Some Notes on *p(e)re*-Reduplication in Bulgarian and Ukrainian: A Corpus-based Study

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Abstract

We present a comparative study of p(e)rereduplication in Bulgarian and Ukrainian, based on material from a parallel corpus of bilingual texts. We analyse all occurrences found in the corpus of close sequences and conjunctions of two cognate words, the second of which features the intensive and recursive prefix pre- (Bulgarian) or pere-(Ukrainian). We find that in Bulgarian this construction occurs more frequently with finite verb forms, and in Ukrainian with participles and nouns. There is also a correlation with the mode of action denoted by the prefix: in its intensive meaning it turns up more often in Bulgarian, in its recursive meaning in the two languages equally, and in Ukrainian there are more occasions where it cannot be identified as either intensive or recursive. Finally, in both languages instances of *p(e)re*-reduplication are most common, by a wide marge, in texts with Ukrainian originals.

Keywords: reduplication, intensive prefix, prefix *pre-*, prefix *pere-*, parallel corpus, Bulgarian language, Ukrainian language.

1 Introduction

The Proto-Indo-European root **per* 'take, carry across or through' (Pokorny 1959: 810) gave rise in Slavic to a preverb with a fundamental spatial meaning as well as a variety of derived meanings, all related to crossing a boundary or surpassing a degree, with the potential of combining with parts of speech other than the verb, too, as an elative marker:

пръ- expresses the idea of going beyond, surpassing: *пръити* 'to cross, get over', *пръстялити* 'to transgress', *прълинати* 'to overflow'; and of transporting, transforming: *пръселити* 'to resettle', *пръобразити* 'to transfigure'. At the same time it is an intensifier which adjoins to adjectives, to nouns: *препогыбъль* 'complete perdition, πανωλεθρία' and to verbs: *пречюдив с***A** 'being excessively astonished, ὑπερθαυμάσας'. (Vaillant 1948: 323)

These meanings persevere, by and large, in the contemporary Slavic languages. The details vary. In Bulgarian the recursive mode of action ('redo, do again or in a new way') appears to be the most prominent among the ones marked by the preverb npe-, followed by the majorative-resultative (or intensive: 'do to a degree higher than the norm') and the transgressive ('do across an area'), with 96, 67 and 41 examples listed in (Ivanova 1974: 49ff), respectively. Bulgarian npe- does not mark the resultative-pancursive-distributive mode of action ('do upon all available objects'), which is often expressed by its Ukrainian cognate nepe-(Zhovtobrjukh 1979: 262f). On the other hand, in Ukrainian the inherited preverb nepe- cedes the elative function almost entirely to the borrowed prefix npe- (ESUM 2003: 558), which operates mainly on adjectives and adverbs. It is also noted (Šerech 1959: 291f) that nepe- tends to denote motion across and above, contrasting with the similar preverb npo-, which indicates motion through the inside of an object, and this motivates its further evolution to a pancursive, majorative (intensive) and recursive marker.

The Bulgarian prefix *npe*- and the Ukrainian *nepe*- play a key part in a phenomenon which we will call p(e)re-reduplication. It consists of the use in close succession of two cognate words (as a rule of the same part of speech and in the same grammatical form), the second of which is formed with the prefix *npe*- or *nepe*- (in the two languages respectively), where the first has no prefix or has another. In general this pursues a rhetorical effect:

a concept is expressed twice with added emphasis the second time, which results in intensification:

- (1) [Bg] Но тези роти вече, както личи, не са формирани от <u>патилите и препатили</u> войници, които текат закърпени от болниците (O. Honchar, *The Standard Bearers*) 'But now these companies are evidently not composed of those seasoned and overseasoned soldiers who stream, patched, from the hospitals.'
- (2) [Uk] Це досить відверта посмішка жінки, яка <u>бачила-перебачила</u>. (В. Raynov, Don't Make Me Laugh) 'This is the rather brazen grin of a woman who has seen, and seen a lot'.

The device is especially typical of the language of folklore and of colloquial speech influenced thereby.

It may be tempting to say that this is simply the same construction serving the same purpose in two closely related languages. But this does not mean that its use is identical: there may be differences in the lexical categories most commonly involved, the details of the morphology and the syntax and perhaps other parameters. Such differences can only be established or disproven with the help of evidence drawn from corpora.

In this paper we present the results of a comparative study of p(e)re-reduplication in Bulgarian and Ukrainian based on material from a parallel bilingual corpus.

2 On the Corpus

The bilingual Bulgarian–Ukrainian corpus (CUB) (Siruk and Derzhanski, 2013; Derzhanski and Siruk, 2019) consists of parallel texts available in electronic libraries or obtained by us from paper editions through scanning, optical character recognition and error correction by *ad hoc* software tools and by hand. For this reason, the corpus is composed of fictional works, mostly of novels, which dominate in such sources.

Because original and translated parallel texts for Ukrainian and Bulgarian are hard to come by, especially in online-accessible computer-readable form, we also use Bulgarian and Ukrainian literary translations from other languages as corpus material. The version of CUB used in this research includes eleven sectors, each of which covers parallel Bulgarian and Ukrainian texts with the same original language:

- original Bulgarian and Ukrainian texts, as well as translations from English-1 (by authors from the British Isles), English-2 (by authors from the United States), French, German, Italian, Polish, Russian-1 (stories about the past and present) and Russian-2 (stories about the future)—approx. 2 million words in each of the ten sectors (in Bulgarian and Ukrainian counted together; for various reasons the ratio tends to be about 53:47);
- the Bible, in canonical translations from Church Slavonic into Bulgarian and from Hebrew, Aramaic and Greek into Ukrainian— 1.1 million words.

The total size of the corpus is 21 million words (11.2 million in Bulgarian and 9.9 in Ukrainian). The Bible is aligned by verse, and the other texts (mostly) by sentence.

3 The results

A total of 130 instances of p(e)re-reduplication in one or both languages were found in the corpus, including 48 in Bulgarian only, 19 in both Bulgarian and Ukrainian and 63 in Ukrainian only.

We disregarded most occasions of *npe*reduplication of adjectives or adverbs in Bulgarian, because we are interested in comparing Bulgarian *npe*- to its regular etymological counterpart in Ukrainian, which is *nepe*-, and for this particular purpose, as was said above, Ukrainian tends to also use *npe*-.

3.1 Distribution by part of speech

The items which compose the construction include finite verb forms or gerunds, participles, adjectives, nouns or pronouns. In Ukrainian it is expedient to handle invectives as a separate category: these are formally adverbs, pronouns or nouns, but used with no regard to their part of speech and original semantics: Posmydu mebe nepemydu 'And unprint thyself' (E. Hemingway, For Whom the Bell Tolls), Голий, <u>таку-</u> перетаку, коня прибери з ваги! 'Holiy, you so and so, take your horse off the platform!' (V. Zemlyak, Green Mills), Mamb-nepeмamb! (A. and B. Strugatsky, Roadside Picnic; this invective is borrowed from Russian, which is why it involves Ru мать in lieu of Uk мати 'mother', but the pattern is the same).

The two words are of the same part of speech, except for a few instances where the first is an adjective and the second a participle; the grammatical form is likewise the same, except for one occasion in Ukrainian when a gerund is combined with a finite verb form (*вибираючи*, *nepeбupas* 'chose choicely' in F. Nietzsche's *Thus Spoke Zarathustra*).

Apart from invectives, the use of pronouns in *pere*-reduplication is also restricted to Ukrainian:

(3) [Uk] Я роду <u>такого й перетакого</u>, мої предки <u>те й перете</u> зробили! (G. Boccaccio, *The Decameron*) 'I belong to the So-and-so family and my ancestors did such-and-such!'.

In addition, Table 1 attests that in Bulgarian this construction occurs more often with finite verb forms and in Ukrainian with participles and nouns.

	Bg only	Bg, Uk	Uk only	total
verbs	39	10	20	69
participles	3	7	13	23
adj. : part.	5		1	6
adjectives			1	1
nouns	1	2	17	20
pronouns			2	2
invectives			9	9
total	48	19	63	130

Table 1: Distribution by part of speech

Somewhat controversially, we have counted as an instance of *npe*-reduplication the Bulgarian adjective–participle compound бяла-пребледняла 'white-blanched' (found in O. Kobylianska's On Sunday Morning She Gathered Herbs); it is not one stricto sensu, as its parts are not even etymologically related, but they are phonetically and semantically similar, and also the writing of the whole as a hyphenated word, akin to бледнапребледняла 'pale-blanched' from the same book, argues in favour of such treatment.

With virtually identical frequency in the two languages – about 47.66% – the items forming the couple only differ in that the second one has the prefix n(e)pe- (notated as p in the formulae in Table 2). Alternatively, n(e)pe- can replace a prefix present only in the first item (p°) ; this is more common in Ukrainian (*закуска-перекуска* 'hors d'œuvre snack', *розказано й переказано* 'told and retold'). Conversely, it is more common in Bulgarian for the items to differ in suffixes (*s*). In both languages the latter happens mostly because of the suffix it takes to reconvert the verb which has been perfectivised by the addition of *n(e)pe-* back to the imperfective aspect (Bg *monлени и претопляни супи* 'soups heated and reheated', Uk *читає і перечитує* 'reads and rereads'), but also when an adjective is coupled with a participle (Uk *cmape-nepecmapiлe* 'old and overaged'). The co-occurrence of the two differences is predictably rare; there is only one example of this in our data, in Ukrainian: *Часті й тривалі перекури, <u>розмови, перемовки</u> (V. Shishkov, <i>Gloomy River*) 'Frequent and long smoking breaks, chats, talks'.

With the verb 'read' in Bulgarian another prefix (*npo*-, notated as p' here) is also added (*четените и препрочетени книжки* 'the books read and reread', *чете и препрочита* 'reads and rereads'). This happens 7 times in the corpus.

	Bg		Uk	
p°R−pR	5	(7.46%)	23	(28.05%)
R - p(p')R	32	(47.76%)	39	(47.56%)
p°R–pRs			1	(1.22%)
R-p(p')Rs	30	(44.78%)	19	(23.17%)

Table 2: Derivational relationship between the two items in the couple

In Bulgarian in the absolute majority of cases the two items are linked by a conjunction; it is significantly rarer for them to be juxtaposed (or appear in juxtaposed phrases), which materialises as a comma in writing; and there are only three hyphenated compounds in our data, all of the adjective-participle type (бледна-пребледняла 'pale-blanched' and бяла-пребледняла 'whiteblanched', mentioned above, and пълнопрепълнено 'full-overfilled'). In Ukrainian the distribution among the three categories is more balanced, but in both languages the preference is for the two items to be connected syntactically rather than morphologically:

	Bg	Uk
conj.	54 (81.82%)	46 (56.79%)
juxt.	9 (13.64%)	23 (25.93%)
hyph.	3 (4.55%)	14 (17.28%)

Table 3: Grammatical link between the two items

The first two of the options formulated here do not necessarily imply that the words need to be adjacent or only separated by a conjunction: there may be functional words interfering (up to three in our material), less often content words, or the construction may appear in direct speech and be broken by the author's words:

- (4) [Bg] <u>Четох</u> ги и ги <u>препрочитах</u> чак до сутринта (P. Zahrebelnyi, Let's Come to Love) 'I read them and reread them until the very morning'.
- (5) [Uk] A от ми зараз подивимося, хто кого <u>дожене</u>, хто кого <u>пережене</u>! (A. and B. Strugatsky, *Roadside Picnic*) 'Now we'll see who catches up and who gets ahead!'
- (6) [Uk] <u>Розтуди</u>, коротко сказав Агустін. — І <u>перетуди</u>. (Е. Hemingway, For Whom the Bell Tolls) "'Milk," Agustín said simply. "And milk again.""

There is one example which doesn't fall easily into any of the three categories in either language, and is not counted in Table 3:

 (7) [Uk] А я <u>скочив</u> — Дунай <u>перескочив</u> (M. Stelmakh, *The Four Fords*) 'And I jumped and vaulted over the Danube' || [Bg] *Кога <u>скочи</u> — Дунава <u>прескочи</u>.*

3.2 Distribution by meaning of the prefix The semantic relation between the two parts of the construction varies. By far most frequently, the meaning of the prefix is intensive or recursive, so the whole adds up to, literally, 'do and overdo' or 'do and redo', in either case conveying emphasis or intensity. Occasionally, however, the second (prefixed) word does not exist at all outside of this construction:

- (8) [Uk] нехай вона в тебе буде <u>i чесна, й</u> <u>перечесна</u> — не зарікайся, що вона одна з усіх того не зробить (G. Boccaccio, The Decameron) "tis at least possible, that, however honest she be [*lit.* let her be honest and overhonest], she will do as others do',
- (9) [Uk] Добре, <u>mydu ix nepemydu</u>, ycix фашистів (E. Hemingway, For Whom the Bell Tolls) 'To obscenity with all fascism good' (*lit.* 'Well, thither and re-thither with them, with all fascists');

or is a close synonym of the first word:

(10) [Uk] *Та конкуренція, конкуренція… нові* винаходи, новіші винаходи… <u>зміни,</u> <u>переміни</u>. Світ мене обігнав (С. Dickens, Dombey and Son) 'But competition, competition—new invention, new[er] invention—alteration, alteration—the world's gone past me' (the original has three exact repetitions; the translator introduces gradation into two of them, one by a comparative degree and one by a *nepe*-derivative which means the same as the word with *3*-, but the two together create an impression of waxing intensity);

or a less close synonym, so that the gradation is more clearly felt:

(11) [Bg] Струваше ми се, че някой ме следи, че ме преследва, опитва се да ме хване...
(A. Christie, They Do It with Mirrors) 'I thought people were spying on me, watching me [lit. following me, pursuing me], trying to hound me down';¹

or bears some other relation to the first word, such as being a transgressive derivative ('do from place to place'), a supergressive-resultative ('outdo someone else') or a finitive one ('finish doing') modes of action which are also typical of the prefix n(e)pe- in one or both languages:

- (12) [Uk] Четверо коліс каронади прокочувалося й перекочувалося по вбитих нею людях, шматуючи їх, кришачи й розриваючи (V. Hugo, Ninety-Three) 'The four wheels of the carronade passed back and forth [*lit.* over and across] over the men it had killed, cutting, crushing and rending them' (the French original features the formally similar, but different in content, passaient et repassaient 'passed and passed again');
- (13) [Uk] Люди дотримуються свого звичного побутового ритму, поки ми отут безглуздо наздоганяемо й переганяемо один одного (В. Raynov, Typhoons with Gentle Names) 'People follow their usual schedule, while we here mindlessly overtake and surpass one another';
- (14) [Bg] Люлякът в градинката на райкома <u>иъфтя и прецъфтя</u>, а нея все я няма и няма от Велики Устюг... (V. Zemlyak, The Swan Flock) 'The lilac in the District Committee garden had shed its blossoms [lit. bloomed and finished blooming], but still she did not return from Velikiy Ustyug'.

There is a single example, in Ukrainian, of a non-deverbal noun with a derivative in which the

¹ The meanings of the verb *npec.nedgam* range from 'follow, pursue' (shared with *c.nedga*) to 'persecute, haunt'; here the context argues that the more ominous meanings are not the ones intended (because a victim of persecution is very much aware of it), but the hearer is aware of their existence in the language, so they can contribute to the effect.

prefix *nepe*- has a spatial meaning: лісами ma *nepeлiсками* 'through forests and thickets' (M. Stelmakh, *The Four Fords*).

Exceptionally the second item may bear no synchronically detectable relation to the first:

(15) [Bg] — <u>Намерила, та премерила</u> — прихна той (M. Stelmakh, *The Four Fords*) "She is insatiable," he snorted' (*lit.* 'She has found and measured';² originally the words share a root, as per (Georgiev and Duridanov 1995: 484), but at present they are not perceived as being semantically akin);

or has a separate lexical (or even terminological) meaning, so that the use of the two words in succession is not a rhetorical device, but – because of the similarity to a familiar one – may have a similar effect:

- (16) [Uk] Деякий час маленький загін ішов піскуватими трунтами, що утворились із скалок двійчастих черепашок і висхлих кісток, з великою домішкою закису й <u>перекису</u> заліза (J. Verne, In Search of the Castaways) 'For a part of the day, the little troop trod a sand composed of debris of bivalve shells and cuttlefish bones, and mixed in a great proportion of iron protoxide and peroxide' (the French original has une grande proportion de peroxyde et de protoxyde de fer, but the translator has reversed the order, thus achieving, consciously or otherwise, outward similarity with the p(e)re-construction),
- (17) [Uk] Були ще й інші <u>сходи та переходи</u>, якими ніхто не ходив цілими тижнями (C. Dickens, Dombey and Son) 'There were other staircases and passages where no one went for weeks together'.³

The frequency of the construction in the two corpus languages correlates with the semantics of the prefix: in its intensive meaning it turns up more often in Bulgarian (which harmonises with the fact that in Ukrainian this meaning has been partly taken over by the South Slavic loan *npe-*), in its recursive meaning approximately equally in the two languages, and in Ukrainian there are more cases where it cannot be identified as either intensive or recursive. This is summarised in Table 4.

	Bg only	Bg, Uk	Uk only	total
intensive	19	5	1	25
recursive	19	13	25	57
miscell.	10	1	37	48
	48	19	63	130

3.3 Distribution by source language

It is known that in their choice of wording translators are prone to being influenced by constructions used in the original. Since the use of reduplication for emphasis is universal, this can be expected to happen here as well.

Table 4 attests that p(e)re-reduplication is much more frequent in original Ukrainian texts and their Bulgarian translations than in any other texts in the corpus.

	Bg only	Bg, Uk	Uk only	total
Bg	3	2	3	8
De	2	1	2	5
E1	2		7	9
E2	1		5	6
Fr	2	2	8	12
It	8		6	14
Pl	2		1	3
R1	4		9	13
R2	1	1	6	8
Uk	14	13	15	42
Bible	9		1	10
	48	19	63	130

Table 5: Distribution by source language

When p(e)re-reduplication appears in a corpus text, the original (if different) may

• (I) use an analogous reduplicative construction with a prefix with similar semantics on the second item. Such are German intensive *über*-

² Along with the idiom намерил съм, та съм премерил 'to have found and measured' there exists the similar one намерил съм, та съм се прехласнал 'to have found and become entranced' (Nicheva et al. 1974: 644f); the latter makes more literal sense and so is likely to be the original variant, from which the former is derived by copying the root of the first word into the second, giving the whole the shape of a *npe*-reduplicated construction.

³ Apart from meaning 'staircase', $cxo\partial u$ means 'ascents; descents', *nepexid* (pl. *nepexodu*) likewise means 'passing' as well as 'passage, corridor', so in the translation there are two ways in which the words are cohyponyms; this enhances their perception as more than two words with their regular meanings which happen to occur in sequence in the text.

and recursive *wieder*-,⁴ French *re*-, Italian *ri*-, Russian *nepe*-,

- (II) repeat a word exactly or with a different kind of modification (as when Bg *numaxa*, *paзnumsaxa* 'they asked and inquired' in Elin Pelin's Yan Bibiyan on the Moon is translated as Uk *numanu й nepenumyвали*, or Bg бледнапребледняла 'pale-blanched' and бялапребледняла 'white-blanched' serve to render Uk біла-біліська 'white-white[diminutive]' in O. Kobylianska's On Sunday Morning She Gathered Herbs),
- (III) not involve repetition at all.

Table 6 demonstrates that Bulgarian translators from Ukrainian use p(e)re-reduplication nearly as eagerly as Ukrainian writers: of the 28 occurrences of the phenomenon in original Ukrainian prose they have only kept a little less than half (13), but have contributed a little more than that (4+10=14), ending up with approximately the same number. (Curiously, the same can be said to have happened in the translations in the opposite direction, only the numbers are smaller there.)

	Bg				Uk			
	Ι	II	III		Ι	II	III	
Bg	5		_	5	2	1	2	5
De	2		1	3	1	1	1	3
E1			2	2	_	1	6	7
E2			1	1			5	5
Fr	4			4	5	2	3	10
It	2	1	5	8			6	6
Pl			2	2			1	1
R1			4	4	5		4	9
R2	1		1	2	6		1	7
Uk	13	4	10	27	28			28
Bible		7	2	9		1		1
	27	12	28	67	47	6	29	82

Table 6: Distribution by the presence of reduplication in the original language

On 4 occasions in Bulgarian translations from French and on 6 in Ukrainian ones, the original features a similar construction with the prefix *re*.

Also, on 11 occasions the Ukrainian construction renders its materially identical Russian analogue. In Bulgarian this only happens once, but on 7 occasions in the translation of the Bible there is a kind of reduplication (albeit not of the same form) in the Church Slavonic (as well as the Ukrainian) text, which in turn follows literally the Hebrew or Greek original:

- (18) [Bg] Аз ще <u>благословя и преблагословя</u>, ще <u>размножа и преумножа</u> твоето семе || [Uk] благословляючи, Я поблагословлю тебе, і розмножуючи, розмножу потомство твоє || [He] kî-bārêk 'ăbārekkā, wə-harbāh 'arbeh 'et-zar'ăkā 'in blessing I will bless thee, and in multiplying I will multiply thy seed' (Gn 22:17);
- (19) [Bg] наистина ще те <u>благословя и</u> <u>преблагословя</u>, ще те <u>размножа и</u> <u>преумножа</u> || [Uk] Поблагословити Я конче тебе поблагословлю, та розмножити розмножу тебе! || [Gk] η̃ μην εὐλογῶν εὐλογήσω σε καὶ πληθύνων πληθυνῶ σε 'Surely blessing I will bless thee, and multiplying I will multiply thee' (Heb 6:14).

Finally, it is remarkable that none of the few uses of p(e)re-reduplication in translations from Polish reflect a similar construction in the original; expressions such as *myślał i przemyślał* 'thought and rethought' (cf. Bg *мислил и премислял*) are not totally alien to that language, but evidently are much less used than in the other Slavic languages in the corpus.

4 Conclusions

The constructions are similar indeed, but when it comes to actual use, they differ in many points, as we have seen: the parts of speech involved most commonly (predominantly verbs in Bulgarian and nouns more often - and exclusively, pronouns and a separable category of invectives – in Ukrainian), the interpretation of the prefix (intensive mostly in Bulgarian, transgressive etc. in Ukrainian), the derivational models (a distinctive prefix on the first item being more typical of Ukrainian), the grammatical link between the two items (with strong preference for a conjunction in Bulgarian). These can be explained in part by the presence of the borrowed prefix npe- in Ukrainian, which has relieved nepe- of some of its functions, especially in the literary language. But since we work with fiction, and mostly with translated texts, there is an

⁴ There is one occurrence of each of these in F. Nietzsche's *Thus Spoke Zarathustra: Wie er sie schlingt und <u>kaut und</u> <u>wiederkäut</u>! 'How it swalloweth and cheweth and recheweth them!' > Bg Kak camo eu налапва и <u>дъвче, и предъвква</u>! || Uk \pik вона душить її, <u>жує й пережовус</u>!; sie <u>schwollen</u> <u>und überschwollen</u> von Mitleiden 'they swelled and o'erswelled with pity' > Bg me <u>ce издуваха и преиздуваха</u> от състрадание.*

occasion for examining the impact of the original languages and the translators' attitudes to using the target languages' vernacular constructions.

The material for this study was collected by a semi-automatic search in a bilingual corpus of aligned text. As the corpus is continually evolving, this raises the question of enriching it with appropriate alignment which would facilitate such research.

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