

An Analysis of the Influence of Greek Texts on Negative Concord in Old Church Slavic

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Abstract

This study seeks to investigate how negative concord works in conjunction with negation strategies of Old Church Slavic (OCS), comparing this process in biblical OCS with original Slavic compositions. This work expands on the preliminary investigation done by Klein (2011), which used early Indo-European language translation of the Biblical Gospels. The specific locus of this paper is over the nature of negative concord, defined as the use of an NCI (Negative Concord Item) in conjunction with a negative verb. Negative concord can be strict (always using a negative verb when an NCI is present) or non-strict (only using a negative verb if it precedes an NCI), and OCS shows evidence of both types (Dočekal, 2009; Willis, 2013). A popular opinion for this variation lies in register, with Willis (2013, supporting an earlier opinion by Vaillant 1948) stating that a lack of negative concord where an NCI precedes the verb is due to the influence of works translated from Greek. Were this the case, one would expect to see a clear distinction in the rate of negative concord, with full presence in original Slavic compositions, and significantly fewer in religious translations. Despite this, there are many examples in early Slavic languages of an NCI preceding a positive verb in a secular text. These examples demonstrate that the secular vs. religious distinction may not be sufficiently descriptive in justifying the discrepancy in the application of negative concord. This work surveys the instances of NCIs preceding their verbs in the OCS Gospels- translations from Biblical Greek- and a selection of texts from native Slavic compositions. This test case will serve to discern whether the difference in rate of negative concord between texts translated into OCS and native OCS texts is significant.

1 Goal

The goal of this paper is to analyze the phenomenon of negative concord (NC) in Old Church Slavic. Many authors have acknowledged the strange way in which

the language expresses NC- specifically that it shows features of both *strict* and *nonstrict* NC- and have proposed various theories, including contact interference from Greek (Dočekal, 2009; Šimić, 2022; Vaillant, 1963; Willis, 2013). This paper seeks to test the theory that any absence of NC is due to outside influence. To this aim the texts are checked in hopes of finding that in original Old Church Slavic materials there is more NC than is found in translated documents.

2 Background

NC refers to the pairing of some negative element with the negated verb. This paper will only be treating the basic type of this phenomenon, *negative doubling*, where a NC Item (hereafter, NCI¹), defined as an indefinite pronoun with negative polarity, is paired with a negative verb (see Willis, 2013, p. 30). This particular type of NC can also be referred to as *proper*, or *classic*, NC (Giannakidou, 2000, p. 458). Examples of NC can be found in (1)². Note the lack of optionality with regard to the negative markers.

1. (a) Italian
Gianna *(non) ha visto niente
Gianna not has seen n-thing
'Gianna hasn't seen anything'
- (b) Polish
Janek *(nie) pomaga nikomu
Janek not help n-person
'Janek doesn't help anyone'
- (c) Greek
*(Dhen) ipa tipota
Not Said.1SG n-thing
'I didn't say anything'
- (d) Japanese
John-wa nani-mo tabe-*(nak)-atta
John.TOP n-thing eat-not-PAST
'John didn't eat anything'

Additionally, there are two different types of NC. *Strict NC* is what we call the correlation of an NCI with a negative finite verbal element, regardless of position, as seen above. Examples of languages which reflect strict NC are the Slavic

¹NCI as a term is used after Gianollo (2021); Another common term for this element is *n-word*, coined by Laka (1990, p. 108)

²Examples taken from Giannakidou and Zeijlstra (2017, p. 7), gloss altered to better fit discussion.

languages and Greek. Further, there is *non-strict NC*, wherein the finite verb is negative only where it precedes the accompanying NCI. Languages which reflect the non-strict version of NC include most of the Romance languages.

Where (1) showed examples of the strict version of NC, (2) uses Italian³ to indicate non-strict NC. When the NCI is postverbal, as in (a) and (b), one expects NC. If the NCI comes first, as in (c) then the verb must reflect positive polarity.

2. Italian

- (a) Non ha telefonato nessuno
NEG has called n-person
'nobody called.'
- (b) *Ha telefonato nessuno
Has called n-person
- (c) Nessuno ha telefonato a nessuno
NEG.person has called to n-person
'nobody has called anybody.'

Modern Balto-Slavic languages have the strict version of NC in the classic sense: NCI correlated with a negative finite verbal form in free order⁴.

Traditionally, Old Church Slavic (OCS) is considered a non-strict NC language, though with some peculiarities. Where one would expect the verb to be positive any time the NCI is fronted, in fact this only occurs about 1/3 of the time. In 2/3 of the data the verbal element is negative, even when following the NCI⁵.

3. Examples of NC in OCS

- (a) ne jęsomŭ nięesože
'we did not take anything' Luke 5:5
- (b) nikoliže zapovědi tvoeję ne přęstopixŭ (...)
'I never broke your command (...)' Luke 15:29
- (c) ničįsože otŭvēštavaaše
'he answered nothing' Matt 27:12

While Attic Greek is considered non-strict, Modern Greek illustrates the strict version of NC⁶. The OCS earliest gospels were translated from the Greek versions that demonstrated the non-strict version of NC.

³Examples taken again from Giannakidou and Zeijlstra (2017, p. 7), gloss again altered to better fit discussion.

⁴For a more thorough examination of the modern languages, with an analysis of exceptional instances for other negative element types, see van der Auwera et al. (2021).

⁵For more information about these figures see Dočekal (2009) and Večerka (1996).

⁶See Muchnová (2019) for an analysis of negative concord in Ancient Greek, wherein a more nuanced interpretation of the type of non-strict negative concord reflected by Ancient Greek differs slightly from what we expect in languages like Italian.

Willis (2013, p. 371) promotes Vaillant’s (1963) assertions that while Common Slavic was a non-strict variety, the language was already making the change towards a strict system well before any split or attested writing. He goes on to say that any vestiges, therefore, in OCS of non-strict NC are reinforced by influence from early writings being translated from Greek. Essentially, their proposal is that the lack of NC in OCS writing is a direct result of Greek influence. This paper assumes that if this were true, one would expect to see lower rates of NC where the NCI is preverbal in those documents which are translations from Greek material, but higher frequencies of concord in original constructions.

3 Methods

3.1 Source Texts

In pursuit of testing this theory, two sets of OCS data were collected- one reflecting translated works, the other those of non-translated sources. Ideally these collected works would be from the same time and location, to preserve an accurate comparison, controlling for dialect. Unfortunately, the available corpora of original Slavic texts do not number very high, and even fewer offer the type of data under scrutiny in this study. The four canonical gospels were selected to represent the translated material, while those reflecting original construction are a series of unrelated texts as described in Table (1).

Table 1: OCS Document Choices

Translated:			
Codex Marianus ⁷	9 th century	Church Slavic South Slavic	
Non-Translated:			
Vita Methodius ⁷	9 th century	Church Slavic South Slavic	
Vita Constantine ⁷	9 th century	Church Slavic South Slavic	
Primary Chronicle ⁸	12 th century	East Slavic, with Southern features	

The Codex Marianus represents translated data, being the majority of the four-fold gospels. It starts with Matthew 5:24 and continues to John 21:17. The manuscript itself is from Macedonia, copied some time in the 11th century, but

⁷As found on the TITUS database- <https://titus.uni-frankfurt.de/indexe.htm>
⁸From the Laurentian Codex; http://expositions.nlr.ru/LaurentianCodex/_Project/page_Show.php

the source text is presumed to date to the 9th century, reflecting the earliest written language, which in turn is so like Common Slavic as to suggest things about the language before it split into the various dialects and branches. The non-translated material is collected from the vitae of Constantine and Methodius, both written shortly after the death of their namesakes in the 9th century. The Life of Constantine is considered the oldest work penned in Old Church Slavic, again showing the oldest layers of the language under scrutiny. Both of these are accounts of the lives of men significant to the history of the Slavic peoples. The final source of data is the Primary Chronicle, which at first glance seems out of place. It was composed later than the other texts used in this study, but in truth probably only about 100 years passed between the composition of the vitae and the writing of the Primary Chronicle in the very earliest parts of the 1100's. This last text is from Kiev, detailing a history of the Rus' people from the years 850 to 1110. This officially an area where East Slavic was spoken. The Chronicle itself, however, is written with South Slavic features, making it a match for the current study. The Laurentian Codex itself is a copy surviving from the late 14th century.

3.2 Tokens

Each work was searched for clauses bearing an NCI, the classic examples⁹ of which are listed in Table (2).

Table 2: The NCI in OCS

	N	A	G	L	D	I
M/F	nikъto(že)	nikogo(že)	nikogo(že)	nikomъ(že)	nikomu(že)	ničemъ(že)
N	ničъto(že)	ničъto(že)	ničeso(že)	ničemъ(že)	ničesomu(že)	ničimъ(že)

In OCS, the NCI is canonically comprised of the negative item *ni* prefixed to the interrogative series (*kъto*, and its declensions) prototypically with a suffixed *že*. The interrogative adjective can also pair with the *ni* prefix and function in the same capacity as the pronoun. See Gardiner (1984, p. 49) for a more thorough explication of these forms. Additionally, there are other words such as 'never' *nikoliže* which compel the same behaviour as an NCI but that does not follow the compositional formula of *ni* plus an interrogative.

Subsequently, every result with an NCI was checked for both position relative to the finite verb, and whether or not the verb was negated, thus providing the rate of NC as well as the type (strict versus non-strict). Examples of this can be found in (4)¹⁰ below.

⁹These examples reflect the canonical spelling- variations exist and were considered during data collection.

¹⁰All biblical passages are taken from the Codex Marianus as cited previously.

4. OCS NCIs in context

(a) Preverbal NCI with NC

azъ nikoliže ne sъblažnjō sę
 1.SG.NOM never NEG give into temptation
 ‘I will never give into temptation.’

Mt 7:23

Postverbal NCI with NC

(b) da ne pogybletъ nichъtože
 that NEG perish.PRES.3SG nothing
 ‘That nothing shall perish.’

Jo 6:12

Preverbal NCI with no NC

(c) ěko nikoliže znaxъ vašъ
 that never know.AOR.1SG 2PL.ACC
 ‘I never knew you’

Mt 9:33

Post verbal NCI with no NC

(d) oni že rěshę ničesože
 3.PL PRTCL say.3.PL.AOR NEG.THING.ACC
 ‘They said nothing.’

Lk 22:35

4 Data

4.1 Data from Translated Sources

Of the data collected from the gospels as represented in the Codex Marianus, there are 157 instances NCIs. Table (3) shows that in 74% of these the verb was negative, reflecting NC. 83 of these tokens were found ahead of their verb, leaving 33 to follow the verb. Of those examples lacking concord, only one was postverbal, with the remaining 40 coming before the verb.

Table 3: NC in Codex Marianus (157)

Verb_{NEG}: 116 (74%)	Verb_{POS}: 41 (26%)
Verb _{FRONT} : 33 (28%)	Verb _{FRONT} : 1 (2%)
NCI _{FRONT} : 83 (72%)	NCI _{FRONT} : 40 (98%)

Table (4) reframes the data to look at ordering of elements (NCI relative to the verb) overall. Among those 157 examples the NCI is found in front of the verb in 78% of the occurrences. Of these preverbal NCIs, the rate of NC is just over 67% with 83 tokens paired with a negative verb. 40 of these preverbal NCIs were paired with a positive verb, leaving us with about a third of the data defying the strict version of NC as previously described. In those contexts where the verb is fronted, the percentage is much more in line with the expectation of a non-strict NC language, with only 1 examples showing a positive verb. Despite this fact, given the definition of non-strict NC, we would expect there to be significantly fewer negative verbs in the NCI-fronted examples. This distribution clearly describes the mixed-model of NC that OCS utilizes.

Table 4: NCI position relative to Verb in Codex Marianus

NCI_{FRONT} 123 (78%)	Verb_{FRONT} 34 (22%)
Verb _{NEG} : 83 (67%)	Verb _{NEG} : 33 (94%)
Verb _{POS} : 40 (33%)	Verb _{POS} : 1 (6%)

In looking for evidence that these numbers make a statement about the language at large versus the idea that the gospel in which it appears might make a difference, the data was reorganized once more to see rates broken down by book in Table (5).

Table 5: NC by Gospels

Book (NCI total)	NCI position			
	NCI _{FRONT}		Verb _{FRONT}	
	Total	Verb _{NEG}	Total	Verb _{NEG}
Matthew (31)	27 (87%)	17 (63%)	4 (13%)	4 (100%)
Mark (36)	30 (83%)	23 (77%)	6 (17%)	6 (100%)
Luke (40)	33 (82.5%)	20 (63%)	7 (17.5%)	6 (86%)
John (50)	33 (66%)	23 (70%)	17 (34%)	17 (100%)

In the instance where the verb comes before the NCI, they are with but one token entirely negative, roughly reflecting the expected NC in a language with non-strict concord. Only Luke and John each bear a single NCI verb collocation that do not exhibit NC. One interesting feature is that three of the books nearly totally agree with regard to how likely the NCI is to be preverbal, centering around the 85% mark. John is much more likely to put the verb before the NCI, while Mark is slightly more likely to see NC with a fronted NCI.

A further reorganization of the data examines the question of whether word-choice (ie: specific NCI) motivates the use of negation, as in Table (6). NCIs which provide only a single data point are not included below, as they are unlikely to say

anything interesting in the grand scheme of the information set since they do not contribute to the violation of any assumptions. As expected, based on the statistical data in (4), in nearly every instance of a verb-first construction there is agreement between the NCI and the verb with regard to negation. The variation is largely found in the fronted NCI element. The NCI *nikomuže* appears to prefer a negative verb regardless of position relative to the verb. Otherwise, with the exception of *nikomuže*, each NCI pairs with a negative verb in between 50- and about 75% of the instances where it can be found preverbally.

Table 6: NC by NCI in Marianus

NCI Form	(total)	NCI position			
		NCI _{FRONT}		Verb _{FRONT}	
		Total	Verb _{NEG}	Total	Verb _{NEG}
nikogože	6	3 (50%)	2 (67%)	3 (50%)	2 (67%)
nikoliže	11	8 (73%)	4 (50%)	3 (27%)	3 (100%)
nikomuže	18	12 (67%)	12 (100%)	6 (33%)	6 (100%)
nikъtože ¹¹	60	56 (93%)	38 (68%)	4 (7%)	4 (100%)
nikyi ¹²	3	3 (100%)	2 (67%)	0 (0%)	0 (N/A)
ničesože ¹³	36	21 (58%)	16 (76%)	15 (42%)	14 (93%)
ničtože ¹⁴	11	9 (82%)	3 (33%)	2 (18%)	2 (100%)

The following (5-11) provides a list of examples for each of the NCIs listed in Table (6). In each instance, (a) represents an example of a preverbal NCI, while (b) shows one that is postverbal. The verb is in bold text, while the the NCI is bolded as well as underlined. Each exemplar is followed by the Greek text¹⁵, and then an English translation¹⁶.

5. nikogože

- (a) *ī vъnezaapq vъzbrĕvъše nikogože ne viděše* (Mk 9:8)

καὶ ἐξάπινα περιβλεψάμενοι οὐκέτι οὐδένα εἶδον

And suddenly looking around they **did not see anybody**.

- (b) *ne dostoitъ namъ ubiti nikogože* (Jo 18:31)

ἡμῖν οὐκ ἔξεστιν ἀποκτεῖναι οὐδένα.

It is **not suitable** to us to kill **anybody**.

¹¹Includes the spelling variant *niktože*

¹²No *je* at the end of this item, but context and translations insist this serves as an NCI

¹³Includes the spelling variants *ničъsože* and *ničъsože*

¹⁴Includes the spelling variants *ničъtože* and *ničъtože*

¹⁵Greek sentences pulled from the PROIEL database

¹⁶English translation is my own (from OCS).

6. nikoliže

- (a) ěko
- nikoliže**
- znaxъ vasъ (Mt 7:23)

οὐδέποτε ἔγνων ὑμᾶς·

For I **never** knew you.

- (b) něste li čьli
- nikoliže**
- (Mt 21:16)

οὐδέποτε ἀνέγνωτε ὅτι ἐκ στόματος νηπίων καὶ θηλαζόντων κατηρτίσω αἶνον

Have you **never** read (...)?

7. nikomuže

- (a) da
- nikomuže**
- ne rekъtъ (Mt 16:20)

τότε διεστείλατο τοῖς μαθηταῖς ἵνα μηδενὶ εἵπωσιν ὅτι αὐτός ἐστιν ὁ Χριστός.

That they **say** to **no-one** (...).

- (b) onъ ze zaprěti ima
- ne pověděti nikomuže**
- bynъ[š]ago (Lk 8:56)

ὁ δὲ παρήγγειλεν αὐτοῖς μηδενὶ εἰπεῖν τὸ γεγονός.

He ordered them **to not tell anyone** what had happened.

8. niktože

- (a)
- niktože**
- pridetъ къ отьсју тѣкѣмо тѣпојо (Jo 14:6)

οὐδεὶς ἔρχεται πρὸς τὸν πατέρα εἰ μὴ δι' ἐμοῦ.

Nobody comes to the father except for through me

- (b) i
- ne vъsxytitъ**
- ixъ
- niktože**
- отъ rъky moeјę (Jo 10:28)

καὶ οὐχ ἄρπάσει τις αὐτὰ ἐκ τῆς χειρός μου.

And **no one** shall **seize** them from my hand.

9. nikyi

- (a)
- niky**
- že rabъ
- možetъ**
- dъvēma gospodъma rabotati (Mt 6:24)

Οὐδεὶς δύναται δυσὶ κυρίοις δουλεύειν·

No servant **can** work for two masters.

- (b) –

10. ničesože

- (a) i
- nichesože**
- emu
- ne glъjotъ**
- (Jo 7:26)

καὶ οὐδὲν αὐτῷ λέγουσιν.

And they **say** nothing to him.

- (b) ěko bez mene **ne možete** tvoriti ničesože (Jo 15:5)

ὅτι χωρὶς ἐμοῦ οὐ δύνασθε ποιεῖν οὐδέν.

For without me you **cannot** do anything.

11. ničtože

- (a) slava moě ničtože **estъ** (Jo 8:54)

ἡ δόξα μου οὐδέν ἐστιν·

My glory **is** nothing.

- (b) **něstъ** bo ničъtože taino eže ne avitъ sę (Mk 4:22)

οὐ γάρ ἐστιν τι κρυπτὸν, ἐὰν μὴ ἵνα φανερωθῇ·

For there **is not** anything secret that will not reveal itself.

5 Data from Original Sources

There is, in general, less data reflecting non-translated material¹⁷, but what exists has been organized in the same way the data collected from the translated sources were. Table (7) suggests that non-translated materials are more likely to utilize NC than not, with about two thirds of the data using a negative verb. The data are split about fifty-fifty with regard to which element is fronted with a negative verb, although in examples where the verb is positive, they are almost entirely in contexts where the NCI is fronted. There is only a single exception, where the verb is both fronted and positive. This is much like the translated material, where there were only two fronted positive verbs.

Table 7: NC in Non-Translated Material (41)

Verb_{NEG}: 27 (66%)	Verb_{POS}: 14 (34%)
Verb _{FRONT} : 13 (48%)	Verb _{FRONT} : 1 (7%)
NCI _{FRONT} : 14 (52%)	NCI _{FRONT} : 13 (93%)

While the translated data were more likely to show NCI-fronting, with a rate of 78%, the non-translated material still shows a preference for the NCI coming

¹⁷This is partly due to the constraints of matching time and dialect, however the primary reason for this is that there simply is not enough original work in the OCS canon- the majority of these texts are translations from earlier (mostly Greek) canons and homilies and other such religious writing. Of the few documents that are decidedly free of translation, fewer still yielded the desired NCI forms. It is acknowledged that the paucity of data from non-translated documents is less than ideal, when looking to compare against the collected corpus of translated work.

before the verb, at 66%, as seen in Table (8). As expected, when the verb is first there is nearly always NC, with only one instance of a lack of agreement. However, these non-translated constructions appear nearly evenly split when the NCI is fronted, compared to the two-thirds split in the translated data favouring NC. Meanwhile, when the verb is fronted the verb is mostly negative. This looks much like the translated data where the fronted verb prefers NC and only one positive verb appearing in this context.

Table 8: NCI position relative to Verb in Non-Translated Material

NCI_{FRONT} 27 (66%)	Verb_{FRONT} 14 (34%)
Verb _{NEG} : 14 (52%)	Verb _{NEG} : 13 (93%)
Verb _{POS} : 13 (48%)	Verb _{POS} : 1 (7%)

The examination of the data broken down by its source in Table (9) provides an unbalanced view of the ordering of the NCI relative to the verb. The vita of Constantine is more likely to place the NCI ahead of the verb than not¹⁸, however the Primary Chronicle almost exclusively creates verb-first constructions. That being said, the data follows expectations with regard to non-strict NC in that where the verb is fronted the rate of NC is near 100%. The NCI-fronted examples are largely too few for meaningful comment, with the exception of Constantine where the majority of NCIs are preverbal, but just over 50% of these instances show NC.

Table 9: NC by Non-Translated Text

Source (41)	NCI position			
	NCI _{FRONT}		Verb _{FRONT}	
	Total	Verb _{NEG}	Total	Verb _{NEG}
Constantine (24)	22 (92%)	12 (55%)	2 (8%)	2 (100%)
Methodius (5)	3 (67%)	1 (33%)	2 (33%)	1 (50%)
Primary Chronicle (12)	2 (7%)	1 (50%)	10 (83%)	10 (100%)

Table (10) looks at rates per individual NCI form, again removing all tokens that only appear a single time, and shows conformity to the expectation that in verb-fronted contexts the NC rate approaches 100%. Only 2 of these instances show a positive verb. Meanwhile the contexts where the verb follows the NCI, many of these appear to support NC, with only one verb, *ničesože*, seeming to generally prefer a positive verb.

¹⁸One would want to make a similar statement with regard to Methodius, but with only 5 tokens available it would not be saying much.

¹⁹Includes the variant spelling *nikomuže*

²⁰Includes the *že*-less form of the variant spelling *nikotoromy*

²¹Includes the variant spelling *niktože*, as well as the *že*-less form *nikto*

²²Includes the variant spelling *ničsože*

Table 10: NC by NCI in Non-Translated Texts

NCI Form	(total)	NCI position			
		NCI _{FRONT}		Verb _{FRONT}	
		Total	Verb _{NEG}	Total	Verb _{NEG}
nikakože	3	3 (100%)	1 (33%)	0 (0%)	(N/A)
nikomuže ¹⁹	2	0 (0%)	(N/A)	2 (100%)	1 (50%)
nikotoromuže ²⁰	2	2 (100%)	0 (0%)	0 (0%)	(N/A)
nikъtože ²¹	14	9 (64%)	8 (89%)	5 (36%)	4 (80%)
ničesože ²²	7	6 (86%)	2 (33%)	1 (14%)	1 (100%)
ničtože	6	2 (33%)	2 (100%)	4 (67%)	4 (100%)

As before, the following (22-27) provide examples of each of the NCIs listed in Table (10). Again, (a) represents an example of a preverbal NCI, while (b) shows one that is postverbal. As before verbs are in bolded text while NCIs are bolded and underlined. As these are from the non-translated texts, there are no Greek sentences here, but English translations persist.

12. nikakože

(a) nikakože přestupľša togo sьvěta (Cons 2:5:3)

They in no way transgressed that agreement.

(b) –

13. nikomuže

(a) –

(b) wtъ selě něsmъ azъ ni tsaru sluga ni inomu nikomuže na zemli (Cons 18:3:2-3)

From here I **am neither** a servant to the tsar nor to anyone on Earth.

14. nikotoromuže

(a) jako **ne dostoitъ** nikotoromuže jazyku iměti bukovъ svoixъ (Meth 6:3:2)

For it is **not fitting** for any language to have its own letters.

(b) –

15. niktože

(a) juže niktože **ne imatъ** razvě mene? (Cons 6:51:3)

That which **nobody** has except for me?

(b) ixže **ne možaše** niktože ni pročisti ni skazati (Cons 13:3:3-4)

Which nobody could neither read nor say.

16. ničesože

- (a) a ničesože jestь vamъ zapovědalъ (Cons 6:21:2)

But your command is nothing.

- (b) kromě kanona **ne stvoriste** ničsože (Meth 8:10:2)

Nothing appeared at the canon.

17. ničtože

- (a) blagoslovenie wtъtsa vashego ino nichtože něstь (Cons 10:65:1-2)

The blessing of our father is **not** anything different

- (b) i **ne vidjashe** ničtože (Prim 36 obv 21-22)

And they saw nothing.

6 Discussion

6.1 Comparing Both Data Sets

The first part of the discussion will handle a comparison of both datasets, translated data next to non-translated data, side by side. It is acknowledged that the sets bear drastically different amounts of tokens, and therefore are perhaps not capable of providing a statistically sound comment on the situation under scrutiny. An analysis of the non-translated material compared to a single gospel text will follow to allow for a more realistic analysis.

Ultimately the question at hand is whether or not the non-strict version of NC is due to the influence from the Greek text. One way of testing this theory is to compare the rates and types of NC between two datasets, one composed of materials translated from Greek and one comprising originally composed texts. If the stated theory is true, then the data should show a higher rate of NC in the non-translated texts when the NCI is preverbal. As seen in Table (11), in the Codex Marianus there was agreement 67% of the time in this context. In the compiled non-translated texts this number fell to 52%, disproving the hypothesis.

Table 11: Non-Translated vs. Translated: NC

NC	Translated	Non-Translated
Total Amount	74%	66%
NCI_{FRONT}	67%	52%

Not only was the rate of NC in non-translated texts lower in constructions with a preverbal NCI, but the total rate of NC appears to be lower. There does seem to be a bit of a difference in the two datasets regarding which element is likely to come first, as shown in Table (12).

Table 12: Non-Translated vs. Translated: Word Order

	Translated	Non-Translated
NCI first	78%	66%

The fact that the NCI is preverbal more often in the translated materials could be influencing the authors' choice of whether to form agreement between the verb and its corresponding NCI. This doesn't necessarily impact the study, however, as the question under review concerns only those instances where the NCI comes before the verb.

These data do not necessarily disprove the notion that Greek had some influence on the development of OCS, but they do not seem to support the idea that it had a role in reinforcing an earlier stage of non-strict NC in Slavic. The translated material, in fact, appears more strict than the non-translated texts, contrary to established thought regarding the history of NC in the Slavic languages. Further, as all Slavic languages today show only the strict version of NC, it cannot be assumed that these unexpected findings could be the result of original texts from a later time period than that of the translated materials (whether due to a later composition date, or from influence from later copyists), as the data should trend toward more strict over time.

However, as mentioned before, we cannot reliably draw conclusions from this data as presented. The data sets are too disparate in size, and therefore not statistically sound methodology.

6.2 Comparing a Subset of the data

If we are to compare the 41 tokens found in the available non-translated data to a single chunk of translated text, we might see these results in a different light. As the translated data comes to us from the gospels, it can neatly be broken up into four distinct chunks. By comparing the non-translated data to only one of these chunks, the analysis bears a little more validity. As Luke contains forty instances of an NCI, the comparison will be repeated using only data from this book.

This reworking of the data, as seen in Table (13), shows NC 65% of the time. Most of these instances (77%) show the negative verb following the NCI. In those instances where the verb is positive, indicating a lack of NC, all but one follow their associated NCI.

When focusing on relative position, Table (14) shows a general preference for a fronted NCI in Luke. 61% of the time this presents with NC. Again, in those few

Table 13: NNC in Luke (40)

Verb_{NEG}: 26 (65%)	Verb_{POS}: 14 (35%)
Verb _{FRONT} : 6 (23%)	Verb _{FRONT} : 1 (7%)
NCI _{FRONT} : 20 (77%)	NCI _{FRONT} : 13 (93%)

verb-fronted contexts, the verb is almost exclusively negative, with only a single exception.

Table 14: NCI position relative to Verb in Luke

NCI_{FRONT} 33 (83%)	Verb_{FRONT} 7 (17%)
Verb _{NEG} : 20 (61%)	Verb _{NEG} : 6 (86%)
Verb _{POS} : 13 (39%)	Verb _{POS} : 1 (14%)

Comparing the two datasets side by side in Table (15), we can see that the total rate of NC is about even, with 65% in the translated data, and 66% in the non-translated data. In the relevant context of a fronted NCI, there is 61% NC in Luke, which is still much higher than the non-translated figure of 52%. Comparing two datasets of like size makes for a much more realistic analysis, and with Luke having 40 tokens and the non-translated data having 41, we can now see that the non-translated data look significantly more non-strict than the translated data.

Table 15: Non-Translated vs. Luke: NC

NC	Translated	Non-Translated
Total Amount	65%	66%
NCI_{FRONT}	61%	52%

To review, the stated hypothesis is based on the supposition that while at the earliest stages Common Slavic was a non-strict NC language, which very quickly started developing a more strict strategy, this process was interfered with by the influence of Greek. The theory under discussion is that if this were true, we should expect to see a higher rate of NC in non-translated material compared to translated material, specifically in the contexts where the NCI comes before the verb. The data as presented suggests that this is not true, and in fact the opposite might be occurring.

A suggestions for why the non-translated data looks less strict than expected could be that OCS itself is fairly representative of Common Slavic and its linguistic structures. It could simply be that at this stage in the language, the language was still early in its journey towards strict NC. An area of further exploration could be to collect these tokens from non-translated material across a time depth to see when and at what rate these numbers take a turn for the strict.

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