2P and the contact position are result of different mechanisms, that, somehow, seem to compete with each other. However, the syntactically superior element (the enclitic's governor) can occur in the first and the third position in a clause, i.e. in a position adjacent to the enclitic. In this case, there is no competition between these two positions – if anything, we might talk about cooperation. To our great surprise, there is no detailed analysis of this phenomenon (except [9], where the problem is mentioned, but not analyzed thoroughly). We see the problem as crucial for the following reasons. A finer classification of the elements involved in the 2P position could shed light on the principles behind the Wackernagel's law. For instance, if – in majority of cases – an enclitic falls into the 2P and this position is also the contact position, then it means that the law influences not only the enclitic position, but also the position of the clitic's governor. Alternatively, the position of the syntactic governor can play a more important role than usually assumed even in the case the enclitic is in the 2P. More generally, it is possible to consider this problem as an instance of the least effort principle [11]. In any case, we need better empirical evidence, so that we can gain more substantial insight into the problem. Therefore, in this study, we analyze the relationship between the 2P and the contact position of the enclitic in older Czech.

Our aim is to observe whether their relationship is competitive,

cooperative or neutral (for details see Section 2). Older Czech is chosen intentionally for the following reasons: a) there is a variability of word order (cf. [1, 2, 3]), especially if compared to the contemporary Czech (the relative rigidity of clitic placement in the contemporary Czech might be sought in linguistic prescription established in the middle of the 20<sup>th</sup> century); b) we chose texts that represents both the oldest period (14<sup>th</sup> century) and younger period (16<sup>th</sup> century) with enough language material available for linguistic research. Thus, it is a proper starting point for modelling the historical development of this phenomenon.

# 2 Language Material and Methodology

We chose two Czech Bible editions translated in different periods and from different pretexts: 1. The first edition of the Old Czech Bible (2<sup>nd</sup> half of 14th century), 2. Kralice Bible<sup>3</sup> (1579–1594). This material was chosen for the following reasons: 1. The first edition represents one of the oldest Old Czech prose texts<sup>4</sup> (original Czech texts from an earlier stages are not suitable for the word-order analysis: it is poetry). 2. In our view, the diachronic perspective desired for our research is best brought by comparison of two different historical translations of similar texts. The texts are similar, but crucially, they are not the same: a) the first edition of the Old Czech Bible and Kralice Bible were translated by different translators, b) the first edition of the Old Czech Bible was translated from the Middle Age Latin Vulgata, 5 whereas the Kralice Bible was translated by the members of the Unity of the Brethren (Jednota bratrská) from the Latin and Greek pretexts (New Testament) and Hebrew and Latin pretexts (Old Testament).<sup>6</sup> Since the language material must be annotated manually, we restricted ourselves to the selected books both from the Old and New Testament. Intentionally, we selected texts with different styles and structure, as well as texts by different translators: The Gospels of Matthew and Luke, the Acts of the Apostles, the Revelation of John from the New

Testament and Genesis, Job, Sirach, and Isaiah (chapters 14 to 66) from the Old Testament. For compiling this transcribed corpus, we used 1.

This Bible was highly valued for its brilliant language and it was re-printed repeatedly. It also served as a model (and an unattainable) ideal for the Modern Czech codification in the 19<sup>th</sup> century.

<sup>4</sup> From the philological perspective, the language of the Bible is discussed in [12].

<sup>5</sup> For details, see [13].

<sup>6</sup> For details, see [14].

the modern edition of the Olomouc and Litoměřice-Třeboň Bible, i.e. the younger copies (from the beginning of 15<sup>th</sup> century) of the original Old Czech translation (the original itself has not been preserved) [15, 16, 17, 18, 19], 2. the first edition of the Kralice Bible (1579–1594).

To observe "competition" and/or "cooperation" of the two possible word order patterns of enclitics, the language material is annotated as follows. We determine

- a) The *postinitial contact position* (2PC position). In this case, the enclitic (E) occurs right after the initial phrase which is its governor (G), schematically
- (3) [G] [E] []\*

(the symbol []\* represents zero or more syntactic units of the clause) or the enclitic (E) occurs after the initial phrase of any type, except its governor ([]) and the enclitic is immediately followed by its governor (G), schematically

b) The *post-initial isolated position* (2PI position). In this case, the enclitic (E) occurs after the initial phrase of any clausal element type except its governor ([]) and it is followed by one or more syntactic element(s) of any clausal element type except its governor ([]+), schematically

c) The *non-post-initial contact position* (NPC position). In this case, the enclitic (E) occurs anywhere except in the post-initial position and it is adjacent to its governor, schematically

or

$$(7) []+[G][E][]*$$

d) The *non-post-initial isolated position* (NPI position). In this case, the enclitic (E) occurs anywhere except in the post-initial position and it is not adjacent to its governor, schematically

or

It should be noted that the example (9) was not attested in Slavic languages [4] and should be considered ungrammatical.

The distribution of these positions is examined on the pronominal form mi (to me). This form was a permanent enclitic already in Proto-Slavic and appears with sufficient frequency in the analyzed biblical texts. The other pronominal forms are either not documented at all (si, ti) (to  $myself/to\ yourself$  etc., to you), or documented in just a few examples (ho, mu)  $(him, to\ him)$ , or are not used at all for different reasons;  $s\check{e}$ ,  $t\check{e}$  (myself/yourself etc., you), for instance, could sometimes bear stress and could be used after prepositions.

Frequency of particular positions in the corpora was observed and their proportions were counted. The results are to be interpreted in the following way: a) the prevalence of the 2PC position suggests that there is a cooperation between mechanisms leading to the Wackernagel's position and the contact position; b) the prevalence of the 2PI position means that the Wackernagel's law is dominant and it is in competition with the contact position; c) the prevalence of the NPC position should be interpreted so that the contact position is dominant and it is in competition with the Wackernagel's law, d) the prevalence of the NPI position means that neither the Wackernagel's law nor the contact position influence the word order of the enclitics in any way.

# 3 Results

The absolute and relative frequencies of particular positions are shown in Table 1, 2 and Figure 1.

2PC	2PI	NPC	NPI	Σ
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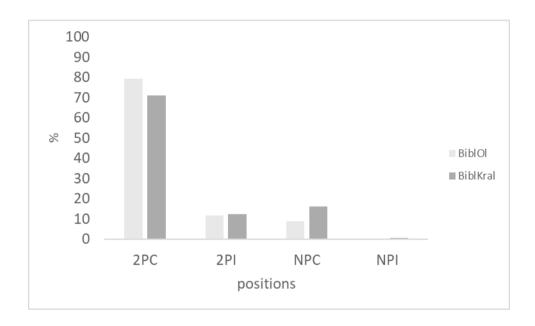
Gn	83	14	11	0	108
%	76.85	12.96	10.19	0	
Jb	33	4	3	1	41
%	80.49	9.76	7.32	2.44	
Ecc	8	2	2	0	12
%	66.67	16.67	16.67	0	
Iz	7	0	4	0	11
%	63.64	0.00	36.36	0	
Mt	22	6	0	0	28
%	78.57	21.43	0	0	
Lk	19	2	1	0	22
%	86.36	9.09	4.55	0	
Sk	26	1	1	0	28
%	92.86	3.57	3.57	0	
Zj	11	2	1	0	14
%	78.57	14.29	7.14	0	
Σ	209	31	23	1	264
%	79.17	11.74	8.71	0.38	

Table 1. Absolute and relative frequencies of particular positions in the Olomouc Bible.

	2PC	2PI	NPC	NPI	Σ
Gn	74	12	16	1	103
%	71.84	11.65	15.53	0.97	
Jb	32	7	9	0	48
%	66.67	14.58	18.75	0.00	
Ecc	8	2	2	0	12
%	66.67	16.67	16.67	0.00	
Iz	25	4	10	0	39
%	64.10	10.26	25.64	0.00	
Mt	25	4	2	0	31
%	80.65	12.90	6.45	0.00	

Lk	15	3	5	0	23
%	65.22	13.04	21.74	0.00	
Sk	21	5	4	1	31
%	67.74	16.13	12.90	3.23	
Zj	22	1	2	0	25
%	88.00	4.00	8.00	0.00	
Σ	222	38	50	2	312
%	71.15	12.18	16.03	0.64	

Table 2. Absolute and relative frequencies of particular positions in the Kralice Bible.



**Fig. 1.** Relative frequencies of particular positions in the Olomouc Bible (BiblOl) and the Kralice Bible (BiblKral).

The results show that the 2PC position is clearly dominant in all the cases. It means that the Wackernagel's position and the contact position are not in competition in the majority of cases. Furthermore, this result is not influenced by the style of the pretext or the translation. Moreover, a comparison of the Olomouc Bible and the Kralice Bible shows the same tendency in both corpora. Even though there are some differences

(a higher proportion of the NPC position accompanied with a lower proportion of the 2PC position in the Kralice Bible), the application of simulate chi-square test reveals that the result is on the border of significant difference (for the significance level  $\alpha = 0.05$ ),  $\chi 2 = 7.47$ , p-value = 0.058. This means that despite a) the time span of 200 years, b) the different pretexts, and c) different translation "strategy" [14], we identify a stable language behavior for the clitic placement phenomenon.

As for the 2PI and the NPC positions, the differences in their proportions in various biblical books are striking. However, absolute frequencies are too small, thus, it would be wrong to interpret these results. Nevertheless, the above-mentioned higher proportion of the NPC position in the Kralice Bible (for all the books in the corpus), can be interpreted as pointing towards an increasing competition between these two positions. However, only further research can reveal whether it is a manifestation of the historical development, or specificity of the translators of the Kralice Bible, or, eventually, whether it is only a random fluctuation (cf. above-mentioned result of the statistical test). Finally, the minimal frequency of the NPI position shows that there had been a very strong tendency to avoid such word order patterns that do not follow the main enclitic placement strategies, i.e. in the Wackernagel's and/or the contact position (even if the position might be grammatical).

### 4 Conclusion

Our results show that the word order of the selected Czech enclitic pronominal form mi (me) in the chosen two historical Czech Bibles is by and large limited to the two dominant word-order patterns: the Wackernagel's position and the contact position. Surprisingly, these two positions do not compete with each other but rather cooperate: most examples in our study are clauses in which the post-initial and the contact position of an enclitic merge. A question that requires further research is whether this situation is specific to the language of biblical translation or whether it manifests a general mechanism and, further, whether this situation has changed during the following development of Czech

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