



Multilingual Resources with Bulgarian – Recent Developments (IMI-BAS experience)

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in Slovakia and in the world

10 years of the Slovak National Corpus

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Multilingual Resources with Bulgarian – Recent Developments

The Department of Mathematical Linguistics at IMI—BAS participated in 3 large language engineering EC projects:

- COP project 106 **MULTEXT-East** *Multilingual Text Tools and Corpora for Central and Eastern European Languages*, 1995-1997, coordinator Jean Véronis, CNRS;
- INCO Copernicus project PL96-1142 **CONCEDE** *Consortium for Central European Dictionary Encoding*, 1998-2000, coordinator Roger Evans, University of Brighton;
- 7th FP project GA 211938 **MONDILEX**, *Conceptual Modelling of Networking of Centres for High-Quality Research in Slavic Lexicography and their Digital Resources*, 2008-2010, coordinator Ludmila Dimitrova, IMI-BAS;



Multilingual Resources with Bulgarian – Recent Developments

Four multilingual corpora under EC projects and two bilateral academic projects

- **MULTEXT-East *Parallel and Comparable Corpora with Bulgarian***, (MULTEXT-East EC project),
- ***Bulgarian-Polish Parallel and Comparable Corpora***, (Joint research project between IMI-BAS and ISS-PAS),
- ***Bulgarian-Slovak Parallel and Aligned Corpora***, (Joint research project between IMI-BAS and IŠIL-SAS),
- ***Bulgarian-Polish-Lithuanian Parallel and Comparable Corpora***, (Joint research project between IMI-BAS and ISS-PAS)



Multilingual Resources with Bulgarian – Recent Developments

Parallel Corpora with Bulgarian texts - MULTEXT-East corpus

MULTEXT-East builds an annotated multilingual corpus (6 languages from CEE) composed of 3 major parts:

- **Parallel Corpus,**
- **Comparable Corpus,**
- **Speech Corpus** (small)
 - texts comprising 40 short passages of 5 thematically connected sentences,
 - each spoken by several native speakers, with phonemic and orthographic transcriptions.



Multilingual Resources with Bulgarian – Recent Developments

Parallel Corpora with Bulgarian texts - MULTEXT-East parallel corpus

- Multilingual parallel corpus, based on **George Orwell's** novel **“1984”** in
 - the English original
 - 6 translations in Bulgarian, Czech, Estonian, Hungarian, Romanian and Slovene.
- Produced as a well-structured, lemmatized, CES-corpus.
- The texts automatically annotated for
 - tokenization,
 - sentence boundaries,
 - part of speech annotation, using the project tools.

Multilingual Resources with Bulgarian – Recent Developments

Parallel Corpora with Bulgarian texts - MULTEXT-East parallel corpus

Example:

excerpts of the 3rd version - *CesANA encoding (XML/TEIP4)*

Априлският ден бе ясен и студен, часовниците биеха тринайсет часа.

.....
<tok type=WORD from='Obg.1.1.1.1\12'>

<orth>ден</orth>

<disamb><base>ден</base><ctag>NCMS-N</ctag></disamb>

<lex><base>ден</base><msd>Ncms-n</msd><ctag>NCMS-N</ctag></lex>

</tok>

<tok type=WORD from='Obg.1.1.1.1\16'>

<orth>бе</orth>

<disamb><base>съм</base><ctag>VAIA3S</ctag></disamb>

<lex><base>бе</base><msd>Qgs</msd><ctag>QG</ctag></lex>

<lex><base>съм</base><msd>Vaia2s</msd><ctag>VAIA2S</ctag></lex>

<lex><base>съм</base><msd>Vaia3s</msd><ctag>VAIA3S</ctag></lex>

</tok>
.....

Multilingual Resources with Bulgarian – Recent Developments

Parallel Corpora with Bulgarian texts - **MULTEXT-East** parallel aligned corpus

■ Example

1-1 Aligned sentences:

<Obg.1.1.7.4>Още три сгради, подобни по външен вид и размери, бяха посети из **Лондон**.

<Oen.1.1.9.2>Scattered about **London** there were just three other buildings of similar appearance and size.

<Obg.1.1.7.5>И дотолкова се извисяваха над околните здания, че от покрива на жилищен дом **Победа** можеха да се видят и четирите едновременно.

<Oen.1.1.9.3>So completely did they dwarf the surrounding architecture that from the roof of **Victory Mansions** you could see all four of them simultaneously.

MULTEXT-East Comparable Corpus

- Annotated manually at the paragraph level
- Tagged with sub-paragraph mark-up (abbreviations, dates, names)
- **Content:** 2 sub-corpora
 - **Bulgarian fiction** – contemporary Bulgarian literature, 97251 words:

Emilia Dvorianova, *PASSION or the death of Alice*,
Julia Berberyan *I want, I believe, I can* (first four chapters of the novel)
 - **Bulgarian newspapers** – newspapers excerpts, 96538 words

MULTEXT-East Comparable Corpus

Bulgarian fiction – annotated at paragraph level (<p> </p>),
tagged with sub-paragraph mark-up (<q rend="PRE=mdash">
</q>), (<name> </name>), (<date> </date>)

Example:

<p>

<q rend="PRE=mdash">Какво е това, дето го чете момичето,
госпожо, неясно ми се вижда, да не ѝ повлияе зле.

</q>

</p>

<p>А тя ми отвърна като знаеща:</p>

<p>

<q rend="PRE=mdash"> Философия,
<name type="person">Йо</name> .

</q>

</p>



Multilingual Resources with Bulgarian – Recent Developments

Parallel Corpora with Bulgarian texts - **Bulgarian-Polish corpus**

First Bulgarian-Polish corpus (under development)

Joint research project between **IMI-BAS** and **ISS-PAS**

“Semantics and contrastive linguistics with a focus on a bilingual electronic dictionary”

Total of **approx. 5 million words**

■ Comprises two corpora:

□ **Parallel**, including **Aligned sub-corpus**

□ **Comparable**

Bulgarian-Polish Parallel corpus

- Contains more than 3 million words
 - mostly **fiction**
 - small part: **official documents** of the European Commission available through the Internet
- **Two parts:**
 - original Bulgarian texts with Polish translations or *vice versa*
 - texts translated from other languages into both Bulgarian and Polish

Bulgarian-Polish Aligned Corpus, Level P

Stefan Żeromski's *Popioły* (vol. 1, part 1 *W górach*)

Polish:

<p>Psy ucięły. Zaraz potem drugi głos, bliższy Rafała, odpowiedział jednokrotnie tym samym sposobem.</p>

Bulgarian:

<p>Кучетата млъкнаха. Веднага след това друг глас, по-близко до Рафал, отговори еднократно по същия начин.</p>

Polish:

<p>Młody myśliwiec jeszcze przez czas pewien leżał na ziemi, pękając ze złości. Po chwili jednak zerwał się na równe nogi, strzepnął śnieg z siebie, odszukał w krzakach pojedynek. Wytrzeł oczy i, na podobieństwo sarn skacząc przez choiny, pomknął na dół.</p>

Bulgarian:

<p>Младият ловец лежа още малко на земята, позеленял от яд. Но после изведнъж скочи на крака, изтупа снега от себе си и потърси пушката в храстите. Избърса очи и скачайки като сърна през младите елички, полетя надолу.</p>

Multilingual Resources with Bulgarian – Recent Developments

Bulgarian-Polish Aligned Corpus – Level S

1-3 Aligned sentences example - Lem's *Powrót z gwiazd*:

<tu tuid="0000000001">

<tuv xml:lang="Polish">

<seg>Dotknąłem, jeszcze z zamkniętymi oczami, piersi, miałem na sobie sweter; jeżeli spałem, nie rozbierając się, to miałem wachtę: Olaf!</seg></tuv>

<tuv xml:lang="Bulgarian">

<seg>Все още със затворени очи аз докоснах гърдите си. Бях облечен в пуловер; щом съм спал, без да се събличам, значи, съм бил на вахта. „Олаф!“</seg></tuv>

</tu>

1-1 Aligned sentences example – Lem's *Powrót z gwiazd*:

<tu tuid="0000000054">

<tuv xml:lang="Polish">

<seg>I co, robić kursy Mars-Ziemia-Mars?</seg></tuv>

<tuv xml:lang="Bulgarian">

<seg>И какво, да правя курсове Марс - Земя - Марс?</seg></tuv>

</tu>

Bulgarian-Polish comparable corpus

Contains texts in Bulgarian and Polish of similar sizes:

- ☐ excerpts from newspapers,
- ☐ literary works, mostly modern Bulgarian and Polish literature (2nd half of the 20th c.), with the text size comparable in 2 languages, available on the Internet:

- In *Bulgarian* (for example): :

Dimitar Talev, *The Iron Oil Lamp*, *The Bells of Prespa*;

Dimitar Dimov, *Tobacco*, *Doomed Souls*;

- In *Polish* (for example):

Ryszard Kapuściński, *Imperium*;

Stanisław Lem, *Dzienniki gwiazdowe* (*The Star Diaries*)



Multilingual Resources with Bulgarian – Recent Developments
Parallel Corpora with Bulgarian texts - Bulgarian–Slovak parallel and aligned corpus

Bulgarian–Slovak parallel and aligned corpus

Joint research project between IMI-BAS and LSIL-SAS

“Electronic Corpora – Contrastive Study with Focus on Design of Bulgarian-Slovak Digital Language Resources”

Comprises two sub-corpora:

❑ Parallel Bulgarian–Slovak/Slovak–Bulgarian corpus

Contains more than 1.2 million words

- original Bulgarian novels with Slovak translations or *vice versa*
- texts (fiction, novels, short stories) in other languages translated into Bulgarian and Slovak.



Multilingual Resources with Bulgarian – Recent Developments

Parallel Corpora with Bulgarian texts - Bulgarian-Slovak aligned corpus

❑ Aligned corpus

Hunalign software is used to align parallel texts at the sentence level

Contains 376 200 words in parallel texts, aligned at the paragraph level and at the sentence level

■ Aligned texts – Level S

- ❑ Bulgarian novels and their Slovak translations:

 - Dimitar Dimov, *Doomed Souls*;

 - Pavel Vezhinov, *The Barrier*,

- ❑ Slovak novel: Klára Jarunková, *The silent wolf's brother* and its Bulgarian translation,

- ❑ Bulgarian and Slovak translations of Jaroslav Hašek, *The Good Soldier Švejk*.

http://korpus.sk:8090/manatee.ks/index - Windows Internet Explorer

http://korpus.sk:8090/manatee.ks/index

File Edit View Favorites Tools Help

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★ Favorites http://korpus.sk:8090/manatee.ks/index

Заявка
беше Търсене в корпуса: par-skgb-bg

áäčďéíllfñoórstuüýzAÄČDĚÍĽĽŇŎŎŔŠTUŮÝŽ
абвгдежзийклмнопрстуфхцчшщъьюяАБВГДЕЖЗИЙКЛМНОПРСТУФХЦЧШЩЪЬЮЯ

□ ^ * , " " \ =

За корпуса •

Multilingual Resources with Bulgarian – Recent Developments

Parallel Corpora with Bulgarian texts - Bulgarian-Slovak aligned corpus

Concordances of Bulgarian verb *беше*

101645	Jej čierne, blízko sejba vsadené oči horeli živočíšnou zvedavosťou. Žena sa chcela s Fanny pozhovárať, ale keď narazila na nepriateľský pohľad, odišla smerom k námestiu, kde dúfala, že nájde lepšie miesto na pozeranie. Zástup jednotaj rástol a bol čoraz vzrušenejší.	Черните ѝ тясно поставени очи горяха от животинско любопитство. Жената беше готова да разговаря, но като срещна враждебния поглед на Фани, отмина към площада, където се надяваше да намери по-хубаво място за гледане. Тълпата се увеличаваше и ставаше все по-възбудена.
101911	Fanny zrazu pochopila, že z námestia už nebude môcť odísť. Zástup veľmi zhustol a nikto nechcel opustiť miesto, ktoré si obsadil. Výhrážne pokusy falangistov v uniformách preraziť si cestu k námestiu ostali neúspešné.	Изведнъж Фани разбра, че не можеше да се отдалечи от площада. Тълпата беше станала много гъста и никой не искаше да напусне заетото вече място. Опитите и заплашванията на една група фалангисти в униформа да си пробият път към площада останаха безуспешни.
101953	Výhrážne pokusy falangistov v uniformách preraziť si cestu k námestiu ostali neúspešné. A aj ulica, po ktorej mali priviezť odsúdených, bola taká upchatá, že vojaci napriek nadávkam nevedeli dav rozohnať, a tak ho nechali rásť. Fanny došla k pohyblivému lešeniu s drôtenou sieťou, ktorým mohli v prípade potreby ulicu uzavrieť, a tak sa ocitla pri robotníkoch, čo s trpkosťou pozorovali zástup.	Опитите и заплашванията на една група фалангисти в униформа да си пробият път към площада останаха безуспешни. Дори улицата, по която шяха да докарат осъдените, беше тъй задръстена, щото войниците въпреки ругатните си не сполучиха да разпръснат множеството и го оставиха да пригизда. Фани се приближи до една подвижна скеля с телени мрежи, приготвена да затвори в случай на нужда улицата, и така се озова при работниците, които горчиво наблюдаваха тълпата.
102216	Odkiaľsi prišla rota dobrovoľníkov, aragónskych dedinčanov, a načisto upchala námestie. Panebože, aké to bolo všetko odporné! Od zástupurazilo potom a olivovým olejom.	Отнякъде пристигна цяла рота доброволци — арагонски селяни — и задръсти напълно площада. Господи, колко отвратително беше всичко! ... От тълпата се разнасяше миризма на пот и зехтин.
102815	Ľudia žiadostivi divadla naťahovali krky a dvíhali sa na prsty. Každý chcel vidieť odsúdených, lepšie im pozrieť do tváre a vychutnať živočíšnu radosť, že nie je na ich mieste. Dav ovládlo všeobecné vzrušenie.	Жадните за зрелище хора протегнаха шияте си и почнаха да се повдигат на пръсти. Всеки искаше да види осъдените, да се взре по-дълбоко в лицата им и да изпита животинската радост, че не беше на тяхно място. Една всеобща възбуда завладя тълпата.
102957	Medzitým sa nákladniak s odsúdenými pomaly blížil k popraviisku. Dav dosiaľ ovládala len veľká zvedavosť, ktorá ho ochromovala a nútila mlčať, ale zrazu si spomenul, že musí voči odsúdencom prejavovať nenávisť. - Smrť komunistom!	Между това камionът с осъдените приближаваше бавно мястото на екзекуцията. Досега тълпата беше обладана само от парливо любопитство, което я поразяваше и караше да мълчи, но изведнъж си спомни омразата, която трябваше да изпитва към тях. — Смерт на комунистите! ... — извика един фалангист с превързана ръка.
103000	- zvolal istý falangista s obviazanou rukou. Z nemocnice odišiel len preto, aby sa zúčastnil popravy. ♦ Veľmi dobre poznal chmúry hnep hutníkov z Bilbaa. Jeho výkrik bol signálom na rozpútanie fanatickej búry medzi ostatnými.	— Смерт на комунистите! ... — извика един фалангист с превързана ръка. Той беше излязъл от болницата само за да присъствува на екзекуцията, и познаваше вече мрачния гняв на металурзите от Билбао. Викът му бе сигнал да се разрази фанатична буря от всички останали.

Bulgarian-Polish-Lithuanian corpus

2 Slavic languages: Bulgarian belongs to the South subgroup, Polish – to the West subgroup of the Slavic languages,

1 Baltic language: Lithuanian belongs to the Eastern Baltic group.

Experimental corpus, currently under development

Total more than 3 million words

- Comprises two corpora:
 - ☐ parallel
 - ☐ comparable

Bulgarian-Polish-Lithuanian parallel corpus

- Contains more than 1.5 million words
- Main part:
 - fiction, novels, short stories in other languages translated into Bulgarian, Polish, and Lithuanian
- Small part:
 - original texts in one of the three languages with translations in two others
 - texts of official documents of the European Union available through the Internet

Multilingual Resources with Bulgarian – Recent Developments

Bulgarian-Polish-Lithuanian Aligned Corpus – Level S

Stanisław Lem's *Solaris*:

```
<tu tuid="0000000011">
```

```
  <tuv xml:lang="polish">
```

```
    <seg>Widziałem już seledynowy kontur jedyne-  
    wskaźnika.</seg>
```

```
  </tuv>
```

```
  <tuv xml:lang="bulgarian">
```

```
    <seg>Вече различавах светлозелените контури на  
    универсалния указател.</seg>
```

```
  </tuv>
```

```
<tuv xml:lang="lithuanian">
```

```
  <seg>Jau išskyriau žalsvus universalaus indikatoriaus  
  kontūrus.</seg>
```

```
  </tuv>
```

```
</tu>
```

Multilingual Resources with Bulgarian – Recent Developments

Bulgarian-Polish-Lithuanian Aligned Corpus – Level P

М. Булгаков “Мастер и Маргарита”:

BG: Кайсиевият сок вдигна обилна жълта пяна и наоколо замириса на бръснарница. Литераторите го изпиха и веднага се разхълцаха, платиха и седнаха на една пейка с лице към езерцето и с гръб към Бронная.

PL: Morelowy napój wyprodukował obfitą żółtą pianę i w powietrzu zapachniało wodą fryzjerską. Literaci wypili, natychmiast dostali czkawki, zapłacili i zasiedli na ławce zwrócenі twarzami do stawu, a plecami do Bronnej.

LT: Abrikosų gėrimas suputojo geltona putą, ir oras pakvipo kirpykla. Literatai atsigėrę tučtuojau ėmė žagsėti, užsimokėjo ir susėdo ant suoloelio veidais į tvenkinį ir nugaromis į Bronają gatvę.

(**RU:** Абрикосовая дала обильную желтую пену, и в воздухе запахло парикмахерской. Напившись, литераторы немедленно начали икать, расплатились и уселись на скамейке лицом к пруду и спиной к Бронной. Часть 1, Глава 1 „Никогда не разговаривайте с неизвестными“ //Интернет-библиотека Алексея Комарова - <http://ilibrary.ru> //)

Bulgarian-Polish-Lithuanian comparable corpus

Current content:

- Texts from the electronic media – descriptions in 3 languages of the same event (English text also included)
- such texts specified as “**parallel descriptions of content**”
- Literary works representing mostly modern Bulgarian, Polish, and Lithuanian literature (2nd half of 20th c.), with the text size being comparable in 3 languages



Multilingual Resources with Bulgarian – Recent Developments

MULTEXT-East Bulgarian Language-Specific Resources

TEI-compliant **MULTEXT-East** morphosyntactic specifications for corpora and lexicon encoding for the six languages of the project: Bulgarian, Czech, Estonian, Hungarian, Romanian, Slovene, and English (*hub* language):

Language-specific morphosyntactic specifications present “language-specific” phenomena of each language

Core “general” features (shared by all MTE languages) → comparability of the information, encoded in MTE lexicons

MTE morphosyntactic specifications are presented by *morphosyntactic descriptions*, with corresponding codes MSD (*MorphoSyntactic Descriptors*) to mark them in the lexicons

MULTEXT-East Bulgarian Language-Specific Resources

Example: **MSD** of the Bulgarian wordform **стелата** is **Ncfs-y** and is connected with

POS: Noun,

Type: common,

Gender: feminine,

Number: singular,

no Case: -,

Definiteness: yes.

In Bulgarian MTE-texts there are 326 MSDs.



Multilingual Resources with Bulgarian – Recent Developments

MULTEXT-East Bulgarian Language-Specific Resources:

Bulgarian MULTEXT-East Lexicon

- Orwell-1984.bg
- Fiction.bg
- News.bg

Structure of the Bulgarian MULTEXT-East Lexicon:

word-form <TAB> **lemma** <TAB> **MSD** <TAB> **comments**

In Bulgarian MTE-lexicon there are 55200 entries.

MULTEXT-East Bulgarian Language-Specific Resources

Orwell-1984.bg – lexicon of the Bulgarian “1984”-text:

word-form<TAB>**lemma** <TAB> **MSD** <TAB> **comments**

катер	=	Ncms-n
катереше	катеря	Vmii2s
катереше	катеря	Vmii3s
катери	катер	Ncmp-n
катери	катеря	Vmia2s
катери	катеря	Vmia3s
катери	катеря	Vmip3s
катери	катеря	Vmm-2s
катерите	катер	Ncmp-y
катерите	катеря	Vmip2p



Multilingual Resources with Bulgarian – Recent Developments

Bulgarian Lexical Databases

Bulgarian LDB

for integrated multilingual CONCEDE LDBs

CONCEDE *Consortium for Central European Dictionary Encoding*

- ❑ CONCEDE model for creation of standardized (according to TEI *Text Encoding Initiative*) lexical databases in six European languages: Bulgarian, Estonian, Czech, Hungarian, Rumanian, and Slovene (MTE-languages)
- ❑ **First Bulgarian LDB for CONCEDE project** contains more than 2700 lexical entries of the “Bulgarian dictionary”



Multilingual Resources with Bulgarian – Recent Developments

Bulgarian Lexical Databases

Bulgarian–Polish LDB

Bilingual LDB, follows CONCEDE model,
to support **Bulgarian–Polish** online dictionary

New tags for presentation of

- ❑ **Bulgarian conjugation:** <conjugation> tag and <type> tag (3 conjugations)
- ❑ **semantics information:** <semantic> tag and <type> tag (type = 1 for verbs that mean “state”, type = 2 – for “event”),
- ❑ **aspect of verbs** in tag <gram> (for perfect and imperfect verbs)
- ❑ specific information about **transitivity/intransitivity of verbs:** in tag <subc>

Multilingual Resources with Bulgarian – Recent Developments

Bulgarian Lexical Databases

An example of the dictionary entry for headword *боря*
(*Podręczny słownik Bułgarsko-Polski* of Sławski, 1987)

бо'р|я, -иш *vi.* *niepokoić*, *męczyć*; ~я се *borykać się*, *walczyć*, *zмагаć się*

Presentation in the *Bulgarian-Polish LDB*:

<entry>

<hw>бор|я</hw>

<conjugation><orth>-иш</orth><type>2</type></conjugation>

<semantic><orth>състояние</orth><type>1</type></semantic>

<subc>преходен</subc>

<pos>гл.</pos>

<gram>несв.</gram>

<struc type="Sense" n="1">

<trans>niepokoić</trans>

</struc>

Multilingual Resources with Bulgarian – Recent Developments

Bulgarian Lexical Databases

```
<struc type="Sense" n="2">
  <trans>męczyć</trans>
</struc>
<struc type="Derivation" n="1">
  <orth>~я се</orth>
  <subc>непреходен</subc>
  <pos>гл.</pos>
  <gram>несв.</gram>
  <struc type="Sense" n="1">
    <trans>borykać się</trans>
  </struc>
  <struc type="Sense" n="2">
    <trans>walczyć</trans>
  </struc>
  <struc type="Sense" n="3">
    <trans>zmagać się</trans>
  </struc>
</struc>
</entry>
```

Multilingual Resources with Bulgarian – Recent Developments

Bulgarian-Polish Lexical Database

вие сте логнат като: admin | нов потребител | изтриване на потребител | изход

създаване на речникова статия | списък- български думи | списък- полски думи | съкращения | страници | помощ | докладвани думи

Въвеждане на глагол

Индекс за омоним

Заглавна дума *

бо'р|я

търси в списък с думи

2 л. ед.ч. сег. време *

-иш

Спрежение на глагола II ▼

Св. / несв. вид на глагола *

несв. вид ▼

Състояние / събитие състояние ▼

Преходен / непреходен глагол

непреходен ▼

добавяне на обяснение към думата ▼

>>

Multilingual Resources with Bulgarian – Recent Developments

Bulgarian –Polish online dictionary

Bulgarian verb “*боря , боря се*” /*fight, strive, struggle*/

БЪЛГАРО- ПОЛСКИ РЕЧНИК SŁOWNIK BUŁGARSKO-POLSKI

речник | за проекта | поддръжка

Български -> Полски ▾

Въведете дума

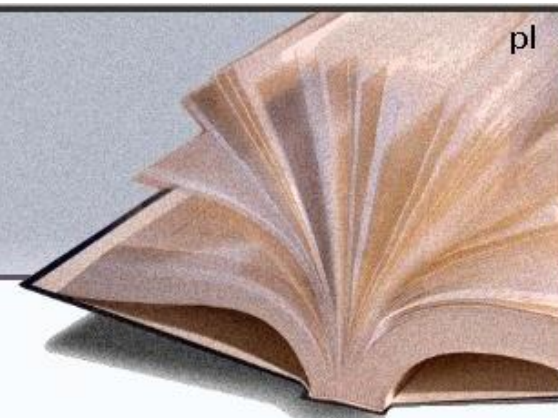
преведи

а	б	в	г	д	е	ж	з	и	й	к	л	м	н	о	п
р	с	т	у	ф	х	ц	ч	ш	щ	ъ	ь	ю	я		

боря
бос
ботаник
ботаника

бор |я -иш несе вид, непреходен, състояние, II спрежение nierokoić, męczyć преходен; ~ я се възвратен непреходен borykać się, walczyć, zмагаć się

pl



Multilingual Resources with Bulgarian – Recent Developments

Bulgarian-Polish Online Dictionary

Polish verb “*niepokoić*” /fight, strive, struggle/

БЪЛГАРО- ПОЛСКИ РЕЧНИК
SŁOWNIK BUŁGARSKO-POLSKI

речник | за проекта | поддръжка |

pl

Полски -> Български ▼

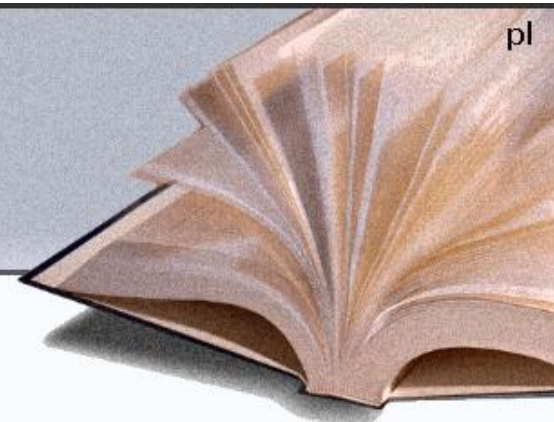
Въведете дума

преведи

a	ą	b	c	ć	d	e	ę	f	g	h	i	j	k	l	ł
m	n	ń	o	ó	p	r	s	ś	t	u	w	y	z	ż	ź

niepokoić несл. вид бо́ря

niepokoić
niewinny
niekiedy





Multilingual Resources with Bulgarian – Recent Developments

Thank you for the attention!